

enacted depends on the present context. If the activated schema occurs within the present context of the demands of an interaction—a very powerful, rich, and constraining context—the schema will be expressed in overt behavioral acts. The same activated schema can be expressed in narrative or other verbal form. From the clinical point of view, the expression of an activated schema-of-being-with in a behavioral mode is not seen as more or less revealing or profound or basic than its expression in any other mode.

What is relatively new and different in this view is the emphasis on the moment-by-moment interaction as a present remembering context to activate different representations. Traditionally, we tend to think in clinical terms of one or two central themes or representations (such as core conflictual themes) that are constantly activated internally, or maintained in a state of semireadiness by internal forces such that their threshold for activation from external events is so low that the representations are, in effect, almost constantly activated. While this may be the case for certain representations, I am more impressed by the role of the shifting interaction in evoking specific representations that were latent. A shift toward a greater role for interactive reality compared to purely intrapsychic events in the regulation of the subjective landscape has been made.

Since the present context that interests us most for clinical reasons is the interaction with the baby, let us turn at this point to an examination of the parent-infant interaction for a better understanding of its language, rules, and demands as a present context for the parents, as well as for the baby's representations.

CHAPTER 4

The Parent-Infant Interaction

THE NEXT ELEMENTS of the clinical system that we will take up are the mother's overt interactive behavior with the infant (M_{act}) and the infant's overt interactive behavior with the mother (B_{act}). Together they make up the parent-infant interaction.

The Central Place of the Interaction

The parent-infant interaction is the centerpiece of the clinical situation. It is the key element to be understood, for several reasons.

First, the parent-infant interaction is the arena in which the parents' most critical representations, wishes, fears, and fantasies about the infant are played out. Certainly, only a part of the parents' representational world concerning the infant is played out here, but it is exactly that part that most concerns us clinically, because only those parental representations, fantasies, and so on, that are enacted in the interaction will directly influence the baby. They thus occupy a special place clinically. Ultimately, we cannot understand how a parental representation acts clinically unless we understand the interaction through which it acts. Similarly, the interaction is the arena for the enactment of the infant's representations, which directly influence the parents.

The interaction is thus the bridge between the parent's and the infant's representations. As I have discussed earlier, there is no magic ether con-

necting representations across two separate minds. The influence must be transmitted by way of the concrete interaction between them.

The interaction is also the path for most of the influences that ultimately impinge on the very young infant from the world at large—such as social, economic, and cultural factors—because of the highly asymmetrical nature of this relationship. The parent has a huge volume of interactive traffic with the world, but the young infant's interactive traffic is overwhelmingly with his primary caregiver, especially during the first months and first year. The parent filters and regulates the growing but still relatively limited traffic with the world external to direct parent-infant interactions. In the beginning, then, pathogenic influences can arise from anywhere, but they will impact on the baby only to the extent that they influence the privileged caregiving dyad or triad. This general rule applies to all the factors we know to have powerful influences on the later mental health of the child. Socioeconomic status is the example par excellence, having more predictive power than any other single influence (see, e.g., Sameroff, Seifer, Barocas, Lax, & Greenspan, 1987). This list of external (i.e., to the dyad) factors includes malfunctioning social supports, the nature of the intervening mental health care system, if there is one, the parental culture, minority status, level of education, and so on. When the infant is still quite young, these factors can have no conceivable meaning or influence until they are translated into the language of action within the caregiving dyad.

It is easy to imagine how these factors could influence the quality and quantity of specific interactive behaviors directed toward the infant during the first year of life. Nonetheless, the central point bears emphasizing, because clinicians and theorists often think, act, and write as if these influences acted directly or through some unspecified medium to affect the baby. We already know the medium. This neglect of the obvious role of the parent-infant interaction as the principal—at times the only—translating medium of external influences is curious. Some of the possible reasons for this deemphasis of the obvious are mentioned later in this chapter.¹

Finally, the interaction plays a crucial role in determining the symptom or problem that brings the family to treatment. Most of the chief complaints of the parents (usually about the infant, e.g., problems of sleeping, eating, conduct, or attachment) or, on the mother's part, problems of feeling rejected or unloving, ultimately arise in the interactive setting. I do not mean that the cause of the problem necessarily lies in the interaction but that the primary symptom takes place within the context of the interaction

¹The notion of the early centrality of the interaction is compatible, I believe, with current concepts about modes of influence, such as Sameroff's transactional model (Sameroff & Fiese, 1990).

and is evaluated in the terms of that context, because that is where the parents "live it." Even the presence of a physical handicap in the infant is only a partial exception, since the handicap is "lived" by all concerned in the daily interactions. Accordingly, therapies cannot afford to be interested in the entirety of the mother's representational world or in the full spectrum of cultural influences on the family. Rather, only those influences that bear significantly on the parent-infant interaction will be chosen for therapeutic focus. In other words, the scope of the therapeutic universe is ultimately defined by and brought back to the parent-infant interactions.

This centrality of the interaction within the clinical situation does not mean that it has to be the preferred subject matter for the therapeutic sessions or the privileged port of entry into the system. Some therapies make minimal use of the actual parent-infant interaction as clinical material. Others encourage it, structure it, and focus on it heavily during sessions. In either case, these interactions, as they occur in treatment and at home, remain the key element.

