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# On Traumatically Skewed Intersubjectivity

Daniel S. Schechter, M.D.

#### **ABSTRACT**

Beginning with his Interpersonal World of the Infant (1985), Daniel Stern suggested that the infant is driven from birth to connect intersubjectively with his caregivers. By the final three months of the first year of life, as the infant begins to use protodeclarative pointing and jointly attends to the outer world, he also begins to jointly attend with his caregiver to their respective intrapsychic worlds, the mental states of his caregiver and himself. Clinically, analysts observe at this crucial point of development of secondary intersubjectivity mothers who, more often than not, respond only selectively and often unpredictably to their infants. In many instances, this may be motivated out of a mother's own need for regulation of emotion and arousal as we have shown in our empirical research. This article elaborates on clinical observations that, for the infant or young child to feel his traumatized mother's affective presence, he must try to enter mother's state of mind, while simultaneously, mother is seeking to self-regulate in the wake or the revival of trauma-associated memory traces, this at the expense of mutual regulation of emotion and arousal. We call this phenomenon traumatically skewed intersubjectivity. We find that children coconstruct with their traumatized mothers a new, shared traumatic experience by virtue of the toddler's efforts to share an intersubjective experience with a mother who is acting in response to posttraumatic reexperiencing. The problem is that the infant or young child has no point of reference to decipher the traumatized mother's social communication. And so, what is enacted leads to a new, shared traumatic event. Both the child's anxiety and aggression can, in this setting, easily become dysregulated, further triggering mother's anxiety and avoidance, leading thus to a vicious cycle that contributes to intergenerational transmission of trauma. Clinical examples and implications for psychoanalytically-oriented parentinfant psychotherapy will be discussed.

Daniel Stern asserted in *The Interpersonal World of the Infant* that babies are wired for intersubjectivity from birth and that the "drive" toward intersubjectivity is an organizing force in human development. In Stern's own words, "There is little question that infants do construct relationships as well as perceive them already (at birth)" (Stern, 1985, p. 64). As was already supported by numerous empirical studies going back to the early 1970s (Aitkin and Trevarthen, 2001), Stern found that the development of intersubjectivity starts out with simple imitation of social communication during the development of primary intersubjectivity and mothers' mirroring of her infant over the first 2–3 months of life, which he called the beginning of the development of "core self," more commonly referred to as the development of primary intersubjectivity (Stern, 1985, pp. 69–70). This concept is grounded in Winnicott's notion of mirroring, namely that the infant comes to see himself, feel alive, and develop a sense of agency by being seen by his mother (Winnicott, 1967, pp. 26–33).

Stern's model is dynamic and complex, perhaps more explicitly so than that of Winnicott. According to Stern, the mother not only mirrors her infant's affect, but also modulates it. Stern writes:

"The dialogue does not remain a stereotypic boring sequence of repeats, back and forth, because the mother is constantly introducing modifying imitations...or providing a theme-and-variation format" (Stern, 1985, p. 139). And Stern is clear that this is a bidirectional process such that her infant's affect also modulates mother's affect. As in attachment theory (Bowlby, 1969), the infant's positive affect is a powerful motivating force for the mother's maintenance of availability to the infant. And so, Stern's vision of early parent-infant interaction provides a more direct connection between the development of subsequent intersubjectivity, emotional regulation in the context of attachment, and a theory of mind than earlier theorists as reviewed by Rochat and Passos-Ferreira (2008).

Stern's subsequent interest in mirror neurons, as noted in the work of Gallese, Rizzolati and others (Rizzolatti, Fogassi, and Gallese, 2001), which continued until his death as evident in one posthumously published coauthored paper, would, he hoped, add a further connection to human wiring, the biology of the infants motivational system to be intersubjective (Di Cesare et al., 2014). Prominent neuroscientists have since Stern's death begun to write about the emergence of a twoperson or "second person" neuroscience that, from birth, includes and extends beyond the mirror neuron system (Schilbach et al., 2013, p. 393).

Implicit to Stern's model dating back to 1985 is the infant and young child's need of his mother as an agent of biopsychological regulation, beyond that of the maternal roles of nurturer and protector as highlighted in Freud's and Bowlby's models respectively. Yet this is not as stated explicitly, as reviewed in the following. Stern made careful observations of mother-infant interactions occurring between the development of primary intersubjectivity at 2-3 months and secondary intersubjectivity, by 9-12 months. His early collaboration with Beatrice Beebe described prototypic patterns of mother-infant interaction (i.e., chase and dodge) via microanalysis of videos of mother-infant interactions at ages 4-5 months in what Beebe has gone on to describe in her own work as precursors of attachment organization versus disorganization and regulation versus dysregulation (Stern et al., 1975; Beebe et al., 2003). Yet, interestingly, the word regulation had not yet appeared by the time of his writing The Interpersonal World of the Infant in 1985. Stern used the term "affective attunement" in that volume (Stern, 1985, p. 138). However, this term he associated only with the subsequent development of secondary intersubjectivity at the age of 9–12 months. And so, in *The Interpersonal World of the Infant*, Stern had not yet integrated the role of attachment from birth as a continual source of regulation with the development of intersubjectivity throughout the first year of life.

He writes that it is not until "when the infant is nine months old ... one begins to see the mother add a new dimension to her imitation-like behavior, a dimension that appears to be geared to the infant's new status as a potentially intersubjective partner ... she begins to expand her behavior beyond true imitation into a new category of behavior we will call "affect attunement" (Stern, 1985, p. 140). Stern notes that what characterizes "affect attunement" is interactions that involve "some form of matching" of feeling state, cross-modally, giving the impression that imitation has occurred, but at the level of resonance of a feeling state, at a proto-symbolic level, not involving direct physical imitation. Stern considered affect attunement to be an essential step in the development of symbolic play and language. Although all of this relates to what analysts now understand as affect regulation, Stern had not yet integrated the concept of emotional regulation within the context of attachment into his writing.

# Mutual regulation of emotion and arousal and intersubjectivity within the context of mother-child attachment

Myron Hofer (1981), a close friend and colleague of Stern's, had already, prior to the writing of *The* Interpersonal World of the Infant (Stern, 1985) and its mention of affect attunement, observed the diverse ways that rat mothers (dams) engaged with their pups in a complex system of mutual regulation that is often "hidden" from the view of the observer. These "hidden regulators" affect multiple biological systems such as blood pressure, heart rate, and respiration, digestion, elimination, and sleep across species. Yet they also extend into more complex psychological functions,

particularly in primates and humans, such as regulation of emotion, arousal, attention, aggression, and language acquisition.

