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Research Article

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Studying the process of psychoanalytic parent–infant psychotherapy: Embodied and discursive aspects

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Abstract

This paper presents findings from an intensive, mixed methods case study of one session of psychoanalytic parent–infant psychotherapy (PPIP) addressing early relational trauma, and aims to shed light on the multimodal interactive processes that take place in the moment-to-moment exchanges comprising the therapeutic encounter. Different research methods were used on video material from PPIP sessions, including microanalysis of adult–infant interactions, discourse analysis of talk, and coding systems developed to study parent–infant interaction. These different perspectives were brought together with the clinical narrative to illuminate the complex, dynamic processes of parent–infant–therapist interaction. More specifically, the detailed analysis of one interactive episode revealed brief behavioral manifestations of fearful and disoriented states of mind, reflecting dysregulated interaction between mother and infant, which also powerfully affected the therapist. The processes through which the therapist gradually resolves this rupture are also described in detail. Through this pilot study, we were able to show that it is possible to systematically study the process of PPIP. The study contributes to the growing psychotherapy research literature that takes into account both the verbal domain and implicit, interactional processes in therapeutic practice, and underscores the therapist's comprehensive engagement in the therapeutic process.

KEYWORDS
implicit domain, multimodal communication, parent–infant psychotherapy, process research

1 | INTRODUCTION

This paper is part of a growing body of psychotherapy research that examines aspects of clinical process by studying implicit and explicit domains of interaction, and explores their role in the process of change. This literature draws upon the concepts and findings developed within the field of infant development and points to the importance of implicit, nonconscious procedural processes in human interaction and in psychotherapy (e.g., Beebe & Lachmann, 2002; BCPSG, 2002; Harrison & Tronick, 2011). A key assumption is that therapy entails processes of intersubjective meaning-making that occur across different modalities, including both embodied/nonverbal/implicit and semantic/verbal/reflective/explicit processes. Several authors have argued that, in addition to the creation of new meanings through talk, the process of therapy takes place through implicit relational exchanges as therapist and client(s) come to co-create a way of being with each other that produces changes in

procedural "knowing about relationships" (e.g., BCPSG, 2002, 2010, 2012; Beebe & Lachmann, 2002, 2014; Stern et al., 1998). Despite the recognition of the importance of such interactive exchanges for the work of therapy, research on the ways in which these processes unfold in the therapeutic hour is scant. In this paper, we present findings from an intensive, mixed methods case study of one session of psychoanalytic parent–infant psychotherapy (PPIP) addressing early relational trauma. We aim to shed light on the multimodal interactive processes that taking place in the moment-to-moment exchanges that constitute the therapeutic encounter.

The treatment studied is an example of a modality of psychoanalytic, attachment-informed therapy developed for infants and their parents who are entangled in disturbed relationships, with the infant presenting symptoms that are likely to negatively impact his/her developmental trajectory (Baradon, Bizeo, Broughton, & James, 2015). PPIP was selected for study for several reasons. Importantly, the infant's presence in the room powerfully foregrounds nonverbal aspects in the infant–mother–therapist interaction. A characteristic of PPIP is that the therapist is actively engaged with parent/s and infant, joining with parent/s and infant in the melee of the "here-and now"—physically on the floor, emotionally present, and relating with heightened sensitivity to the embodied language of the infant, in addition to the spoken languages of the adults. We focus on early relational trauma, given the adverse implications that this can have on infant mental health and on the development of attachment. Furthermore, in cases where the parent has experienced relational trauma in their own childhood, the parent–infant psychotherapist may also need to amplify affective aspects of psychodynamic developmental therapy (Fonagy & Target, 1996) through, for example, labeling of affect through mirroring and reflecting back emotional states, bodily co-regulating of overwhelming affect through the containing quality of presence (by which we mean the multiple embodied and verbal ways the therapist is emotionally regulating and reflective, thus anchoring the therapeutic work), and playing. This more active way of working makes the multimodal communications of the therapist more evident and easier to study, as it amplifies the back-and-forth co-construction of dialogue and co-regulation of affect.

The primary aim of this study is to describe in detail the multimodal processes that constitute the therapeutic interaction, as this unfolds in actual therapy sessions. For this purpose, we utilize findings and methods from different research traditions to produce a multilayered, clinically informed description of therapy process. These methods include the microanalytic tradition developed for studying parent–infant interactions (Beebe, Messinger et al., 2016), discourse analytic methods for studying the processes of meaning-making in psychotherapy (Avdi & Georgaca, 2007), and coding systems developed in the context of developmental research on parent–infant interaction, namely, the Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE; Bronfman, Parsons, & Lyons-Ruth, 2004); Reflective Functioning (RF; Fonagy, Target, Steele, & Steele, 1998), and Parental Embodied Mentalizing coding systems (PEM; Shai & Belsky, 2011). These different perspectives are brought together and combined with the clinical narrative in an attempt to illuminate the complex, dynamic processes of parent–infant–therapist interaction. Before turning to the case, we briefly describe some of the key theoretical and research underpinnings of our work.

2 | EMBODIED COMMUNICATION AND PSYCHOTHERAPY

This study is concerned with "the multiple simultaneous meaning-making processes" (Harrison & Tronick, 2011) that constitute communication, as it takes place in the consulting room. There is ample research that communication is inherently multimodal; in addition to the semantic/verbal level, communication includes the affective undertones of the vocal/aural modality—prosody, tone, pitch, vocal rhythm—the "vitality affects that give the sense of 'how' the 'what' was said or done" (Stern, 1985, pp. 51–63), and the visuospatial modality, which includes facial expression, body movement, gaze, gesture, posture, and body orientation (Beebe et al., 2016; Stivers & Sidnell, 2005). As such, meaning is co-constituted through embodied multimodal actions, rather than simply constructed through talk, as interacting partners co-create moment-to-moment an emerging relational context, which is primarily understood nonconsciously (Cromby, 2012).