Identifying Clinically Important Events

We can start with the assumption that the clinically important events and moments are the very small, ordinary, daily, repetitive, nonverbal events that, objectively speaking, did happen. In fact, these may be the only kinds of human events that initially exist for the infant. In any case, they are the events into which the representations of the parents and infant get transformed and enacted so as to play their role in creating a clinical problem.

Let us examine the features of these events in more detail.

1. *The events are the subjective experience of "real" events.* Much psychoanalytic thinking suggests that psychic reality for the infant starts with and consists mostly of innate fantasies. Some therapists, such as Melanie Klein (Isaacs, 1952/1989), write as if these fantasies are primary in the sense that they will occur, if not in an interactive vacuum, with only a minimum of triggering from the interactive contact, which is viewed as almost nonspecific. Others, such as Wilfred Bion, suggest that infants have something like latent fantasies ("preconceptions"), which are innately organized and are experienced when they encounter an appropriate specific counterpart in real interactive life. I take the position that the infant has many strong, innately determined preferences and action tendencies that will greatly influence the very nature of his experience with the world as well as what part of the objective world he will have experience with.

The early interaction of infants and mothers has probably changed relatively little over millennia, compared with many other human interactions. This is exactly the kind of evolutionary stability that would favor the innate preprogramming of many of the perceptual aspects and motor patterns that make up these early interactions. The question is not whether much of this interaction is prewired—it certainly is—but whether it is necessary to postulate innate fantasies that exist prior to the experiences that the fantasies are waiting for or seeking. I would guess that the idea of innate or primary fantasies is not necessary, because, as we will see in chapter 5, the infant will so quickly form representations of those experiences that his nature leads him into. One can, of course, call this aspect of his nature “preconceptions,” but these are not fantasies. Accordingly, except for the first few such experiences of an event, the infant will never be without some kind of experience-based representations that his preconceptions have led him to form. Still, it is the subjective aspects of his encounters with this selected world that will determine his representational world and then, secondarily, his fantasy life. In other words, interactive experience, innately guided, precedes fantasies, not the other way around. We will thus concern ourselves with interactive experiences in this chapter and derive fantasies from them later, in chapter 6. (When speaking of “real” interactive experience, I mean the subjective experience of being in objectively observable interactive events.)

2. *The events are microevents.* Parent-infant psychotherapies focus on the relatively small and short-lived events, such as what the mother does with her eyes and face at the moment when the infant's smile at her increases in amplitude. This descriptive level of events, which can be called microevents, can be contrasted with the larger macroevents that occupy most clinical theories: the mother's becoming depressed, the birth of a sibling, the emotional availability (or unavailability) of the mother, and so on. The point is that a macroevent such as mother's becoming depressed can have no possible meaning to the infant in that form. A maternal depression is a large concept made up of many smaller criteria that are present over a period of time. And there are different types of depressive interactions. The infant lives the depression in terms of the microevents that are its palpable manifestations.

In chapter 6, I will compare two points of view on the infant's experience of having a depressed mother: one in terms of macroevents as reconstructed by the adult who was once the infant of a depressed mother, the other in terms of the microevents that impact now on the infant who has a depressed mother. In brief, the macroevent view sees

the maternal depression as a single traumatic macroevent—love lost at one blow. In the microevent view, the maternal depression is as knowable to the infant as many repetitive microevents, each of which is a different “way-of-being-with-mother.”

Focusing on the descriptive level of the microevent is essential, because it is at that level where so much of the parent-infant interaction is played out. The nonverbal behaviors that make up a great part of this relationship are not communications about, nor comments upon, nor interpretations of the relationship; they *are* the relationship. They consist of microregulations of the level of affect and activation. To the extent that these interactions are purely social with no other goal in mind, they consist of the mutual microregulation of affect and activation. These mutual microregulations last split seconds, more rarely longer. They are the basic step of an interactive regulatory process. And, indeed, their split-second duration conforms to current notions in the neurosciences of the timing involved in most animal regulatory processes at the behavioral level and perhaps the physiological level.

3. *The events are ordinary, daily, and concrete.* Events are known to be clinically important by virtue of the changes they introduce into the weave of life. Even most traumas very rapidly become variations of the ordinary, daily, and concrete. In the life of the infant, they are recognized through changes in the patterns and quality of the main activities of eating, sleeping, playing, and so on—that is, in the activities that make up the fabric of life. Most often they are designated as traumatic long after the fact.

4. *The events are repetitive.* For the most part, it is the repetitiveness of events that makes them easily represented. Repeated microevents are assumed to be the basic building blocks of the representational world of both the infant and the parent. It is the experiencing-reexperiencing process that permits the formation of prototypes and generalized models (representations) of events. In this light also, it is to be expected that the changes or variations in eating, sleeping, or playing will tell the story. In the major motivational systems (or drives), these activities are repeated at regular intervals. Drives thus format life to facilitate learning.

Reading the Clinically Important Events

It is the banal, nonverbal, and diminutive nature of this interaction that holds some unexpected and unique features that perplex many clinicians

who have not had considerable experience with infants and parent-infant relations. A full training in adult or even child psychotherapies does not necessarily prepare one for this clinical situation; in fact, it can sometimes be a hindrance.