Following Hofer's example, the developmental psychobiology of attachment and attachment's role in buffering" the stress response extending to human models, became a ripe area of research during the 1990s. Gunnar (1998; Hertsgaard et al., 1995) in the United States, Spangler and Grossmann (1993) in Germany, and others demonstrated the role of attachment in the regulation of infant stress. Stern became increasingly aware of the potential convergence of this attachment-theory-informed research with his own interest in the development of intersubjectivity.

Lyons-Ruth (2007), who is a member of the Boston Change Process Study Group of which Stern had had been a founding member, reviewed the intersections of empirical work on the development of intersubjectivity such as by Tomasello and Carpenter (2007), and attachment research that emerged since Hofer's original conceptualization of hidden regulators. Lyons-Ruth makes explicit the important link that is perhaps implicit to Stern's understanding of the mother-child relationship during the first-year of life by underlining the link between "the extent to which the infant -caregiver attachment relationship functions to maintain positive engagement and regulate the infant's fearful arousal" (2007, p. 595) and its increasing importance for the development of intersubjectivity. She notes the importance of the caregiver's predictable availability for joint attention and the sharing of mental states under conditions of increased emotional arousal—including fear, within the context of attachment, as essential for healthy adaptation. The absence of this predictable availability, coupled with anxious, withdrawing behavior toward the infant have been shown to be related to subsequent development of dissociative symptoms and the development of borderline personality disorder by adulthood in Lyons-Ruth and colleagues' own longitudinal research (Lyons-Ruth et al., 2013).

But why would a mother show anxious withdrawal in response to her own infant? Clearly, a threat to life or limb generates fear that disrupts the capacity for joint attention and the sharing of mental states in the moment. The threatened individual must think rather of survival, escape, and self-regulation. Porges (2007) has attributed this disruption physiologically to the withdrawal of the vagus nerve, which interrupts the capacity to be affiliative to favor survival of the individual. Ideally, when the threat has passed, the individual can return predictably to a social mode of relatedness, in which the vagal nerve is activated. The stimulation of the vagal nerve, as well as the activation of the oxytocin system, has been related to basic functions of mother-infant attachment (Feldman, 2007). Difficulties ensue, however, when the individual cannot predictably return to the nonthreatened, regulated, affiliative state, such as occurs in the case of posttraumatic stress disorder (PTSD).

Such difficulties among mothers with interpersonal violence-related (IPV) PTSD has been the topic of my lab's research for the past 15 years. We have learned from our research and clinical experience, as for example in reference to large-scale, shared traumatic events such as the terrorist attacks on the World Trade Center in New York on September 11, 2001, that the primary attachment relationship can both buffer the child from traumatic stress and can dysregulate, rather than regulate, an infant's fearful arousal. When such dysregulation occurs, it can have adverse effects on the infant's subsequent social-emotional development (Schechter, 2003; Coates and Schechter, 2004).

We have since shown empirically that young children's emotional communication can create a fearconditioned response in the traumatized mother that produces dysregulation at multiple levels simultaneously: psychologically, behaviorally, physiologically, and at the level of neural activity in the maternal brain (Schechter et al., 2008; Schechter et al., 2004; Schechter et al., 2014; Schechter et al., 2012). In this context, mothers can withdraw or avoid interpersonal conflict with their children even in terms of setting limits with her child and/or can be overly intrusive and controlling in an effort to avoid feeling helpless. In either case, it is clear, as we have shown in our research, that women with violencerelated posttraumatic stress feel more stressed in response to their children's distress and helplessness such as demonstrated during mother-child separation in the laboratory (Schechter et al., 2012)

By the time Stern published *The Motherhood Constellation* in 1995—ten years after he first wrote about affect attunement, he, in fact, began to describe what happens when a mother impairs, rather than supports, mutual regulation of emotion in the mother-infant relationship. For the first time, he



used the term "regulation" (p. 69), which he considered as related to temporal aspects of the motherchild interaction. He then described how a troubled mother could dysregulate the child and derail the development of intersubjectivity via "overregulation" (Stern, 1995, p. 74). He wrote:

Maternal overregulation ... would be manifest in the mother in various ways. ... 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. ... 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.

# Getting from Stern's view of derailment of the development of intersubjectivity due to dysregulation by a troubled mother to traumatically skewed intersubjectivity

Stern described that, from very early on, the infant develops a "schema of being with" that is very specific to his relationship with mother (1995, p. 93). He can increasingly anticipate how she might respond and he can know how to elicit certain reactions from her. Between 2-3 months (onset of primary intersubjectivity) and 9-10 months (onset of secondary intersubjectivity), the infant can already reciprocate and consciously imitate his mother and indicate to her by 6-7 months a potential danger by checking back to see that she is nearby while exploring and when in situations of uncertainty (i.e., social referencing). These schemas prior to 9-10 months essentially form a mental representation of mother, a set of expectations upon which the latter more subtle "reading of mother's state of mind" takes place (1995, p. 101). Thus, until the brain is physically able to attend jointly to a focus at 9-10 months, the child as far as one can observe, does not attempt to label and thus to make sense of mother's affective communications, rather accepting them as they come and responding primarily with imitation or reciprocation.

It is only when the child begins to gesture and point so as to share a joint focus of attention in the outer world that the child then begins to attempt to share a joint focus of attention in the more elusive intrapsychic world of self and other. And it is at this point that the child attempts to take mother's point of view and question what is going on in her mind, hopefully given a mother's prior modeling of this from birth with gestures and verbalizations that suggest that mother sees her infant has having a separate mind, with embodied and explicitly verbalized efforts to understand what is going on in that infant's mind and in her own mind (Shai and Belsky, 2011). Without a mother's consistent, predictable and sensitive participation in thinking about and translating in a developmentally appropriate way what is going on in her own mind, the child can misread mother's intentions and feel lost.