In developmental research, there is some evidence that parent–infant biobehavioral synchrony (coordination and contingency) is associated with the development of self-regulation and symbol use in the infant (e.g., Feldman, 2007a; Stern, 1985) and has been proposed as a framework for conceptualizing and studying intersubjectivity across the lifespan (e.g., Feldman, 2007b). In psychotherapy research, nonverbal aspects of the interaction—such as body orientation, postural sharing, smiling, head nodding, and prosody—have been shown to be associated with the expression of empathy and with attributions of expertness and attractiveness of the therapist by clients (e.g., Philippot, Feldman, & Coats, 2003). Nonverbal cues are thought to be central in the creation of empathy (Hatfield, Cacioppo, & Rapson, 1993), rapport (Tickle-Degnen, & Rosenthal, 1990; Vacharkulksemsuk & Fredrickson, 2012), the therapeutic alliance (Knoblauch, 2000; Ramseyer &

Tschacher, 2011), and affect regulation in psychotherapy (e.g., Benecke, Peham, & Bänninger-Huber, 2005).

A key concept in the literature on nonverbal communication is that of *interpersonal coordination*; the term refers to behaviors in an interaction that are patterned or synchronized in timing and form (Bernieri & Rosenthal, 1991). Interpersonal coordination is studied through two related phenomena: behavioral matching—that is, doing what others are doing—and synchrony (contingency), that is, the temporal coordination of microlevel social behavior (Feldman, 2007b). Interpersonal coordination plays a central role in the formation of social bonds and is considered a core aspect of human sociality, a form of "social glue that binds and bonds" (Lakin & Chartrand, 2003). It is associated with liking, affiliation, rapport, cooperation, self-other merging, perspective-taking, empathy, smoothness of interaction, prosocial behaviors, and infant attachment (Beebe, Jaffe, Markese, Buck, & Chen, 2010; Chartrand & van Baaren, 2009; Jaffe, Beebe, Felsdtein, Crown, & Jasnow, 2001; Keysers, 2011).

In psychotherapy research, there is evidence that body synchrony plays an important part in the establishment of the therapeutic relationship. For example, postural convergence between therapist and client has been found to be associated with ratings of rapport and congruent body movements correlate with clients' perceptions of the therapist as being more empathic (Sharpley, Halat, Rabinowicz, Weiland, & Stafford, 2001), warmer, more understanding, and more engaged and with increased client disclosure (Davis & Hadiks, 1994). Body movement synchrony is associated with the therapeutic alliance and with therapy outcome (Koole & Tschacher, 2016; Ramseyer & Tschacher, 2006).

In this study, we draw upon literature from infant observation, cognitive science, social psychology, and psychotherapy, which suggests that much of what transpires in human interaction occurs so fleetingly as to not register reflectively in the moment (Beebe, Lachmann, Markese, & Bahrick, 2012) and that procedural knowledge, which seldom reaches conscious awareness, plays a central part in human relations and therefore therapy process. The recognition that so much of communication does not reach conscious registering is the basis for our choice to combine microanalytic and nonverbal elements with more macrolevel approaches to studying therapy process.

3 | RELATIONAL TRAUMA AND AFFECT REGULATION IN INFANT DEVELOPMENT AND PSYCHOTHERAPY

Relational trauma takes places within the matrix of the infant's relationships with primary love objects and can lead to the development of attachment disorganization, in addition to other adverse effects on infant development (Baradon, 2009; Schore, 2003). One of the key characteristics of relational trauma is that it creates an "unresolvable paradox" for the infant, as his/her attachment figure is also the source of threat to survival and to psychic integrity (Liotti, 2004; Main & Hesse, 1990). Relational trauma takes place through different types of lapse in sensitive parenting, such as repeated enactments of frightened or frightening behaviors on the part of the parent (Hesse & Main, 2006) or hostile/helpless and withdrawn states of mind in parents as a response to infant's attachment cues (Lyons-Ruth & Spielman, 2004). The infant's attachment behaviors can trigger dissociative states and reactions in the parent, which are themselves underpinned by unresolved traumatic experiences in the parent (e.g., Main & Hesse, 1990). This can lead to the parent failing to provide a minimally adequate response to the infant's manifestations of distress, displaying discrepant behaviors such as smile or surprise to infant distress (Beebe et al., 2010), and displaying atypical parental behaviors or a specific lack of cross-modal contingency (e.g., Bronfman et al., 2004; Lyons-Ruth & Jacobvitz, 2008). In sum, this literature suggests that such behaviors create in the infant "confusion about their own basic emotional organization, about their mothers' emotional organization, and about their mothers' response to their distress, setting a trajectory in development which may disturb the fundamental integration of the person" (Beebe et al., 2010, p. 119). Such "communication errors," whereby the affect displayed by the parent is at odds with the infant's affective state (Bronfman et al., 2004), confound the infant's experience of recognition, and consequently his or her experience of selfhood that is normatively derived from finding himself in mother's eyes/mind (Fonagy, Gergely, Jurist, & Target, 2002; Winnicott, 1967).

In parent–infant psychotherapy, relational trauma can manifest in several ways, including direct communications by the parent (both verbally and nonverbally), nonverbal communications by the infant, including the use of defenses (Fraiberg, 1982; Perry, Pollard, Blakley, Baker, & Vigilante, 1995), or the inhibition of normative attachment behaviors. Furthermore, relational trauma can be observed in the rapid transactions between parent and infant as they co-construct their singular dance; in particular, the occurrence of unexpected reactions that break the contingency frame may signal that trauma has infiltrated the ongoing parenting transactions (Baradon, 2018).

Relational trauma is associated with repeated failures of affect regulation in the caregiving relationship. Infants are largely dependent on their parents to regulate their physical and psychological states (Schore, 2003).

Although parent–infant interactions are not symmetrical, as the parent has a much wider range of behaviors and increased capacity for influence, contemporary systems models underscore the bidirectional nature of coordination, and describe patterns of self-regulation and mutual regulation as key to development (Jaffe et al., 2001). Affect regulation is a central component of the work in parent–infant psychotherapy and specifically those aspects of parenting behaviors that promote the development of the capacity for affect regulation in the infant.