Parent-infant therapies construct a first reading of the clinical story on the basis of the nonverbal actions and interactions that make up the microevents. The mother may of course vocalize—sing and say a great deal of sense and nonsense—but there need be no important verbal content in what is happening from either partner. The situation can be almost exclusively nonverbal.

The situation also need not be symbolic. In play therapies with older children, symbolic play may be utilized. The observer assumes that the play-actions are symbolic of an underlying psychodynamic text that could be told in words, usually not by the child but by the therapist. That is not the case in these earlier parent-infant interactions. There is not necessarily an underlying psychodynamic text in the usual sense of the term, at least certainly not for the infant. The actions do not symbolize anything. They *are* what it is about. The action patterns involved and their linked intuitive interpretations are greatly overdetermined by innate, phylogenetic considerations. We are at the level of intraspecific events best addressed by human ethology.

The first clinical reading of the interaction occurs at this level. Of relevance are such questions as, What is the physical distance between the partners? Is there an approach or a withdrawal, and at what speed? What is the orientation, or shift in orientation, of the pelvis and the shoulders? Is there a full orientation toward the other ("squared off")? Is there a turn toward or away from full orientation? What is the orientation of the head—that is, the facing position? Is there a shift of the head orientation of either partner toward or away from a direct vis-à-vis position? Is the shift away to the side? Is it with head tilted up or down? Where are the eyes looking? Is there mutual gaze? Is mutual gaze avoided with the eyes or with the head, or both? And there are the Darwinian facial expressions that accompany these actions and body positions, as well as the tone and volume of voice. There are also the anatomical places and patterns of mutual touching—for example, ventrum to ventrum, front to back, or head in the crook of the neck. For each and every one of these acts, we assume that the action is both motivated (usually out of awareness) on the part of the actor and unconsciously read on the part of the recipient.

What is read by the recipient (and by clinicians, as observers) are the motives that regulate the framework of engagement or relatedness: to get closer or farther away, to signal readiness for or avoidance of engagement,

to initiate or terminate an engagement, to amplify or reduce the intensity of an ongoing engagement, to signal a positive or negative action tendency, to signal an affiliative or aggressive action tendency, and so on. These are basic human (and animal) motives at the level of an ethological reading. The infant is given both an innate general repertoire of these behaviors to perform and the mechanisms to decode their performance in others. Nonetheless, he must learn the cultural and familial variations on this universal human language.

This first clinical reading, at the level of motives and actions for regulating the engagement framework, provides the base and starting point of the clinician's observations. I call this level of interpretation the ethological reading. I was recently shown a videotape of a free play with a 4½-month-old seated in a baby seat. Immediately one was struck by the mother's position. She was very close to him, her face about 10 cm away from his. Her head position was full-facing. Her shoulders were squared off, so that she was fully oriented toward the baby. In addition, her arms were spread out to flank and enclose the baby. And from that position, she wove her head closer and back as she vocalized quite loudly. The infant, in response, showed repeated head movements away to the side. He frequently broke gaze, and his smiles alternated with a more sober, distressed expression. He emitted somewhat tense vocalizations that grew in amplitude.

An ethological reading assumes that the observed actions express motives to regulate the engagement. The mother is overregulating the interaction, showing an overreadiness to engage, forcing the initiation and maintenance of engagement, and mixing affiliative and aggressive signals. The infant is trying to escape, to protect and defend himself. In short, this is the description of intrusive, overcontrolling maternal behavior and the infant's response to it. But such a reading at the ethological level is not an individual psychological reading (although it is often mistakenly thought to be). It requires no knowledge of the past of either individual or of the dyad. No information is required about why that mother is conducting that kind of engagement regulation, or why she is doing it now. (See Corboz-Warnery et al., 1993; Fivaz-Depeursinge, 1987, 1991; for more details at this level, see also Stern, 1977.)

The second reading is an individual psychological one, in which the reading at the ethological level becomes individualized. Why this mother? Why this baby? Why that kind of engagement regulation? Why now? A full clinical reading requires the ethological gloss at the intraspecific level and a psychological gloss at the level of the individual and his past experience.

One gloss is not clinically (or otherwise) better or deeper than the other. They are at different levels of description, and they are complementary. The ethological level tells what happened, what actions and motives were in play. The psychological level tells, in light of the individual's past life history, why those particular actions and motives were in play at this time. It concerns the personal meanings attached to those actions and motives, which are beyond the more general intraspecific meanings. The cultural level mediates between the two.

The ethological level concerns the influence of an evolutionary past on the present. The psychological level concerns the influence of the personal, lived past on the present. The distinction between these two levels of readings, however, is not always so clear, especially when metapsychological theories of human behavior assume a genetic base for certain behaviors and fantasies.

Toward an Improved Reading at the Ethological Level

In spite of their overwhelming obviousness—or exactly because of it—these ethological level microevents are not so easy to see and describe as might be expected. It is paradoxical that in adult psychiatry, clinical psychology, and psychoanalysis, we are so well trained to look for and “see” the causes, explanations, and meanings behind overt behaviors (i.e., the individual psychological level) that we tend to become blind to what actually happened. Meaning supersedes description and eclipses it, especially for clinicians in training. (This is part of the evidence that action is seen in its motivational context.) I once hired a group of very good advanced psychiatric residents, untrained in infant psychiatry and not yet parents, some of whom were candidates in psychoanalysis, to help score parent-infant interactions. They were terrible at it. They were superb at seeing past the behavior to its meaning, but they could not code unelaborated descriptive events. A great deal of retraining was required for them to be as good as untrained, psychologically naive observers.