This is a cornerstone of the development of the theory of mind and later mentalizing function—as yet another hidden regulator within the context of attachment, in place by 5 years. Mentalization has been described as a marker of attachment security and as being fundamental to a parent's ability to participate in mutual affect regulation (Fonagy et al., 2002). Just as a mother in the park will say to her 10-month-old, "Look up at that squirrel climbing up the tree" and point to it for the baby to follow her gaze, so might she say, "I'm feeling frustrated because I just realized that I forgot to buy milk at the supermarket." The latter implies, as the former, that the baby and mother should jointly attend to something outside of the baby; but the latter implies that what is external to the baby can be internal to the mother, in other words, the mother's state of mind. This joint attention to the other's state of mind is thus linked both to secondary intersubjectivity formation and to parental mentalization or reflective functioning, as described by Slade (2005).

Keenly aware of parents' emotional displays, the infant will, regardless of whether mother makes this intervention, begin to show a puzzled face or will gesture with an intent gaze into mother's face to understand if she feels safe, or if she perceives danger, and why she might have looked distraught (Walden and Ogan, 1988). (The alarm signal is clearly built also into the attachment system to engage the infant in a survival strategy). This is the essence of true social referencing and that will play an important role in the focus of this article, namely the link between secondary



intersubjectivity and the intergenerational communication of trauma. Whether or not the infant can get his mother to look at him and wonder about what he is feeling at a given moment of frustration or distress, or curiosity, will also play a role in this process.

Tronick and Weinberg (1997), along these lines, asserted that postpartum depression can become one obstacle to the formation of what they call "dyadic states of consciousness" (p. 54), which is essentially an intersubjective joining characterized by increased richness and complexity in the dyadic system. The infant must attempt to enter the primary caregiver's depressive state to be with her, leading to unintegrated depressive aspects of that infant's self-concept that will be characterized by "thinness" or impoverishment of the representation, rigidity, and lack of a bidirectional or shared intersubjective experience that would be marked by a higher level of complexity.

#### When maternal trauma enters the scene

If the early development of emotion regulation, intersubjectivity, social referencing, and theory of mind are related to one another, it is clear that when a mother suffers from the experience of trauma and related PTSD, such that her traumatic memories do not extinguish, all of these areas of development are affected. PTSD is a disorder of emotion dysregulation in which traumatic memory traces and their associated affects overwhelm the individual such that their priority must turn to survival and self-regulation rather than affiliation and mutual regulation (Sahar, Shalev, and Porges, 2001). For a parent, our research and that of others have shown that such a disorder has effects on caregiving at the level of mental representations, interactive behavior, physiology, and neural activity (Schechter et al., 2008; Schechter et al., 2004; Schechter et al., 2012). Interpersonal violence is a class of life-events that most frequently is associated with PTSD (Breslau, Lucia, and Alvarado, 2006). Several authors have described how IPV-PTSD, in particular, can make parenting difficult, because of the effects of IPV-PTSD on mother's emotion regulation and attentiveness to her child's cues (Scheeringa and Zeanah, 2001). The latter going as far as to describe a "relational PTSD" (p. 799) and vicarious traumatization as mediated and/or moderated by maternal psychological posttraumatic functioning.

One can imagine that the infant around the time of development of secondary intersubjectivity, when looking up at his mother and seeing her expression of fear, tension, and hypervigilance (despite there being no clear external cue that he can perceive that would elicit such a response), is bound to have a response of puzzlement, anxiety, a need for increased proximity and dependence. It is as if the child is drawn to enact social referencing, but at the mother's initiative rather than the child's.

We have also seen in both research and clinical work that IPV-PTSD mothers enact abruptly and unpredictably to maintain their homeostasis in such a way that communicates danger and trauma inadvertently to the child (Coates and Moore, 1997). Vicarious traumatization occurs and a new traumatic event is coconstructed that bears little resemblance to mother's original traumatic experience(s). The child often develops symptoms similar to that of PTSD (i.e., hypervigilance, avoidance, and hyperarousal symptoms, with showing of aggressive or hypersexual behaviors, regression, and separation anxiety) without an event that clearly can fulfill the "A" Criterion of the DSM-V diagnosis of PTSD (American Psychiatric Association, 2013).

I now turn the focus of the article to three illustrative clinical examples, all of which involve, among other forms of interpersonal violence exposure, childhood sexual abuse as an organizing traumatic life event. In each of these examples, elements of the mother's original traumatic experience, which affect her caregiving behavior, are communicated nonverbally to the mother's child (which in certain instances was triggered by that child's emotional communication or other behavior). Yet they are communicated within the present relational consequence and void of the child's awareness of mother's prior experience. They may also be triggered inadvertently by the child's emotional communication leading to a distorted sense of power and dangerousness in the child.

In all three of the following vignettes, the child and mother are left with a new traumatic experience that they share and have coconstructed, that nevertheless transmits the traumatic essence, in part at



least, of mother's prior experience. And so, although intergenerational transmission of trauma has occurred, mother and child can never step into the same trauma twice, at least as mother had experienced it earlier. In none of the three instances, for example, is there a repetition of sexual abuse.

# **Nancy and Libby**

Nancy, a mother in her early thirties, and her 17-month-old daughter Libby had entered our research study that aimed to understand how maternal posttraumatic stress affects the mother-toddler relationship. We have described different aspects of this case elsewhere in more detail (Schechter et al., 2003; Schechter et al., 2007; Schechter, 2010). To summarize briefly, Nancy had suffered exposure to domestic violence and physical abuse at the hands of her alcohol-abusing father. Nancy's mother left her family in the Dominican Republic to find work in the United States and to escape her husband's violence. By the age of 9, Nancy had already suffered domestic violence exposure, physical abuse by her father, and abandonment by her mother. Nancy's father began to leave Nancy in the care of his alcoholic, unemployed brother, her uncle, who then sexually abused Nancy frequently. To prevent neighbors from hearing Nancy's screams, this uncle, with whom Nancy had 2 children at the ages of 12 and 13, covered Nancy's mouth and face with her stuffed animals or pillows. Those children were taken in by her father's extended family when Nancy left with a boyfriend to find work as a cleaning lady in New York. She would not have further contact with them.