In addition to parental sensitivity—that is, the parent's ability to recognize and respond appropriately and contingently to the infant's cues—the parent's mentalizing capacities are considered to play an important role in providing affect regulation for the infant. Mentalizing is a form of imaginative mental activity about others or oneself, which involves interpreting behavior in terms of intentional mental states, that is, beliefs, desires, feelings, and so forth (Fonagy et al., 1998). Parental mentalizing refers to the parent's capacity to envision the breadth of the child's internal experiences and treat him/her as a psychological agent (Sharp & Fonagy, 2008; Slade, 2005). It is thought to underlie sensitive parenting behavior and to be a prerequisite for the child's own developing capacity for mentalization (Fonagy & Target, 1997). It is particularly important in the early parent–infant relationship as it is central to the parent's capacity for regulating their own and their infant's affective state. Mentalizing is considered a multidimensional construct, entailing both implicit and explicit aspects (Luyten & Fonagy, 2015). Recent research has focused on parental embodied mentalizing, an implicit aspect of mentalizing that is associated with a parent's capacity to conceive, comprehend, and extrapolate the infant's mental states from his/her whole-body movement and to adjust their own kinesthetic patterns accordingly (Shai & Belsky, 2011, 2017).

The relationship between implicit and explicit domains in human functioning (including mentalizing) and in interaction is complex and yet to be empirically explored and theoretically clarified (e.g., BCPSG, 2008). Although full discussion of this issue is beyond the scope of this paper, we contend that there are important interactional processes in both parenting transactions and in psychotherapy, as described above, which often occur so fleetingly that they are not easily observed or consciously registered. Multimodal microanalysis has been developed in the context of infant development as an approach to studying interactions in *detail*, and provides insights into the live embodied interaction (Beebe, 2014, 2017; Stern, 1971). Several authors have suggested that empirical microanalytic research could expanded to the study of implicit processes in psychotherapy (e.g., BCPSG, 2002; Beebe, 2017; Harrison & Tronick, 2007).

In sum, this study relies on the assumption that human relatedness is multimodal and that much of human interaction takes place nonconsciously and nonverbally. In this paper, we attempt to study psychotherapy process at the "local level" and we extend the concepts of dyadic systems views (Beebe et al., 2016) to embrace triadic interactions. We integrated and adapted methods derived from microanalytic studies of nonverbal dyadic interaction, empirical attachment research, and narrative studies of therapy talk to examine the interactions co-created by mother, infant, and therapist in PPIP and track the therapist's contribution toward change.

4 | THE CASE

The clinical material analyzed in this study concerns one brief interactive episode, which is drawn from the start of the sixth session of a psychoanalytic parent–infant therapy.[1] The family was referred to a PPIP service when Baby was 8-week old, with concerns about bonding. Mother had experienced severe emotional abuse in her own early childhood; father came from a large, stable family, and the parents had a close and satisfying relationship. The pregnancy had been planned and proceeded without complications but Baby's birth was traumatic, and she had nearly died at birth. She spent the first few weeks of her life in a neonatal intensive care unit and was subjected to many intrusive medical interventions. There was anxiety about her survival and, later, serious concerns that she may have suffered extensive brain damage. These factors contributed strongly to the mutual relationship disruption between mother and baby.

Therapy lasted 9 months, with weekly sessions; 17 sessions took place in total. Mother and baby attended all sessions together and father joined in one. The therapist was an experienced female psychoanalytic parent–infant psychotherapist. The therapy helped reduce maternal anxiety and hostility, as well as baby's avoidance. In the session discussed, baby was 20-week old. The mother gave consent for the use of this material for educational purposes and care has been taken to preserve the family's anonymity.

Below, a brief exchange among parent, infant, and therapist is described; it was selected for further analysis as it entails many of the elements of an enactment of a potentially traumagenic interaction. We describe in detail the dysregulating parent–infant dynamics as they

[1] For more details on this case, see Baradon (2018).

manifest in the session and examine how the therapist initially becomes entangled in this and then interrupts it, gradually bringing it into the verbal/reflective domain.

5 | PROCESS OF ANALYSIS

The research team is multidisciplinary, including parent–infant and adult psychotherapists, psychologists, psychotherapy researchers, and a film-maker. A nonlinear, iterative process between selection and analysis of different interactive events took place over a period of a few months. The researchers watched and analyzed individually and together different parts of the session, each drawing upon their own research and clinical skills. Through repeated discussions, a kaleidoscopic description of clinical process was created, focusing on specific interactive events in the sessions that seemed highly significant. In retrospect, these events are examples of enactments or "now moments" (BCPSG, 2012).

Analysis of the session material oscillated between phases where a more open process relying on intuition was adopted, paralleling Bion's much-quoted suggestion to approach clinical material with "no memory, desire or understanding" (Bion, 1970, p. 43) to phases where more conventional, systematic analysis was carried out, drawing upon microanalysis, discourse analysis, the RF coding system, and analysis of the interaction using the PEM and the AMBIANCE coding systems; we also utilized the therapist's clinical narrative to inform the emerging analysis.

5.1 | Microanalysis

Microanalysis is an approach to studying the details of interactions and enables examination of instant-by-instant temporal–spatial–affective contours of an interactive event (Beebe, 2017; Stern, 1971). By slowing down the filmed interaction or examining it frame-by-frame, it is possible to see what is too rapid to grasp in real time. The use of video in parent–infant research has focused on face-to-face interaction, taking a dyadic systems view of communication (Beebe et al., 2016; Beebe, Jaffe, & Lachmann, 1992) in which each person both monitors their interaction partner and regulates their own inner state, each making moment-to-moment adjustments to the other's behavior. Microanalysis provides both an approach to examining an interaction from a clinical standpoint, as well as a formal approach to coding interactions. For example, attention can be coded as gazing at the partner, gazing at an object, or gazing off. The microanalytic approach outlined above is dyadic and bidirectional. In the study described here, we extend the concepts to embrace triadic, tridirectional interactions. We use the multimodal microanalytic method to examine not only the parent–infant relationship and the therapist–patient relationship but also the matrix of interactions co-created by parent, infant, and therapist; furthermore, we focus on the contribution of the therapist in effecting change.

5.2 | Discourse analysis

Discourse analysis is a qualitative, interpretative approach to studying language-in-use, which focuses not only on the content but also on the organization and function of talk. Following several readings of the text as a whole, analysis tends to focus on three levels (e.g., Georgaca & Avdi, 2011): (a) how the object under study (e.g., the infant) is constructed in participants' talk and what discourses participants draw upon to construct their accounts; (b) the function of talk—this is studied through examining each utterance in its discursive context (i.e., what comes before and what follows), the organization of accounts (e.g., their grammatical and syntactical characteristics), and the rhetorical strategies speakers use; (c) subject positioning, that is, the identities made relevant through specific ways of talking. In psychotherapy research, discourse analysis can help study therapy process by focusing on how meanings are negotiated in the clinical dialogue, the processes through which participants' identities manifest and are reformulated through talk, the interactional dynamics emerging in a conversation, and the therapist's discursive agenda, that is, the effects of his/her talk on the unfolding interaction (Avdi & Georgaca, 2018).