Psychiatrists are trained such that in order to see naively again, they must learn to hold clinical inferences in suspension. (Whether such inferences are right or not is irrelevant.) A certain amount of retraining is required, for several reasons:

1. Even when much of clinical interest is being said by the parent, from the infant's point of view the action is vocal, not verbal. The music and not the lyrics are being attended to. The observer must let pass by

some of the spoken information that is usually the basic source of clinical data. When watching television recordings of interactions, it is helpful either to turn off the sound or to have it just low enough so that the prosody but not the words can be discerned, at least for the first pass through the material. (This technique suggested itself to me when I was doing consultations with parents who spoke in a language I did not understand—an ideal situation for a first impression.)

2. The initial approach to the interaction requires a detailed description of what happened on a behavioral level. For instance, the baby suddenly broke the mutual gaze with his mother and turned his head rapidly away and down to the side. The mother then pulled back, wrinkled her nose, said “Yuuk,” and left the room. One could easily go right past the behavior to the higher level of explanation and say that the mother found the baby disgusting and rejected him. This is likely to be true, but it omits the descriptive key that her disgust and rejection were triggered by the infant's visually disengaging from her. Exactly that piece of information may be needed to understand clinically the entire sequence and even its precedents—for example, disgust was her response to feeling rejected. Explanations may accompany descriptions but cannot replace them. These behaviors carry species-specific meanings that are intuitively apparent and do not require a second explanatory, interpretative step.
3. Why-questions should be limited to why-now questions, much as in other clinical interviews. But here, the why-now refers to a small behavior: “Why did the mother pull back *then*?” or, preceding that, “Why did the infant look away *then*?” It is the sequence of why-now questions that starts to make evident the patterns of the interaction. By focusing on it one stays within and explores more deeply the descriptive stream.
4. The temporal parameters of this interactive world are different from those of adult psychiatry. As I have mentioned, it is a world in which events occur in split seconds. The time frame of observation, of the basic units of information, is usually shorter than what one is used to in traditional therapies. One has to come to trust one's on-the-spot visual impressions. There is a technique for heightening sensitivity that consists of evaluating someone by not looking at the person, then taking a quick but full glance and looking away again immediately. The evaluation is based on whatever was seen in that split second. Such sensitivity-raising techniques can be useful.
5. Clinical pattern recognition is based on patterns of movement rather than on propositional meanings—more like dance than like a written

text. In a sense, the first order of business is to discover the repeating patterns or sequences that form the backbone of the interaction. This requires the observer to have a mental set attuned to what will happen next, like that of a photographer seeking the "decisive moment" that is about to happen. With this mental set, one progressively identifies the repetitive elements that make up the patterned sequences. Generally speaking, it is easier and faster to identify the sequential patterns in more pathological interactions. They show more stereotypy and more dramatic ruptures or discontinuities that are easy to identify. They also usually show less variability. Nonpathological interactions are often so subtle, varied, and freely flowing from one theme or variation to the next that the flow appears almost seamless and pattern identification is difficult (see Beebe & Stern, 1977, and Stern, 1971, for examples).

Because of the importance of describing interactions and the difficulties in doing so, clinicians as well as researchers have taken to using video to aid in this task. Many therapies routinely use video replay as a fixed feature of the therapy, as we will see later in this chapter. Video viewing of interactions can also be highly useful in furthering the process of observing interactions as they happen, that is, without video.

One of the great advantages of video is the capacity for immediate replay. The viewer can not only see exactly what happened but, just as important, by repeating a sequence can quickly learn it "by heart." If one knows what will happen, one can view it differently. For instance, when watching a tennis match, one watches the ball and the action of the player who has the ball in his court. One wants to know what will happen immediately. If you know by heart what will happen, you can tear your attention away and do the opposite—that is, watch the actions of the player when the ball is not in his court. There one sees a different world of anticipation, responses, strategies. The same applies in the parent-infant interaction. The structure and the function of the interaction become clearer. Once this technique of observation has been learned with video, it can be applied to ongoing interactions. (In most interactions, the ball is in the court of the person who is talking or vocalizing or altering a nonverbal pattern.)

A second advantage of video is the freeze frame. It too can be used as a technique of learning to observe ongoing interactions. Thinking and seeing in freeze frames augment the sensitivity to the high point of an interaction, the moment around which the sequence turns.

In short, video and film analysis have taught clinicians much about being better observers. It is particularly helpful in the training or retraining they need to "see" at the level of microevents.

To observe the temporal aspects of the interaction—the responsiveness and contingency and fine regulation—it is often necessary to forget about exactly what the interactants are doing (for the moment, at least) and focus on the timing. The focus of attention is aimed somewhere between the two partners, so that the behaviors of both can be seen equally in one's peripheral vision, which is more sensitive to motion.