Fast-forwarding to Nancy having become a single mother with two daughters, ages 17 months and 6 years, by her alcohol-abusing boyfriend with whom she had moved to New York and whom she then left: Nancy would enter a state of complete terror following a traumatic trigger on the television news or during the course of daily interactions. One such interaction included her younger daughter covering her older daughter with pillows and stuffed animals in a state of excitement during play. Nancy was then compelled by a sudden urge to purge her home of all stuffed animals and pillows, including her daughters' transitional objects. Nancy did so abruptly, unpredictably, and aggressively, yanking a large trash bag from the cupboard, slamming cabinet doors, and oblivious to her daughters' cries for her to stop. Her understanding in the moment was that she was protecting her daughters from something urgent, something noxious that could suffocate them. Their inadvertent excitement in covering each other with pillows had triggered a traumatic memory in Nancy's mind. The confusion of past and present and her home of origin in the Dominican Republic and her present apartment in New York City at that circumscribed moment during her daughters' play is a hallmark of PTSD. Paradoxically, it was this same mother who, unable to tolerate her infant daughters' cries, gave her daughters anticonvulsant medications to stifle their cries and keep them out of trouble (Schechter et al., 2003). It had been the latter that quite dramatically had brought the family into mental health care.

In the wake of her pillow and teddy bear purge, Nancy's daughters had no reference point, and no context in which to understand their mother's rash behavior. As their mother, herself, was in a fight-or -flight mode of survival, or as Mary Main had described "at once the source of and the solution to [the infant's] alarm" (p. 163), Nancy could not help her daughters with their emotional dysregulation (Main and Hesse, 1990). And so, they would cry hysterically to the point of shaking and retching. Their sympathetic nervous systems overwhelmed and their vagal nerve input withdrawn, Libby and her sister both now have both experienced a new traumatic experience at the hands of their mother, just when the latter had the conscious intention of sparing them a repetition of her own traumatic life events. This new coconstruction is characterized by a shared helplessness. A posttraumatic stress syndrome in the children ensued, characterized by nightmares, a preoccupation with garbage bags and cans in play, hypervigilance toward mother, and inability to stay asleep so as to be able to watch the door knobs and windows, related to fears that a thief would enter the apartment during the night.

Although the latter is recounted by Nancy without our having the opportunity to observe the dyad's behavior, the dyad's participation in filmed play interactions in the context of their participation in our research allows us to see how, moment to moment, Nancy overregulates as Stern

described, and simultaneously communicates an aspect of her trauma using very unpredictable, abrupt, and invasive gestures, for example pretend biting Libby with a bird hand-puppet, pushing a soft ball into Libby's nose, all while speaking in an eerily high-pitched, rather strained voice and while holding Libby's hand. Libby moves away from Nancy toward the door; but Nancy does not let her go and entices Libby finally with a turn at wearing the puppet herself, to keep her engaged. The unpredictability, aggressiveness, oddness, and invasiveness of the interaction sequence are all aspects that communicate sexual and physical abuse without being abusive directly. Some content of mother's original traumatic memory was thus communicated via the dynamic process of interaction leading to mutual dysregulation and hyperarousal that severs to mark a newly co-constructed "traumatic memory" (Schechter et al., 2003, p. 518).

Infants and young children can reawaken PTSD symptoms in traumatized parents given certain similarities between the dysregulated emotions, arousal, and aggression intrinsic to infants and toddlers' development, as well as resemblance in one way or another to the mother's violent perpetrators, as well as to the mother's own state of helplessness as a victim (Schechter et al., 2005). Thus, when the child displays distress either due to fear, anger, or frustration, the either helpless or potentially hostile-aggressive stance of the child poses a posttraumatic trigger to the mother with IPV-PTSD. Rather than approach the child to contain his anxiety or aggression, and rather than hold the child or set limits, the mother avoids the child-as-threat as a measure of selfprotection (Schechter et al., 2005, 2010). What results is confusion on the part of the child as to whether he truly does possess power that can overwhelm mother, and increased distress. The latter further distances mother and further distresses the child, such that a vicious cycle ensues. Within this context, the child, in an attempt to maintain an intersubjective link with mother, must comply with mother compulsively without a sense of agency or validation of his distress, and/or must avoid, numb, or dissociate his own distress, leading to further dysregulation of emotion, arousal, and aggression. This is what we, in fact, found on the MacArthur Story-Stem Battery, an observationally coded narrative completion task, among children ages 4-7 (Schechter et al., 2007).

Libby participated in this latter study. Specific to Libby's story-stem completion, was a child who found herself in a world with no predictable or available caregiver. Burned by hot soup after disobeying her mother, Libby's protagonist, a little girl like herself, is met only with harsh treatment, equally injured, dying, and disappearing caregivers. The fact that her father, a restaurant worker, had suffered from a disabling burn in reality, only added to her sense of trauma and helplessness. In her narrative-completion, Libby is left all alone in the end and must call upon a magical supergirl who is a larger-than-life mirror-image of herself, a omnipotent, narcissistically-invested savior, to rescue her, and, I assert, help her with her dysregulation (Schechter, 2010).

As Hatzor described in reference to her psychotherapeutic intervention with this same dyad (Hatzor, 2005), an effort to stimulate joint attention by suggesting that Nancy and Libby look at books together before bedtime, resulted on subsequent inquiry by Dr. Hatzor, in mother's revealing that she had followed her therapist's advice and that Libby had looked at a picture-book while Nancy read her own book, a romantic novel, silently. On questioning, Nancy stated, "Of course, we talked about what we read afterwards." This interpretation of Dr. Hatzor's advice points out how truly skewed a sense of joint attention to, and understanding of, her daughter's developmental needs, given her own very deprived early experience, Nancy had. She would need to be able to look at this issue jointly with her therapist before she would be able to look at Libby's picture book jointly with Libby.

#### Vanessa and Jeanne

A second example of traumatically skewed intersubjectivity occurred in the context of a 9-year-old girl Jeanne, who suffered from recurrent pinworm at school, creating alarm during the night when anal pruritus became unbearable and she begged her mother to apply an antiitch cream until her mother could get the antiparasite medication the next day. Her mother, Vanessa, who had a history of chronic sexual abuse by her stepfather that went on at the same age as her daughter, did as her

daughter asked but suffered flashbacks of her own molestation. As she undressed Jeanne to examine her, mother suffered a "meltdown" in the face of her naked, distressed child; Vanessa began to cry, flush, and perspire profusely. She stated that she called her husband, who was out with friends, and insisted he come back for an emergency, and screamed at him when he asked why she could not apply the medication herself. "I can't ... I simply can't!" she yelled. Jeanne became frightened by her mother's panicked response that "something terrible" was wrong with her and that, perhaps, she would have to go to the hospital. Even after the father came home, applied the medication, and calmed down Vanessa and Jeanne, Jeanne insisted that her mother stay in the same bed with her, resulting in the mother experiencing further ongoing flashbacks of her molestation and insomnia, coupled with Vanessa's inability to comfort her daughter physically for fear of sexual excitement.