5.3 | Parental Embodied Mentalizing coding system

Parental Embodied Mentalizing (PEM) pertains to the parent trying to understand at the implicit level, out of awareness, what the infant wants and feels, and to convey this understanding through his/her movements (Shai & Belsky, 2011). The PEM coding system examines the bodily patterns characterizing interactive exchanges between parent and infant. The coding focuses exclusively on kinesthetic behaviors and therefore video-taped interactions are viewed on mute mode. Coding is performed through careful observation of the videos, both in real time and frame-by-frame; specific elements of the interactive kinesthetic patterns, drawing upon movement analysis paradigms (e.g., Kestenberg, 1965), are examined. The movement qualities can be described using some or all of the following kinesthetic qualities: (a) *directionality*, which refers to where the movement is going to, either shrinking away or growing towards the body center; (b) *pacing*,

which describes the changes in movement and ranges from abrupt to gradual; (c) *tempo*, which refers to how fast or slow the movement is; (d) *space*, which describes where in space the movement is taking place in relation to the infant's body center, and ranges from near, intermediate, and far; (e) *pathways*, which refer to the shape in space the movement is making, either straight and linear or indirect and curvy; (f) *tension flow* refers to how much muscular effort was involved in the movement, which could be bound or free muscle tension (Shai & Belsky, 2017).

Empirical research has shown links between PEM and infant attachment (Shai & Belsky, 2017), mind-mindedness (Shai & Meins, 2018), RF, and parental stress (Shai, Dollberg, & Szepenwol, 2017). In this case study, PEM was adapted from a dyadic to a triadic assessment, in order to detect the kinesthetic expressions of the parent–infant–therapist interactive encounter in the session. Thus, we examined the nonverbal bodily based interactive "dance" of three partners: the mother kinesthetically responding to infant's kinesthetically manifested mental states, and how the infant responds to the mother's kinesthetic; as well as the therapist's kinesthetically responding to the infant and mother's manifested mental states and their interactive process.

5.4 | Atypical Maternal Behavior Instrument for Assessment and Classification

The AMBIANCE coding system (Bronfman et al., 2004) has been developed to study atypical parental behaviors that have been associated with the development of attachment disorganization in the infant. Maternal behaviors include affective communication errors, role or boundary confusion, disoriented or fearful behavior, frightening or intrusive behavior, and withdrawal. Maternal physical behavior, vocal tone, and content of vocalizations are all included in the coding system. The instrument has been developed and used to code maternal behavior in dyadic parent–child interactions and has also been used in clinical settings (Baradon & Bronfman, 2009).

5.5 | RF coding system

The RF coding system provides an operationalization of explicit mentalizing, as evident in attachment-related narratives (Fonagy et al., 1998). It is a verbal coding system that provides a quantification of the level of mentalizing in spoken language. It has been developed primarily for coding transcripts of interviews such as the Adult Attachment Interview and Parent Development Interview, and there is some evidence of links among parental RF, AMBIANCE behavior, and infant attachment (Kelly, Slade, & Grienenberger, 2005; Slade, Grienenberger, Bernbach, Levy, & Locker, 2005). The RF coding can be applied to transcripts of therapy sessions to provide a means of understanding the role of mentalizing in the therapy process (Karlsson & Kermott, 2006). The coding system normally quantifies the level of RF present in narratives. In this context, the coding was used qualitatively to examine the patterns of mentalizing in the therapist and mother's speech, and to see how these patterns changed in the context of verbal and nonverbal interactions in the session. Lapses in mentalizing, such as concrete/teleological explanations of behavior, were noted within the context of the therapeutic interactions (e.g., were there behaviors in the infant that preceded a shutting down of the parent's RF?). Moments of good RF were also noted, as were the precedents and antecedents of mentalizing (e.g., what did the therapist do/say just before the parent was able to talk about and try to make sense of the infant's mental state in that moment?).

The selection of the specific interactive event for further analysis relied on several viewings of the session video. We decided to focus on an exchange that is affectively charged and that clearly illustrates disruptions in the interactive flow; also we realized that, when this interaction was examined frame-by-frame, intricate dynamics that were until that point unnoticed became evident. Following selection of this clip, we watched it several times and in different ways (e.g., slowed down, by blacking out one of the participants, muted and with sound, and so forth), both together and individually, and discussed our understanding of the underlying processes.

6 | CASE ANALYSIS

A verbatim transcript of the dialogue is presented below,[2] enriched by a detailed description of nonverbal aspects of the interaction, shown in italics, inspired by the PEM and the AMBIANCE coding systems. We identify time through hours:minutes:seconds. The main parts of this sequence are also depicted graphically in Figure 1, which comprises images created from the session video, in a way that preserves participants' anonymity.

10:39:20	*Therapist, Mother, and Baby enter the room. Therapist sits down at one end of the mat and starts to take her shoes off. Mother talks to Baby as she kneels down.*

[2] The initial part of this interaction is also discussed in Baradon (2018).