What are the temporal criteria of contingency for the infant? For infants during the first year of life, three seconds is the rule of thumb for one behavior to be considered responsive to or contingent upon a preceding behavior. And a quarter of a second (i.e., approximately minimum reaction time) is the inner limit. Three seconds is, in fact, rather long after several months of age. And as three seconds approaches, one receives the impression (the baby will come to do so as well) that some intervening processes such as reflection, decision, inhibition, or overcoming inhibition have occurred to delay the response behavior.

It is first necessary to establish if the parent's behavior is responsive to that of the baby. Only then is it easy to discern whether it is positively or negatively contingent. For instance, each time the baby smiles, the mother could, three quarters of a second later, smile back or turn away. These actions are equally "responsive"; it takes the same sensitivity to be negatively contingent as to be positively contingent—a clinically crucial point.

This kind of interactive process evaluation must be undertaken for each of the main activities between parent and infant: regulation of arousal and activation, regulation of affect quality and level, physiological regulation, teaching, and so on. This reevaluation is necessary because sensitivity, responsiveness, and contingency can be activity-specific.

All this sounds onerous, and for the purposes of quantitative research it is, but clinically these evaluations are made globally and rapidly. An experienced observer could suggest after one short viewing that a certain mother was oversensitive and overresponsive to the physiological needs and demands of the infant but relatively unresponsive to social-affective demands. Knowing the workings of the interaction processes involved can aid observational acumen.

Clinical Windows into the Parent-Infant Interaction

So far, I have discussed how to look, but not when to look for what. Here again there are features unique to the parent-infant relationship. The cardinal clinical issues that one is familiar with in adulthood are found here

in different forms, often not immediately recognizable.

What follows is based on the notion that the basic clinically relevant issues such as trust, attachment, dependence, independence, control, autonomy, mastery, individuation, and self-regulation are life course issues. They are not issues that are age- or phase-specific. No one early period of life is specially devoted to the indelible writing of a definitive version of any of these issues. That is to say, there are no critical or sensitive periods in early life concerned with the irreversible consolidation of these clinical issues. Rather, they are being worked on all the time.

Nonetheless the manner in which they get worked on and the forms these issues take change across developmental epochs. The battleground constantly shifts, but the war may stay the same. This point of view has been argued elsewhere (Stern, 1985). And the basic idea has been put forward and used clinically by T. B. Brazelton in a manner adjusted for the clinical realities of behavioral pediatrics (1992, 1994). It is the same general view of development that permits one to think in terms of touchpoints or clinical windows.

The reason why the "battleground"—that is, the form, time, place, and local conditions—always changes is that development is always progressing but in discontinuous, quantitative leaps followed by periods of relative consolidation of the new acquisitions. The timing of these discontinuities is fairly well agreed upon, because at these nodal points of change almost all aspects of the infant's functioning change: motor, affective, cognitive, social, and so on (Emde & Harmon, 1984). From whatever perspective one views the infant, one finds a major change at these points. These leaps, during the first 2 years, occur at about 2–3 months, about 5–6 months, about 8–12 months, and about 18 months. As each leap brings into place new social, affective, motor, and cognitive capacities, the interaction with the parent is reorganized. What that means clinically is that the life course issues, such as independence or trust, will now be negotiated differently and in the new terms of the capacities for relatedness that the infant has just acquired. With each developmental leap, the lifelong grappling with such issues as independence and attachment simply continues but under a new form that may only disguise the unchanged function.

To deal with these age-related changes in form, it is helpful to know when and how the infant's capacities for relatedness change and what will be the new interactive battlefield. Each advance in interactive competence provides the therapist with a different "clinical window" to view the progress of the major life course issues.

The progression of clinical windows can be summarized as follows:

0–2½ months: During the first weeks, feeding and/or putting to sleep (including a nap) and episodes of crying and soothing are the events that constitute this first clinical window. The major interactive tasks at this age concern the regulation of the infant's feeding, sleep-wake, and activity cycles, and the majority of social exchanges occur around and within these activities. More specifically, social and affective exchanges—the parental smiles and baby talk—are used largely to cue and to regulate these events, as well as for themselves (Sander, 1962, 1964). It is the regulation and repair of these activities that is of clinical interest. For instance, when feeding starts and the infant is still avidly hungry, does the mother know to stay behaviorally quiet and let him proceed at a full unimpeded gallop? When the baby's hunger is partially satisfied and he needs a certain amount of parallel stimulation to keep a productive sucking rhythm going, does the mother know how to jiggle the bottle, play with and stroke the baby's hand, bounce him a little in her arms, say something, to arouse him just enough to start sucking again but not enough to startle and throw him off? When the baby gives signs of satiety, does the mother read them, and how does she respond? Can she orchestrate the baby's level of arousal and activity by using cues from him? It is in the conduct of these activities that one observes clinical issues of parental or infant responsivity, sensitivity, temperamental fit, overcontrol, undercontrol, bizarreness, and so on.

Because the regulatory process normally breaks down frequently, much crying by the baby and many attempts to rectify the situation by the parent are inevitable during this early life period. The repair of crying, then, is an important part of this clinical window. Charles Zeanah (personal communication, 1994) finds that crying is overwhelmingly the main complaint motivating parents to seek help in a clinic setting for infants under 3 months of age.