The next morning, Jeanne, reported nightmares of fires and floods with no one to save her, such that father had to come back into the room to comfort both daughter and mother, who again began to cry hysterically. Vanessa reported to the psychotherapist that she had had similar nightmares as a child related to the effects of her sexual abuse and so the uncanny resemblance of the nightmares had "freaked (her) out." Yet in the case of her Jeanne, nightmares, and recurrent intrusive memories, hypervigilance, and insomnia were not related to her mother's sexual abuse—as Vanessa had never discussed these experiences with Jeanne. These symptoms were, rather, the effects of mother's posttraumatic stress on the present mother-daughter relationship. Parallel psychotherapy of mother and daughter led to a resolution of these symptoms over the ensuing nine months of treatment. These intersubjective "resonances" of child and parent's nightmares are reminiscent of those that I have described in relation to a brief intervention around acute trauma and fear of parental loss related to the terrorist attacks of September 11, 2001 (Coates and Schechter, 2004).

To address the relational disturbance resulting from very marked traumatically skewed intersubjectivity such as in this case, my main therapeutic intervention involved the gentle introduction, quite simply, of curiosity and wonderment about Vanessa's reaction to Jeanne's distress and Jeanne's exacerbated distress response to Vanessa's reaction. My initial effort was to wonder about Jeanne's possible experience, given her present development and her need for her mother. I then wondered about Vanessa's frightened and frightening reaction to Jeanne in light of Vanessa's own traumatic history of sexual abuse. In particular, I wondered about how the latter impacted (a) her perception, (b) her reading or interpretation of Jeanne's distress and reporting of nightmares, and (c) her unconscious response, as well as her conscious effort to address her daughter's distress with the difficulties imposed by her feeling frightened, hyperaroused, and helpless.

For example, Vanessa described that the stepfather who sexually abused her was an amateur actor. He would speak to her with disguised voices, a different accent, as if he were someone else suggesting likely psychological dissociation, when he perpetrated the sexual abuse, allowing Vanessa to share in the denial of the molestation, which occurred after school and before Vanessa's mother came home from work.

When Vanessa described her daughter Jeanne's nighttime panic due to the pinworm infestation, she stated that she had heard her own voice change. She felt as if she were in a film playing a role: "It was like I was in a horror movie." And yet, at that moment in the individual session with Vanessa that would alternate with Jeanne's individual sessions (with about one-third of the session devoted to mother and daughter during Jeanne's sessions or father and daughter together when he would bring Jeanne), the link between the terrifying image of her abusive stepfather and herself confronted with her daughter's distress and nakedness could not but be avoided in her own mind. My role was to hold this link in mind and jointly and gently attend to it with Vanessa. And with this imagined exposure came both tears and additional associations suggesting that her defensive identification with her abuser was far more complex than either of us had realized. This included a hypersensitive awareness of her daughter's body, along with its odors, flushing, and changes associated with prepuberty that created a great deal of anguish and rumination. Her own sense of "feeling on fire" that she saw reflected in her daughter's nightmares of "people catching fire" in the apartment and firemen who could not enter. In jointly attending to her conditioning and defenses stemming from



her childhood sexual abuse, Vanessa began to label and, as she described "shelve the books" of heretofore avoided traumatic memories from her own past into a coherent library or narrative within her own mind. "I can imagine opening the book to check on what happened with you, Dr. Schechter, and put it back even though I see now that I cannot get rid of it. It is part of my lifestory." Vanessa, some 4-6 months into her daughter's treatment, requested an individual adult therapist for herself to address the impact of her abuse on her relationship with her husband and to explore in more detail the otherwise very disturbed relationship both with her stepfather and her mother who, likely abused herself as a child, remained apparently "oblivious" to what was going on and to the stepfather's menacing of her daughter. Vanessa's mother was clearly unable to jointly attend to what would likely have been her daughter's apparent distress and hypervigilance.

Throughout Jeanne's treatment, which lasted one year, with mother going on to a longer individual psychoanalytic psychotherapy with a colleague, Vanessa considered but decided against telling her daughter about her history of sexual abuse, preferring to tell her when her daughter when she would be more mature. She agreed that she could say that because her parents had trouble with handling her distress when she was child, she had perhaps not learned the most helpful strategies to "manage her nerves" when Jeanne was distressed and now was determined to work on this issue. Fortunately, Jeanne's father maintained a very calming and reflective presence with Jeanne and Vanessa that facilitated the therapeutic process. Yet the question remained as to how Jeanne made sense of her mother's reactions that oozed with traumatic reference?

## How does the child construct meaning? How does the dyad coconstruct meaning?

As a parent-infant therapist, one can if one is prepared to notice and decipher silence in the treatment situation as a message from the dyad (Adelman, 1995). This is as if they are enacting a newly coconstructed traumatic life event even when such silence or "non-telling" might seem given the young age of the child and concerns about exposing the child to the narrative, but inappropriate when not verbalized at least to the clinician, even privately, because of denial or dissociation. The hint may be first perceived in the countertransferential reaction of the therapist as in the following example, which fills in within the context of filmed research interactions and subsequent video microanalysis, finer details of nonverbal transmission that could not be observed directly in the case of Vanessa and Jeanne.

## Greta and Paul

A 31-year-old mother, Greta, who had come in for participation in the Geneva Early Childhood Stress Project (Schechter et al., 2014), for the first interview without her child Paul, then 18 months old, described rather indifferently a history of significant sexual and physical abuse from ages 9-12 years that began as sexual play with her stepbrother. Greta never told her own mother, as she was afraid of her mother's possible reaction, given that her mother was a "a harsh-tempered maniac with a cleaning compulsion that scared us." She denied "remembering much of childhood," and stated that she keeps what she does recall—rather vivid flashbacks, in a drawer that she can open but that generally "stays closed unless someone pries it open." Greta, in a very understated tone in between moments in which she answered her cell-phone and discussed business matters during the clinical interview without her child present, stated that this drawer full of memories in her mind is forced open during sexual intimacy with her husband. He, she reported, had a chronic problem with alcohol, perhaps made worse, at least in her mind, by the couple's difficulties with intimacy.