1 10:39:39	M	Look, do you remember it here? Mm (.)[3] all these bright things to look at *Mother kneels and places Baby on a standing position on the mat while talking to her; Baby is gazing away from Mother and the therapist.* *Mother places Baby in a sitting position on the floor, leaning on a cushion. Mother sits down next to Baby; laughs silently.* Mmm (14).
2 10:40:13	B	*Baby looks briefly at therapist; the therapist is looking at Baby, while taking her shoes off.* Vocalizes *Baby leans forward toward the therapist, looking intermittently at her (9 s pause).*
3 10:40:27	T	*Therapist takes her shoes off, positions herself on a large cushion facing Baby, leans in and starts speaking to Baby, in a warm voice, with highly modulated pitch and slow pace. Baby is looking away from the therapist.* We've learnt to wait, haven't we Baby? Till you are ready to look (.) And sometimes it takes you a little bit of time. Mmh? (.)
4	B	*Baby looks at therapist and pouts.*
5 10:40:35	T	*Therapist mirrors the pout.*
6	B	*Baby looks at therapist. Therapist smiles and nods once **(image A)**.*
7 10:40:40	T	Now you are ready.
8	B	*Baby holds the therapist's gaze.*
9 10:40:43	T	*Therapist sits up.* But you like to take things in first, don't you? (.) Mm? *While the therapist is talking to Baby, they move their heads up and down, and slightly forward and backward toward each other in alternating turns. When seen in slow motion, they seem to almost "breathe" together: when one "inhales," that is, when her movement grows and extends, the other "exhales," that is, her movement shrinks and shortens. The therapist's movement appears to be fluid, coherent, and authentic. Meanwhile, Mother remains still in a fixed position, and her body appears to be in mid-to-high bound muscular tension.*

In the initial turn, Mother orients Baby to the session and introduces her to the space, without mentioning the therapist. The therapist engages with Baby right from the start, initially through gaze and then through speech. She allows a 9-s pause before speaking to Baby and this slightly delayed response sets the pace of their interaction; the therapist waits for Baby to complete her turn before taking the floor.

In her initial utterance to Baby, the therapist talks to her about their relationship. She positions herself together with Mother ("we") as having learnt to adapt to Baby's interactional needs. The use of "we" when talking to Baby is very typical in this session, as the therapist only uses the first person singular when clearly positioning herself outside the family unit. In this way, she creates, through her talk, a parental couple who, together, hold Baby in mind; this bringing together of Mother and therapist also presumably fosters the therapeutic alliance.

In this speech turn, Baby's avoidant behavior is recognized and legitimized. Baby is positioned as a person who needs her time before looking and her gaze aversion is reconstructed from a potential symptom to a meaningful behavior. In the therapist's talk, Baby becomes someone who is "attentive" to her environment and "cautious"; this formulation is further developed later as associated with Baby's early experience in the neonatal unit. In this way, the problem is reformulated from that of a damaged baby to a relational issue, as the adults have now adapted to Baby's way of engaging. Problem constructions, an important aspect of therapy talk, implicate issues of accountability, responsibility, and morality (e.g., Davis, 1986). Refuting potential blame for their child's difficulties is particularly pertinent in parents' encounters with professionals, where they often feel blamed, irrespective of the professionals' actual view (Avdi, Griffin, & Brough, 2000). Accordingly, the therapists' discursive agenda often entails subtle reformulations toward nonpathologizing constructions of the problem. In this session, the therapist often discusses Mother's concerns about Baby in relational and/or developmental terms, thus allowing the possibility of change.

Another feature of the therapist's talk, typical of this session, is that she addresses Baby as an agentic subject—that is, as someone with an inner world, who has comprehensible wishes and intentions, and who is an equal conversational partner. This positioning is achieved through different discursive strategies, including the content of talk, prosody, and turn-taking. On the level of talk, Baby's interactional preferences are explicitly recognized and made sense of. From the perspective of RF coding, the therapist is mentalizing for the baby—that is, interpreting her behavior as intrinsically driven by internal mental states. Nonverbally, the therapist respects Baby's subjectivity by adapting to her developmental level and interactional style. She speaks to Baby in a gentle tone, looks at her attentively, and mirrors her facial expressions. In addition, she follows the rules of turn-taking that are characteristic of adult dialogue. In discourse and conversation analysis, sequences

[3] Transcription notation: The first column includes the turn number and time stamp; the second column the speaker, namely M - mother, B - Baby and T- therapist; the third column includes the speaker's utterance and relevant aspects of nonverbal communication. Pauses of less than 2 s are marked with the symbol (.). Pauses of longer duration are marked with the number of seconds in brackets, for example, (9). Underlining denotes emphasis in speech; capital letters denotes word(s) spoken louder than surrounding speech.