If home visits are made, the observation of an entire wake-to-wake cycle of 4 hours or so is very rewarding in clinical impressions. Practically, however, a considerably shorter office visit can achieve much if it includes a feeding and perhaps a putting to sleep thereafter. With a certain amount of planning and flexibility this can be arranged.

2½–5½ months: Face-to-face social interaction without toys or other objects provides the next clinical window (see Beebe & Stern, 1977; Stern, 1977, 1985; Tronick & Cohn, 1989). The infant is now, both by design and by default, perfectly adjusted to show his full social and affective capacities (and elicit the parental counterpart) in face-to-face play.

I say by design because the infant's innate preferences for the human face, voice, touch, and movement come strongly into play at this time. There is nothing in the world that can compete with these stimuli for

attracting and holding the baby's attention. At this age his nervous system is designed for the situation of face-to-face play. Moreover the social and affective behaviors used to regulate the face-to-face interaction—that is, control of his gaze, responsive smiling, and vocalizing—become mature. Because these infant behaviors are so precocious, a face-to-face interaction at these early ages is an interaction between two people (parent and infant) with almost equal control and will to contribute to the initiation, maintenance, modulation, termination, or avoidance of the face-to-face engagement. A mutual regulation of the social interaction has begun.

The face-to-face interaction is also the preferred clinical window at these ages by default. What else can the baby do? His hand-eye and hand-to-hand coordination is not yet good enough for him to be interested in the world of inanimate objects or to reach for or manipulate them. He cannot get up and crawl or walk away. By his nature he is a kind of prisoner to the face-to-face situation, for better or worse.

At the same time, feeding and sleeping regulation may by now have become relatively routine. The action and passion have now passed to face-to-face play, and it is here that one can best see the same clinical issues at play that one observed during feeding several months before. For instance, if the mother was overcontrolling (e.g., intrusive) during the feeding, she will now overregulate the face-to-face interaction. It may be she who initiates most of the face-to-face dialogues. She will modulate the intensity of the interaction when she decides it has climbed too high or fallen too low. It is she who will decide when an episode of play is to be terminated; if the baby averts his gaze to close out an episode of mutual gaze, she may decide not to respect that act and instead chase after him to reestablish a mutual gaze so that she can then be the one to end it (Beebe & Stern, 1977).

It should now be clear what I mean by the continuity of issues (e.g., maternal overcontrol) in the face of the discontinuity of form (feeding versus face-to-face play). One observes the negotiation of the same issues, but at each developmental leap the negotiation takes on a new guise. It is this reality that makes the sequence of changing clinical windows clinically useful, both for seeing the common thread and for dealing with it therapeutically.

5½–9 months: During the next period, joint object play—that is, parent and baby playing together with some inanimate object—becomes the activity that provides the clinical window. The child has now acquired adequate hand-eye and hand-to-hand coordination and with it an avid curiosity about the inanimate world, so object play is where the clinical action is hottest. The observation of how the parent and infant conduct the

direction, timing, focus, elaboration, scaffolding, change in subject, and disengagement of such play now reveals the same clinical story that one could glimpse several months before in face-to-face play.

Intrusiveness, for example, now takes on a new form in this new terrain; it is seen in how the mother overconstrives and overcontrols the infant's object play. For instance, while the child is sufficiently engaged with one toy, the mother decides that another toy is more interesting (that could mean more stimulating, more educational, or more pleasing to her), so she takes the first one away and offers the second. The infant accepts and explores this one, then loses interest and looks about for a third toy. Mother, however, feels that he has not spent enough time with this second toy and shows him yet a new aspect of the toy that he had not noticed. She insists on his not only noticing but being fascinated by this new aspect and in so doing fails to pick up his signals of boredom. (I have described the pattern by focusing on the mother's contribution and not the infant's to such a pattern, which he accepts and supports with his behavior.)

This overregulated negotiation about toy play is essentially the same as the overregulation seen in the face-to-face interaction several months before. It is played out in who initiates what, who terminates what, and when. But now play with objects is where the relationship gets lived and where the overdetermined patterns are revealed clinically. (There can also be patterns of underregulation as well, where the mother does not participate enough to scaffold the baby's initiations.)

8–12 months: There are two major developmental events that provide convenient and telling clinical windows during the period from 8 to 12 months. The first involves attachment. Beginning toward the end of the first year, the infant starts to manifest in a very clear and readily observable fashion the behaviors characteristic of attachment and separation from the primary caregiver. This process is accelerated by the infant's growing capacity to move away from and return to the mother (crawling, then walking). The patterns of attachment established by parent and infant are proving to be one of the best predictors of the quality of the parent-infant relationship. The clinical view into the relationship provided by patterns of attachment seems to apply to a large array of potential clinical problems and not just those related to the diagnosis of "problems of attachment" (Bretherton & Waters, 1985).

Watching how both parent and infant negotiate the comings and goings, the moving away and returning that are inevitable at this age, provides the raw data. It is not necessary in a purely clinical setting to establish the rigorous conditions of the "strange situation" demanded of research on attachment (Ainsworth et al., 1978). The idea is to get a clinical

glimpse that may prove therapeutically useful, but not to establish any form of clinical diagnosis or research typing. Zeanah et al. suggest behaviors other than separation/reunion behaviors as the basis for assessing the nature of attachment—for example, showing affection, seeking comfort, reliance for help, and cooperation (Zeanah, Mammen, & Lieberman, 1993).