Already during this initial encounter with Greta, the clinician described feeling very uncomfortable during the interview because of the discordance of emotion and the recounting of very explicit and intimate details of Greta's abuse and sexual life. The clinician felt quite troubled by the gravity of the events and the minimizing of the effects of Greta's history of sexual abuse. Greta, in fact, stated that she had not developed any symptoms related to these events outside of trouble in her sexual

relationship with her husband. Even as she denied other psychological symptoms, a microanalysis of Greta's expressions and gestures during the clinical interview revealed very disquieting moments such as Greta's maintaining a fixed direct gaze at the clinician while provocatively mouthing her water glass during the interview, bearing her teeth, seductively licking her lips, and smiling as she spoke, wide-eyed, of graphic details of her molestation. Greta brusquely lurched forward several times toward the clinician, who could be seen to retreat into her chair. All of this seemed out of Greta's and the clinician's awareness at the time of the interview.

With the help of the clinical research team, I then examined the free-play via microanalysis of the videotaped mother-child interactions prior to and following the separation from her. Uncannily, we observed that Greta lurched forward silently with the same fixed direct gaze at her son Paul, who also seemed to sink back into his chair hypervigilantly. Greta remained eerily silent as she flicked the noisemaker on a busybox in front of Paul's face. She did not follow his lead, but rather proposed toys that she chose. At one point, she abruptly opened the toy medical kit in which Paul had expressed interest. He took the reflex hammer and she ignored that, preferring to take herself the ophthalmoscope. They shared an interchange around the stethoscope with which mother then pretended to examine Paul, who backed away from her as she entered into his personal space.

Following the separation research paradigm during which Paul became quite distraught, as one would expect at 18 months, mother knocked and entered. We noted fleeting eye contact between Greta and Paul. Mother remained silent with fixed direct gaze and picked him up without eye contact. She then sat down with him on her lap at the play table. Paul, having calmed down, picked up a lion. Greta, by contrast, holding Paul rather tightly, put on an alligator hand puppet and began to pretend to devour him with the same facial expressions that she showed during the one-on-one clinical interview in which the clinician felt uncomfortable. We saw Paul trying to squirm free and arching his back, as he was held captive. Greta attributed Paul's hypervigilance to his temperament, totally unaware of her effect on him. These play scenes had a "traumatic feel" to them and yet, as in the previous two clinical examples, there was no clear enactment of sexual behavior.

#### Conclusion

What complicates the effect of this intergenerational communication—and the traumatically skewed intersubjectivity that resulted from that communication in all three clinical examples presented, is that the "Schema-of-Being-with-Another-in-a-Certain-Way" that Stern so well described (Stern, 1995, p. 93) has formed early and has been many times over reinforced around traumatic coconstructions. They then become associated if not with pleasure, but with relational expectations that are familiar, predictable, stimulating-if not exciting, and yet "comfortable." Regina Sullivan and colleagues (Perry and Sullivan, 2014; Moriceau and Sullivan, 2006) have described in their research with rats that "cues associated with our models of abuse serve as paradoxical safety signals" (Perry and Sullivan, 2014, p. 1626). This refers to laboratory experiments in which infant rats, during sensitive periods, sustained electroshocks to move closer to their mother. This occurs within the context of a need for mutual regulation within the attachment system. The rat pups seemingly associate these noxious shocks with proximity to the mother they need and with comfort paradoxically. Biologically, this paradox is supported by the neuropeptide oxytocin as a reward. Extrapolating to humans, one can imagine that a similar schema-of-being-with can become fixed via encoding in the infant's developing memory such that later in life, the infant seeks romantic attachments that resonate with prior traumatic ones. This may, in part, explain why, despite childhood and later violent experiences, individuals gravitate toward violent partners, as if they had a blind spot for danger.

Related to this confusion of fear, excitement, and comfort, all three of the clinical examples discussed, when presented to clinically minded audiences or to colleagues in group supervision, evoked a response at least in one individual of "how could a mother do this or that to her child?" Or a comment in reference to the mother such as "she seems to get pleasure out of exhibiting these scenes of horror to you and her child, have you considered her sadism?" To the extent that sadism refers to this confusion of fear, excitement, and comfort—but also in the context of sexual abuse in the mothers' background in all three examples, pleasure and displeasure—the term is well taken. But the conscious inflicting of pain for pleasure or control of the other, I assert is not operative in these cases. Each mother had an adverse response to helpless states of mind in her child and in herself; and, as reiterated in each example, became dysregulated emotionally, behaviorally, physiologically, and, as we know from our neuroimaging studies, at the level of neural activity in her brain. In so becoming, each mother became dysregulating and frightening. The effort to control externally what is out of control internally (i.e., by purging the home of all pillows and stuffed animals in the case of Nancy and Libby), to regulate what is dysregulated, I hypothesize, is often in the service of the mother's effort that the trauma that she experienced not be repeated. In her very efforts to interrupt the transmission, given the effects of her skewed development of intersubjectivity, the paradoxical result of her efforts is the opposite. Given the effort "not to tell," the result, to cite Person and Klar (1994) is that the "trauma will be told" (p. 1080). And yet, the newly shared, coconstructed experience of mother and child in the present generation is frightening, dangerous, and arousing, like that which transpired in the previous generation. But it is not the same. One can never step into the same schema twice, or into the same trauma. Each variation on the original theme marks the particular relationship within which it was composed.