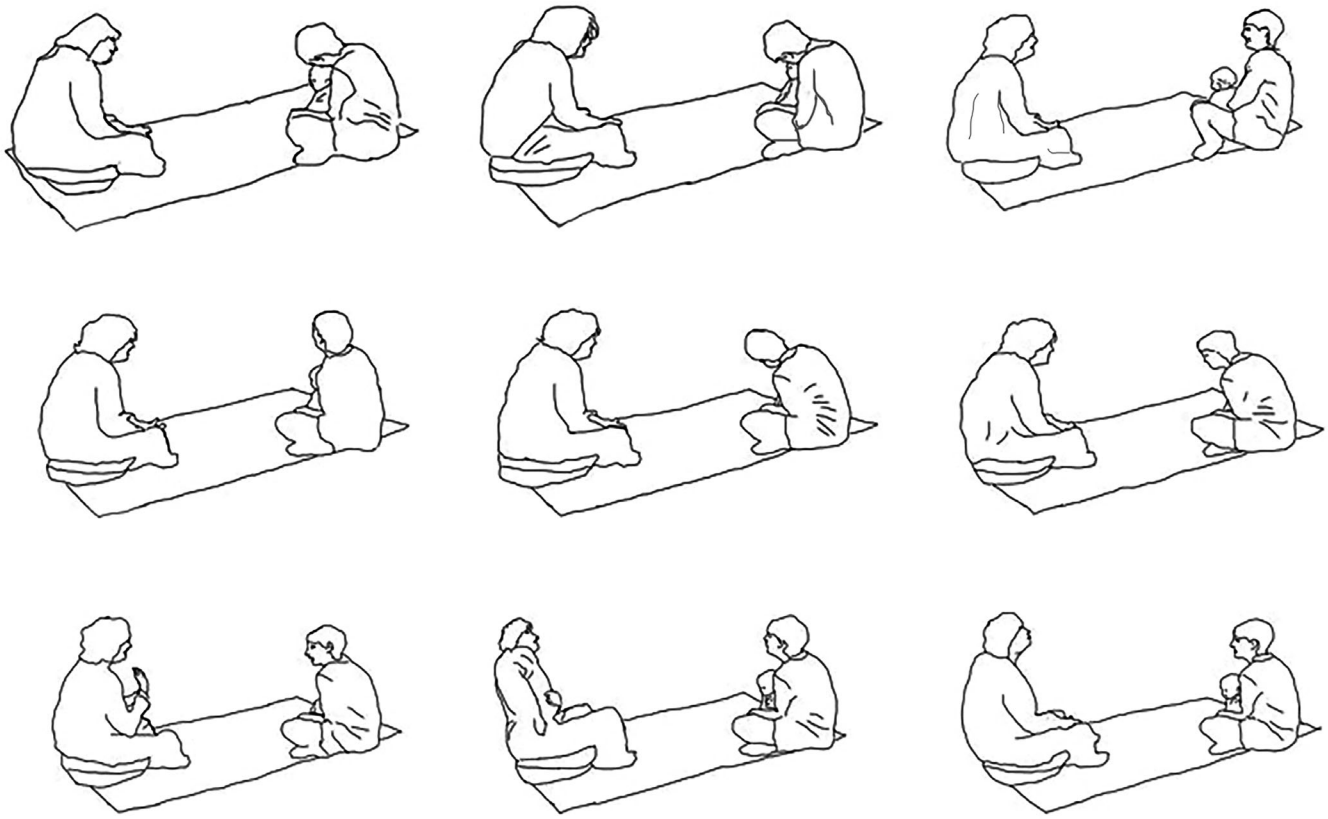

FIGURE 1 Interactive rupture and repair: microanalysis of the mother-infant-therapist interaction

of talk and turn-taking are important foci of study of talk-in-interaction (e.g., Peräkylä, Antaki, Vehviläinen, & Leudar, 2008) and turn-taking structures are also evident in infancy (e.g., Jaffe et al., 2001). Importantly, the therapist's talk is congruent with her nonverbal cues.

It is worth noting that addressing children as full conversational partners is not typical in interactions with adults in professional settings. For example, in family therapy sessions with children, adults tend to talk "for" children, who are often assigned a half-member status and are routinely interrupted or talked about (Hutchby & O'Reilly, 2010; Parker & O'Reilly, 2012). In contrast to this, the therapist in this session consistently positions this very young, preverbal infant as a full participant in the conversation. Almost half of the therapist's speech turns are addressed directly to Baby; these occur more frequently at the beginning and end stages of the session, or when either Baby or Mother become distressed. Most of the therapist's utterances to Baby are in the form of tentative statements that describe Baby's overt behavior, bodily experience, or presumed state of mind. In terms of turn-taking, the therapist often waits for Baby to initiate their proto-conversation and follows her lead, using a gentle modulated voice, characteristic of "motherese." The therapist also sometimes engages with Baby nonverbally (e.g., stroking her tummy), while talking to Mother, thus maintaining a conversation with both, on different levels.

At this point in the session, the therapist and Baby begin to establish a way of being with each other; this is abruptly interrupted in the exchange that follows.

10 10:40:50	B	*Baby abruptly withdraws her head from the therapist's direction and lowers her face toward the floor. She shuts her eyes and moves her head further down, while twisting it away from both therapist and Mother; this movement would be described as "disembodiment" in the PEM, her body is there, but her mind in somewhere else. The rest of her body joins the head in the movement away from the adults and her right hand jolts up and down. The therapist continues to look at Baby* ***(image B)****.*
11 10:40:52	M	*Mother breaks in abruptly, with a high pitched, loud, and eerie laughter. In terms of prosody, this laughter had a markedly higher pitch and intensity than surrounding talk* ***(image C)****.* *OH DEAR!* *This laughter would be coded in several ways on the AMBIANCE. The sudden shift in affect to laughter, paired with a frightened facial expression, and the eerie high-pitched tone are all considered frightened/disoriented behaviors. The incongruence between the frightened facial expression and laughter is an affective communication error. The laughter is followed by an "oh dear," which indicates another*

sudden shift of affect and this is also in a whispered tone indicative of frightened/disoriented affect on the AMBIANCE.

While producing this laughter, Mother raises her head abruptly and sharply to full upright position; the therapist's head joins Mother's in the same tempo and directionality—fast and upwards. Mother's torso pulls backward, whereas the therapist's head moves in the same pace and direction (backwards) until Mother and the therapist look at each other and a space is created between the torso of the baby and that of the mother. This would be a withdrawal behavior on the AMBIANCE. Mother continues to move backward and withdraw, and her left thigh leaves the ground, followed by the right. The legs shrink toward the Mother's body center, her back collapses backwards in a rounded shape, while she supports Baby's back with bound tension-flow. Mother's body turns toward the therapist to en-face. Baby continuously looks away while her entire torso is twisted away from Mother and therapist.

During this time, the therapist is still, with a frozen smile and appears stunned ***(image D)****. This would be coded as a frightened/disoriented behavior on the AMBIANCE, indicating that the therapist too has been disoriented in the moment. She alternates between looking at Baby and Mother. Mother sighs deeply, another frightened/disoriented AMBIANCE behavior, lightly strokes Baby's head, and Baby moves her torso slightly forward, directing away from the therapist. There is a sense that stroking Baby is a self-soothing action for Mother, which would be coded in the AMBIANCE as a role boundary confusion behavior. Baby stays still when Mother strokes for the second time. Baby continues to look away from either adult.*

In a fast tempo and abrupt pacing, Mother lowers upper torso to look at Baby's face from the left ***(image E)*** *. This movement almost takes the form of a loom, a frightening parental behavior, which has been shown to be associated with disorganized attachment (Main & Hesse, 1990). This is, however, interrupted by the therapist's next turn before it reaches its peak. Therapist remains still and begins to speak to Mother, in a flat tone, who abruptly looks up to Therapist pulling her torso backward; thus, the loom is interrupted* ***(image F)****.*

In this sequence, Mother responds to Baby's breaking eye contact with the therapist in a way that marks it as psychologically/emotionally problematic to her. Her response is incongruent with the interactive rhythm that the therapist and Baby have started to establish between them and interrupts it. The rapidly changing, fleeting, and subtle facial expressions and tones of voice in Mother indicate that she is in a highly frightened and disoriented state of mind—as seen by the large number of AMBIANCE behaviors in this brief moment—which in turn is likely to be frightening to the baby. At the same time, the therapist freezes and seems thrown off kilter, briefly mirroring the mother's disoriented state of mind by also displaying AMBIANCE behavior,[4] before she repositions herself physically and addresses Mother.