The second clinical window involves the advent of intersubjectivity (Aston, Harris, & Olson, 1988; Premack & Woodruff, 1978; Stern, 1985; Trevarthen, 1980, 1982). In brief, the infant comes to realize that his mother can have "things-in-mind," that is, contents of mind, such as attention to something, an intention, or an effect; that he, too, has things in mind; and that the contents of his mind and of his mother's mind can be the same or different. And if they are not the same, they can be brought into alignment. Several manifestations suggesting the presence of intersubjectivity can be regularly observed at this age, such as social referencing (Emde & Sorce, 1983; Klinnert, Campos, Sorce, Emde, & Svejda, 1983), affect attunement (Stern, 1985; Stern, Hofer, Haft, & Dore, 1984), joint attention getting (Collis & Schaffer, 1979) and reading of the other's intentions (Trevarthen, 1979), and taking the intentional stance (Gergely, Nádasdy-Gergely, & Biró, in press). What is at stake here is the negotiation between parent and infant of what will constitute the shareable universe of mental phenomena: what can be public, what must remain private, what happened but is not to be referred to between people, and what is shareable. Viewed this way, the negotiation of intersubjectivity is a fascinating and rich observational perspective on the parent-infant relationship (for a further discussion, see Stern, 1985).

To continue with our example, maternal overregulation, at this life phase, would be manifest in the mother in various ways. One could see the mother establish the limits of exploration and the physical distance between her and the child satisfying her own criteria rather than the child's attachment needs. In the domain of intersubjectivity, one could see a parent establish very definitely which of the child's emotional experiences will be responded to as legitimate and shareable, and which will not. If, for instance, the infant feels only moderately excited and enthusiastic about something that has just happened but the overcontrolling mother feels that the event is—or ought to be seen as—far more exciting, she may make a modifying attunement upwards to show the level of excitement or enthusiasm that she is after. In order to share fully the same experience, the infant may be forced to manifest a "false" reaction. At an intersubjective level, the mother is being insufficiently sensitive to the infant's indications of what he or she would like to share.

18–24 months: During the second year, two other developmental leaps offer good clinical windows. First, there is the advent of language. Clinical

cally, language learning is something like learning to play with objects. Both will happen anyway, even with thin parental input. Still, what one generally sees is a rich interaction where the parent helps, scaffolds, and elaborates in response to the infant's sensitivities, desires, and capacities. In a sense there is a clinically revealing triad established between the infant, the parent, and the word with its meaning. Just as one clinically watched this kind of triad at 6 months with real objects, now one watches it with "sound objects," that is, words (Berthoud-Papandropoulou & Veneziano, 1989). Once again, we see similar interpersonal issues (overcontrol, undercontrol, and so on) being negotiated differently at different ages.

The second developmental change ushered in at this age is the increase in mobility and physical capacity that leads to the need for limit-setting. The infant now has the ability to hurt himself and to do considerable damage. Also, it is at this age that society asks parents to begin the process of socialization in earnest. Often enough, the issue of limit-setting is presented by the parents as one of the chief complaints. Setting limits is, most often, not a process of establishing and enforcing rules; it involves negotiating them. Most of the time, the parent and infant are working in a grey area. Infants and children are uncannily creative in finding, or leading parents into, grey areas. And it is there that the negotiations that reveal the structure and functioning of the relationship are to be found. The manner in which the limits get set tells as much of the clinical story as what the limits are.

These, then, are some of the most commonly available and easily used clinical windows that answer the question, Where does one look in the parent-infant interaction, and when, to get a clinical sense of the relationship? Elsewhere I have attempted in a more popular fashion to give a sense of what it may be like for the infant to live these clinical windows, that is, a point of view from the baby's subjective experience (Stern, 1990).

The central point is that most of the basic clinical issues are continuous life-course issues, but the form in which these issues are negotiated is discontinuous, changing with each major qualitative leap in development. The developmental leaps provide the infant with new behaviors and means for conducting the same old issues. At each developmental leap, therefore, there are new clinical windows through which the basic issues can best be seen. This information is also valuable to the researcher devising observation strategies at the different ages. The notion of developmental changes in the forms for negotiating the same clinical issues will reap-

pear again in chapter 10, as it has implications for the processes of generalizing or "working through" in the treatment.

Two final points must be added. First, the list of clinical windows suggested here is not meant to be exhaustive. Others, with different particular interests and perspectives, can be readily added. Since there are such major changes in the infant—and accordingly in the interaction—at each developmental leap, it is to be expected that these changes can be used from different vantage points (see, e.g., Brazelton, 1992, 1994; Greenspan, Lourie, & Nover, 1979; Mahler, Pine, & Bergman, 1975; Sander, 1964). Also, when a new clinical window becomes available, the previous ones do not disappear and become lost to use. Each manner of interacting that forms the basis of a clinical window provides the base upon which the subsequent manner of interaction is built. For instance, effective parent-infant play with an inanimate object relies heavily on constant reframing and contextualizing with bouts of face-to-face interaction. And later, intersubjective relatedness depends in large part on a shared base of having played together with inanimate objects.

The clinical window helps direct clinical observations. It is not intended as an exhaustive or even rigorous classification from the point of view of developmental psychology, but rather as a clinical guide for understanding the parent-infant interaction.

Some Theoretical Issues

We can now return to some of the implications of the reality that action must occupy a central position in viewing relationships with a preverbal infant. This requirement is sometimes interpreted as a reason for describing (or dismissing) the parent-infant interaction as belonging more properly to ethology or behavioral psychology, rather than to the more psychodynamic psychologies. My disagreement with this view requires a larger discussion.

A distinction must first be made about whether we are putting action (and interaction) at the theoretical center or the technical center of the therapeutic approach. Behavioral, systemic, psychoanalytic, and cognitive approaches differ in the technical attention they give to overt acts, as opposed to thoughts about such acts. This difference is in large part one of technique. In most behavioral and some systemic approaches, the field of clinical vision is initially limited to actions and interaction, that is, overt behavior. In technically "pure" traditional psychoanalytic approaches, the field of vision admits everything but action. Action is eliminated by the

nature of the analytic setting, thus by technique; in fact, it is prohibited as "acting out." And in the place of action, one sees and works with the thoughts, feelings, fantasies, and so on, that emerge when direct, immediate action cannot take place. These mental derivations then become the exclusive subject matter of the analysis (Freud, 1938/1940, 1912/19, 1915a/19). Similarly, cognitive approaches concern the mental sets surrounding acts.

At a more theoretical level, beneath these aspects of technique, the centrality of action is implicit in all these approaches. Freud was very clear that unmodified motivated actions such as "specific action" (1895/1950) were indissolubly part of the drive. In fact, a specific action is always the local goal of a drive; energy discharge is the general, nonspecific goal. Thoughts, representations, and memories were thought to result from the inhibition of specific actions and thus were secondary derivations. In this sense, the extreme behaviorists and the classical Freudian positions are in agreement that the act, whether clinically addressed or not, is the basic point of departure for understanding motivated behavior. The fact that behaviorists plus some system therapists work largely with overt behavior and psychoanalysts work largely with the mental derivations of inhibited overt behavior tends to obscure this basic point of agreement about the centrality of the act.

A second important theoretical issue is involved. There exists a strong intellectual current against placing action at the center in understanding human behavior. As Eugene Gendlin states the problem, "Many people conclude that anything human *depends entirely* on language, concepts and history. Nothing of the human animal seems to remain. As Foucault (1977) puts it: our erstwhile animal bodies were 'utterly destroyed' by history. History and language seem utterly to determine what we will perceive, what we will distinguish as touched, seen or heard" (Gendlin, 1992, pp. 341-342).

Even actions committed by a human are assumed to have cultural concepts and language implicitly behind or within them. This may be increasingly true as development proceeds, but it is only partially so at the ages that interest us.

Psychoanalysis, leaning on the hermeneutic tradition, has developed its own version of this language- and culture-based position. Many modern strains of psychoanalysis privilege the narration or interpretation that stands behind or over an act, and that presumably defines it and gives it its psychic reality, rather than the act itself. This preference for the thought that surrounds acts is systematized in the psychoanalytic technique. It is the same perspective adopted by many psychodynamic approaches that

give cardinal importance to the notion of reconstruction, the idea that what one experiences is not determined by the actions and interactions that make up the lived event, but rather by the later mental reconstruction of what happened. That is what becomes the lived experience. The reconstructed event (after the fact) becomes not only the "real" event but the only event. Action and interaction are not simply pushed out of the center but relegated beyond the pale. Chapter 5 contains a further discussion of this point.

In ethology and behavioral psychology, the opposite tendency previously reigned, and many considered the mental representation of actions off limits. Currently, however, the two extremes are approaching one another. Psychoanalysis is moving from the base of thought to admit action, and ethology and behavioral psychology are moving from the base of action to admit representation.

Thus the parent-infant interaction is a key element of the clinical system. It acts as a bridge between the other elements and is the major arena in which the symptoms and problems that motivate the consultation are formed. The clinically relevant parts of the interaction are considered to be the microregulatory events that make up the interaction. The clinical observation of the interaction is therefore somewhat different from most clinical endeavors. Some of the practical and theoretical aspects of this unique situation have been discussed, and they will reappear frequently as we proceed.

CHAPTER 5

The Nature and Formation of the Infant's Representations

WE CAN now turn to the infant's side of the relationship, or at least that part of it that exists in his mind. How does an infant represent the subjective experience of being in a relationship? (How does an adult, for that matter?) This remains one of the more intriguing questions that we left hanging from chapter 2, where it might have seemed easier to pursue such an inquiry with the parent's representations. When thinking about infants, we are far less sure what such representations are and how they get there. We are forced to reconsider the question from its very foundation.

The infant's representations are one of the main elements of the clinical situation, for a simple reason. Even if we could intervene clinically in a troubled relationship and successfully alter what the parents do and how they interpret events, so long as the infant's representations are not changed, he will act as he did before the alteration in his parents, insofar as that is still possible. The therapeutic effect would be partial and would probably not last long. After all, the infant's representations are his guide to what he expects, how he will act, perceive, feel, and interpret in the relationship with his parents. It is with this in mind that the infant's representational world must be explored.