From a dyadic systems view, each person both monitors their interactional partner and regulates their own inner state, making "moment-to-moment adjustments to the other's shifts in behaviors, such as gaze, facial expression, orientation, touch, vocal quality, and body and vocal rhythms" (Beebe, 2005, p. 10). This process involves bidirectional contingencies in which each partner's behaviors can be predicted from that of the other and, over time, these create expectancies in relation to the other's behaviors and mental state (Beebe, 2017; Beebe & Lachmann, 2014). Similarly, in a clinical setting, therapist and patient co-create a way of being with each other, which is often characterized by a sense of shared understanding and purpose and often shared affectivity. At other times, however, the taken-for-granted relational expectancies are disrupted with the more or less sudden eruption of affectively charged moments that disturb the interactive flow. Several terms have been used in the psychotherapy literature to describe such events, such as impasses, ruptures, enactments, and "now" moments (BCSPG, 2010). Such ruptures are often the most challenging clinical situations but also entail the possibility of change; they have been described as "hot" moments, that is, as fraught, affectively charged moments of truth that demand intensified attention and force the therapist into some form of action (BCSPG, 2010).

12 T How are you finding her-

10:40:58 *The therapist remains still, leaning forward toward Mother and Baby, and her tone of voice has a mesmerized quality. Her utterance comes ας Mother is looming toward her Baby's face. Mother looks up to the therapist, with a startled expression* ***(image G)****.*

10:41:01 tracking, her- (.) and her gaze and so on?

The therapist repositions herself on the cushion, she sits back, straightens her clothes, sits upright ***(images H and I);*** *she seems to be physically pulling herself together, and her voice becomes clearer and steadier. Mother has a startled facial expression, looks momentarily away from therapist, and then responds.*

Frame-by-frame examination of this part of the interaction revealed that the therapist's utterance comes midway through Mother's loom toward Baby's averted face.

[4] For a detailed description of therapist's inner experience through this interaction, see Baradon (2018).

From an observer perspective, there is a noticeable change half-way through the therapist's turn, in both her vocal tone and physical posture. This could be described as the therapist "catching up with herself" half-way through her turn, as her voice and posture suddenly become firmer and clearer. The therapist begins to speak within a split-second of Mother starting to loom, this response presumably drawing upon a primarily embodied knowledge of the need to intervene. It seems that this knowledge becomes formed into conscious thought—as evidenced in the nonverbal change in the therapist—"after" the therapist has already started her utterance and thus interrupted the impending loom; she intervenes nonverbally, seemingly without conscious awareness, before intervening through talk. The therapist's action of almost "pulling" Mother out of the loom is perfectly timed and has occurred too quickly to be the result of a conscious decision. In line with this, when asked to reflect on the interaction described above, the therapist discussed both her visceral response and her thinking about the Mother's repeated tendency to loom into Baby's face. Initially, the therapist wondered whether these were somewhat clumsy attempts to get to know her baby, reflecting Mother's interest in her baby's face. At the same time, she experienced discomfort when witnessing such interactions. Upon reflection, better understanding of the notion of mother's movement as a "loom" and, as such, as a frightening maternal behavior, helped the therapist make sense of her visceral discomfort, which in turn made it possible for her to respond in a split-second timeframe and succeed in interrupting the loom before its completion. From the perspective of "now moments" (BCPSG, 2010), this exchange could be seen to constitute a new experience for the mother–baby dyad, whereby the intrusive and dysregulated interaction is interrupted and they are both "pulled out" of a frightening experience.

From a discourse analytic perspective, shifts in addressee are interesting, as they denote something changing in the interaction and are often used to regulate interactional dynamics. On the level of language use, the therapist asks how Mother is finding Baby's gaze; she uses a vague construction ("… her- tracking, her - and her gaze and so on") and her speech is marked by hesitations and brief pauses. At this point, the therapist turns her attention to what has just occurred in the here-and-now of the interaction, in an initial attempt to put into words an affective experience that is as yet not verbalizable, and possibly not yet consciously perceived. Again, she creates a relational formulation of the "issue," as she asks about how Mother experiences Baby's "tracking" rather than about Baby's gaze per se. In this way, the problem is located between Mother and Baby, rather than inside either of them.

In the exchange that follows, the therapist gets Mother to gradually shift from a concrete not-thinking state ("I don't think about it") to thinking about not-thinking, which is a mentalizing state. This intervention is subtle, as the therapist just adds some possibilities, like "anymore" and "you were," while still seeming to listen and accept the not-thinking-about-thinking that Mother describes. Despite this observed shift to a more mentalizing stance, Mother does not respond to the therapist's repeated invitations to discuss her concerns about Baby's gaze. From an interactional perspective, the therapist persists in asking about Mother's anxiety and Mother resists this invitation, seemingly attempting to close the topic down. This exchange has the characteristics of a withdrawal rupture in the therapeutic alliance, where the patient moves away from the work of therapy (Eubanks, Muran, & Safran, 2015). The therapist eventually accepts this closure and shifts addressee again, now speaking to Baby.

13 10:41:04	M	Mmh, I don't think about it.
14 10:41:06	T	You don't anymore. *Therapist smiles fleetingly.*
15 10:41:07	M	No, not really. *Mother shakes her head and looks away*
16 10:41:08	T	Because you were. *Therapist's speech almost overlaps with Mother's; she speaks in a gentle tone and smiles, and lowers her upper torso forward, directing toward Mother. The Mother abruptly turns her head away from the Baby and toward the Therapist.*
17 10:41:09	M	No, I know (.) *Mother shows adaptor movements (shifts position, scratches her back, and looks away briefly).* I was thinking about how I don't think about it today on my way here, but -
18 10:41:15	T	Well, that's a good sign, isn't it?
19 20	B	*Baby smiles at therapist;* *Mother and Therapist laugh.*
21 10:41:21	T	Yeah. That's a very big smile *Therapist smiling at Baby.* And if mummy doesn't think about it, I think she doesn't worry anymore. Yeah?
22 10:41:23	B	*Baby is making movements that Mother and Therapist are looking; she cannot be seen on the video.*
23 10:41:35	T	Mm
24 10:41:38	B	Vocalizations *Baby leans forward and makes small movements, looking around the room; Mother is supporting Baby's body.*

25 10:41:45	T	*Therapist leans in and looks at Baby, who is now looking at the floor.* And we weren't sure, were we? Whether you were cautious at the beginning because people weren't necessarily ch- (.) good people with all the f- fright *Baby leans forward, looks at Therapist intermittently while Therapist is speaking. Mother lifts Baby, holds her rather awkwardly, and moves her around to find a convenient position.*
26 10:42:01	B	*Baby vocalizes, looking away from Therapist.*
27 10:42:03	T	or whether you were worried about mummy?
28 10:42:06	M	What do you want to do? (.) Mmh? (10) *Mum lifts Baby in a standing position facing therapist.*
29	B	*Baby looks around the room, vocalizing. Baby looks at the floor and then away from Mother.*
30 10:42:16	M	Mmh? *Therapist sits back and watches Mother trying to settle Baby; there are signs of tension in the therapist, as she makes several adaptor*[5] *movements.*
31 10:42:31	M	Maybe you go back in there *Mother looks at B and then places Baby in a sitting position, leaning on a cushion;*
32 10:42:34	B	*Baby looks at the therapist.*
33 10:42:44	T	*The therapist leans toward the Baby and speaks to her, in motherese.* We heard you last time when mummy was in here. Yea(h)h,
34 10:42:47	B	*Baby smiles at Therapist.*
35 10:42:48		*Both adults laugh.*
36 10:42:49	T	We did (.) and you sounded very distressed (.) and then you calmed down (.) and when we came out we expected to find you asleep but oh no (.) you were chatting with granny. Yeah! (.) So she managed to calm you (.) and soothe you *(7-s pause)*
37 10:43:16	B	*Baby looks at Mother, then around the room and makes small noises and movements; she stretches out her leg.*
38 10:43:22	M	She's become very upset again today.

In the sequence presented above, the therapist addresses Baby and continues the mentalizing work, as she puts forth a hypothesis about what mental state may lie behind Mother's not thinking. Although she addresses Baby again, she now talks about Mother's state of mind. By changing addressee, the therapist stays with the topic of Mother's anxiety, while regulating the affective tension in the room. The therapist introduces the word "worried" for the first time, thus gradually putting into words Mother's anxiety, and mentalizes Baby's gaze aversion, while positioning Mother and herself as two adults that together try to understand Baby. She provides two alternative hypotheses for Baby's gaze aversion: the first relates to Baby's fear of others, which is rendered understandable in the context of her early experience, and the second attributes it to Baby's anxiety about her Mother, producing a relational account of the problem.

The therapist's formulation is not explicitly responded to, as Mother tries to settle Baby, while the therapist watches. The therapist speaks again (turn 25) only after Baby looks at her, which she uses as a turn-taking invitation. In terms of content, the therapist refers to an event from the previous week, and in this way introduces more explicitly the issue of affect regulation, which Mother takes up after a brief pause. At this point, the rupture is repaired, as Mother and therapist begin to collaborate in order to understand Baby's affect dysregulation and Mother's difficulty in soothing her.

In sum, the brief interaction described above can be seen to contain two interactional ruptures. The first is an implicit, primarily nonverbal rupture that disturbs the flow of the emerging conversation between therapist and Baby. After being transiently dysregulated herself, the therapist interrupts the dysregulating interaction first implicitly, and then, she gradually works toward bringing it into the verbal/reflective domain. Following this attempt, a rupture in the therapeutic alliance emerges. These ruptures begin to be repaired at the end of the session extract presented above, where the enactment starts to be articulated and Therapist and Mother begin a collaborative journey of exploration toward the construction of new meanings. In line with the literature on the role of enactments and rupture and repair processes in psychotherapy, the interactional sequence described could be seen to reflect a "moment of change" (BCPSG, 2010), whereby new ways of being-with-the-other emerge, bringing forth new relational possibilities for the triad.

[5] Adaptors are touching behaviors that indicate internal states typically related to arousal; they occur at a low level of awareness and primarily serve the purpose of regulating anxiety. They include common self-touching behaviors, such as scratching, twirling hair, fidgeting with fingers or hands, and so forth (Andersen, 1999).

5 | CONCLUDING REMARKS

In this study, we illustrate an approach to studying psychotherapy process that focuses on the "local level" of moment-to-moment interaction and draws upon different research methods to deepen our understanding of significant interactive events in a brief section of one therapy session. In line with the tenets of dynamic systems theory (e.g., Salvatore, Tschacher, Gelo, & Koch, 2015), we contend that circumscribed events, such as the one described in this paper, can activate dramatic change processes through nonlinear processes of change. Through the detailed analysis of one brief exchange, we attempted to shed light on the subtle ways in which microtraumatic parent–infant interactions can manifest, and the ways in which these can be responded to by the therapist, initially implicitly and gradually entering the verbal domain, so that they can be reflected upon and made sense of.

A key contribution of this study relates to the multiplicity of perspectives, drawn from different disciplines, that are used to describe in detail the complex and multilayered interactions that lie at the heart of therapeutic work. Although this multiplicity was at times challenging, the different approaches brought several new perspectives and understandings of the process of therapy. The behavioral manifestations of fearful and disoriented states of mind, which have been empirically described in the infant development literature, were discernible in the therapeutic interaction. In addition to the dysregulated interaction between mother and infant, detailed microanalysis revealed how the therapist herself also became transiently disoriented. Following this brief rupture, the therapist employed several verbal and nonverbal responses to regulate affect, repair the therapeutic alliance and scaffold mentalising, thus enabling a shift away from the fearful state of mind. In this pilot study, psychoanalytic understanding was complemented by a focus on frame-by-frame microanalysis, embodiment (PEM), atypical caregiving responses (AMBIANCE), and discourse use in order to illuminate the infant's, the mother's, and the therapist's experience of disruption and gradual realignment.

The approach to studying the details of therapy process described in this paper illuminates how interpersonal microevents create affective meaning and allows us to identify clinically meaningful moments that may be too fleeting to be consciously registered. Through this pilot study, we were able to show that it is possible to study systematically therapeutic engagements with parents and infants and to elucidate the workings of PPIP. A key next step would be to further refine the methods used in the hope of contributing to the growing psychotherapy research literature that takes into account both the verbal domain and implicit, interactional processes in therapeutic practice and underscores the therapist's comprehensive engagement in the therapeutic process.

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