This being said, the psychotherapist or analyst who is able to hold in mind and body the traumatized mother's past and present and wonder about the past and present of the mother, child, and his own self in the context of the treatment, sheds light via his bid for joint attention and his curiosity on what is in the dark attic in which the dyad lives but fears seeing. The sense of returning to level ground with a mentalizing third on which the child has firm footing and is not perpetually pulled into the traumatized mother's sphere of reference is one marked by joy, spontaneity, reciprocity, a burst of language development, and yet also very often, anxiety on the part of the mother. I have noted how this can be catalyzed, at times quite rapidly, with the help of a video-feedback intervention that involves exposure to otherwise avoided moments of child distress and helplessness (Schechter, 2003, 2004; Schechter et al., 2006; Schechter et al., 2015). Following the shift of maternal representations that mark decreased distortion by traumatic memory traces after clinician assisted video feedback exposure sessions, we observe a new sensation, a new relationship, a new way of seeing her child emerge. In the best of circumstances, such changes in maternal mental representations as marked by the quality of verbal attributions that have been shown to follow from this form of brief intervention, can lead to a deeper and richer development of a longer psychotherapeutic process. One hopes for a therapeutic process that results in the centrality of positive affect to mental representations of the child and of the parent-child relationship rather than of fear, and in attention to the child's and parent's individual developmental needs that are so often overlooked in the treatment of those who have experienced violent trauma.

#### A final word

It is thanks to the many years of direct observation of infants and their parents, and of detailed microanalyses of videotaped parent-infant interactions by Daniel Stern and his colleagues that the original work described in this article was made possible. Stern and colleague's courage in challenging the existing developmental theories during the 1970s and '80s via direct observation and microanalysis made possible his understanding of the important role of early affective attunement to the unfolding of secondary intersubjectivity. Inspired by Stern's work, this article has extended his related notion of schemas-of-being-with through the lens of the author's years of clinical observation and research involving video microanalysis of parent-child interactions with mothers who have been exposed to interpersonal violence and their infants and young children. The result is the concept of traumatically skewed intersubjectivity that is presented in this article.



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## References

Adelman, A. (1995), Traumatic memory and the intergenerational transmission of Holocaust narratives. Psychoanal. Study Child, 50: 343-367.

Aitkin, K. J., & C. Trevarthen. (2001), Infant intersubjectivity: Research, theory, and clinical applications. J. Child Psychol. Psych., 42(1): 3-48.

American Psychiatric Association. (2013), Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Washington, DC: Author.

Beebe, B., J. Rustin, D. Sorter, & S. Knoblauch. (2003), Symposium on intersubjectivity in infant research and its implications for adult treatment. III. An expanded view of forms of intersubjectivity in infancy and its application to psychoanalysis. Psychoanal. Dial., 13(6): 805-841.

Bowlby J. (1969), Attachment, 2nd edition, Attachment and Loss (Vol. 1). New York: Basic Books, 1999.

Breslau, N, V. C. Lucia, & G. F. Alvarado. (2006), Intelligence and other predisposing factors in exposure to trauma and posttraumatic stress disorder: A follow-up study at age 17 years. Arch Gen Psychiatry. 63(11): 1238-1245.

Coates, S., & D. Schechter. (2004), Preschoolers' traumatic stress post-9-11: Relational and developmental perspectives. Psych. Clinics N. Amer., 27(3): 473-489.

Coates, S. W., & M. S. Moore. (1997), The complexity of early trauma: Representation and transformation. Psychoanal. Inq., 17: 286-311.

Di Cesare, G., C. Di Dio, M. J. Rochat, C. Sinigaglia, N. Bruschweiler-Stern, D. N. Stern, & G. Rizzolatti. (2014), The neural correlates of 'vitality form' recognition: An fMRI study: This work is dedicated to Daniel Stern, whose immeasurable contribution to science has inspired our research. Soc Cogn Affect Neurosci., 9(7): 951-960. doi: 10.1093/scan/nst068

Feldman R. (2007), Parent-infant synchrony and the construction of shared timing; physiological precursors, developmental outcomes, and risk conditions. J. Child Psychol. Psych., 48(3-4): 329-354.

Fonagy, P., G. Gergely, E. Jurist, & M. Target. (2002), Affect Regulation, Mentalization, and the Development of the Self. London: Other Press.

Gunnar, M. R. (1998), Quality of early care and buffering of neuroendocrine stress reactions: Potential effects on the developing human brain. Prev. Med., 27(2): 208-211.

Hatzor, T. (2005), Anywhere I go, it's me and my girls: A parent-infant psychotherapy case of a very traumatized mother and her 18-month-old daughter. Paper presented at the meeting of the Fifth International Congress of Psychic Trauma and Traumatic Stress, Argentine Society for Psychotrauma. Buenos Aires, Argentina.

Hertsgaard L, M. Gunnar, M. F. Erickson, & N. Nachmias. (1995), Adrenocortical responses to the strange situation in infants with disorganized/disoriented attachment relationships. Child Dev., 66(4): 1100-1106.

Hofer, M. (1981), The Roots of Human Behavior. San Francisco: W. H. Freeman.

Lyons-Ruth, K. (2007), The interface between attachment and intersubjectivity: Perspective from the longitudinal study of disorganized attachment. Psychoanal. Inq., 26(4): 595-616.

, J. F. Bureau, M. A. Easterbrooks, I. Obsuth, K. Hennighausen, & L. Vulliez-Coady. (2013), Parsing the construct of maternal insensitivity: Distinct longitudinal pathways associated with early maternal withdrawal. Attach. Hum. Dev., 15(5-6): 562-582.

Main, M., & E. Hesse. (1990), Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened/frightening parental behavior the linking mechanism? In: Attachment in the Preschool Years:



- Theory, Research, and Intervention, ed. M. T. Greenberg, D. Cicchetti, & E. M. Cummings. Chicago, IL: University of Chicago Press, pp. 161-182.
- Moriceau, S., & R. M. Sullivan. (2006), Maternal presence serves as a switch between learning fear and attraction in infancy. Nat Neurosci., 9(8): 1004-1006.
- Perry, R., & R. M. Sullivan. (2014), Neurobiology of attachment to an abusive caregiver: Short-term benefits and long-term costs. Dev. Psychobiol. doi: 10.1002/dev.21219. [Epub ahead of print]
- Person, E. S., & H. Klar. (1994), Establishing trauma: The difficulty distinguishing between memories and fantasies. J. Amer. Psychoanal. Assoc., 42(4): 1055-1081.
- Porges, S. W. (2007), The polyvagal perspective. Biolog. Psychol., 74(2): 116-143.
- Rizzolatti, G., L. Fogassi, & V. Gallese. (2001), Neurophysiological mechanisms underlying the understanding and imitation of action. Nature Rev. Neurosci., 2(9): 661-670.
- Rochat, P., & C. Passos-Ferreira. (2008), From imitation to reciprocation and mutual recognition. In: Mirror Neurons Systems. The Role of Mirroring Processes in Social Cognition, ed. J. A. Pineda. New York: Humana Press, Springer
- Sahar, T., A. Y. Shalev, & S. W. Porges. (2001), Vagal modulation of responses to mental challenge in posttraumatic stress disorder. *Biol. Psych.*, 49(7): 637–643.
- Schechter, D. S. (2003), Intergenerational communication of maternal violent trauma: Understanding the interplay of reflective functioning and posttraumatic psychopathology. In: September 11: Trauma and Human Bonds, ed. S. W. Coates, J. L. Rosenthal, & D. S. Schechter. Hillside, NJ: The Analytic Press, pp. 115–142.
- (2004), Intergenerational communication of violent traumatic experience within and by the dyad: The case of a mother and her toddler. J. Infant, Child, and Adol. Psychother., 3(2): 203-232.
- . (2010), Multigenerational Ataques de Nervios in a Dominican-American family: A form of intergenerational transmission of violent trauma. In: Formative Experiences: The Interaction of Parenting, Culture, and Developmental Psychobiology, ed. C. Worthman, P. Plotsky, D. S. Schechter, & C. Cummings. New York: Cambridge University Press, Inc., pp. 256-270.
- , S. W. Coates, T. Kaminer, T. Coots, C. H. Zeanah, M. Davies, ... M. M. Myers. (2008), Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. J. *Trauma and Dissoc.*, 9(2): 123–149.
- , T. Coots, C. H. Zeanah, M. Davies, S. W. Coates, K. A. Trabka, ... M. M. Myers. (2005), Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. Attach. Hum. Develop., 7(3): 313-331.
- , T. Kaminer, J. F. Grienenberger, & J. Amat. (2003), Fits and starts: A mother-infant case study involving pseudoseizures across three generations in the context of violent trauma history (with Commentaries by R. D. Marshall, C. H. Zeanah, T. Gaensbauer). Infant Ment. Health J., 24(5): 510-528.
- , D. A. Moser, J. E. McCaw, & M. M. Myers. (2014), Autonomic functioning in mothers with interpersonal violence-exposure related posttraumatic stress disorder in response to the stressor of separation-reunion. Develop. Psychobio, 56(4): 748-760.
- , D. A. Moser, A. Reliford, J. E. McCaw, S. W. Coates, J. B. Turner, S. Rusconi, & E. Willheim. (2015), Negative and distorted attributions towards child, self, and primary attachment figure, among posttraumatically stressed mothers: What changes with Clinical Assisted Videofeedback Exposure Sessions (CAVES)? Child Psychiatry and Human Devel., 46(1): 10-20.
- , D. Moser, Z. Wang, R. Marsh, X. J. Hao, Y. Duan, ... B. S. Peterson. (2012), An fMRI study of the brain responses of traumatized mothers to viewing their toddlers during separation and play. J. Soc., Cog. and Affect. Neurosci., 7(8): 969-979.
- , M. M. Myers, S. A. Brunelli, S. W. Coates, C. H. Zeanah, ... M. R. Liebowitz. (2006), Traumatized mothers can change their minds about their toddlers: Understanding how a novel use of videofeedback supports positive change of maternal attributions. Infant Mental Health J., 27(5): 429-448.
- , E. Willheim, C. Hinojosa, K. Scholfield-Kleinman, J. B. Turner, J. McCaw, ... M. M. Myers. (2010), Subjective and objective measures of parent-child relationship dysfunction, child separation distress, and joint attention. Psych.: Interper. and Biolog. Proc., 73(2): 130-144.
- , C. H. Zeanah, M. M. Myers, S. A. Brunelli, M. R. Liebowitz, R. D. Marshall, ... M. A. Hofer. (2004), Psychobiological dysregulation in violence-exposed mothers: Salivary cortisol of mothers with very young children pre- and post-separation stress. Bull. Menninger Clin., 68(4): 319-337.
- , A. Zygmunt, S. W. Coates, M. Davies, K. A. Trabka, J. McCaw, ... J. L. Robinson. (2007), Caregiver traumatization adversely impacts young children's mental representations of self and others. Attach. Hum. Develop., 9(3): 187-205.
- , A. Zygmunt, K. A. Trabka, M. Davies, E. Colon, A. Kolodji, & J. McCaw. (2007), Child mental representations of attachment when mothers are traumatized: The relationship of family-drawings to story-stem completion. J. Early Childhood Infant Psych., 3: 119-141.
- Scheeringa, M. S., & C. H. Zeanah. (2001), A relational perspective on PTSD in early childhood. J. Traumatic Stress, 14(4): 799-815.



Schilbach, L., B. Timmermans, V. Reddy, A. Costall, G. Bente, T. Schlicht, & K. Vogeley. (2013), Toward a second-person neuroscience. Behav. Brain Sci., 36(4): 393-414.

Shai, D., & J. Belsky. (2011), When words just won't do: Introducing parental embodied mentalising. Child Develop. Perspect., 5: 173-180.

Slade A. (2005), Parental reflective functioning: An introduction. Attach. Hum. Dev., 7(3): 269-281.

Spangler, G., & K. E. Grossmann. (1993), Biobehavioral organization in securely and insecurely attached infants. Child. Dev., 64(5): 1439-1450.

Stern, D. N. (1985), Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology. New York: Basic Books.

. (1995), The Motherhood Constellation: A Unified View of Parent-Infant Psychotherapy. New York: Basic Books.

, J. Jaffe, B. Beebe, & S. L. Bennett. (1975), Vocalizing in unison and in alternation: Two modes of communication within the mother-infant dyad. Ann. NY Acad. Sci., 19(263): 89-100.

Tomasello, M., & M. Carpenter. (2007), Shared intentionality. Dev. Sci., 10(1): 121-125.

Tronick, E., & M. K. Weinberg. (1997), Depressed mothers and infants: Failure to form dyadic states of consciousness. In: Postpartum Depression and Child Development, Vol. 1, ed. L. Murray & P. Cooper. New York: Guilford, pp. 54-81.

Walden, T. A., & T. A. Ogan. (1988), The development of social referencing. Child Dev., 59(5): 1230-1240.

Winnicott, D. W. (1967), The mirror-role of the mother and family in development. In: *The Predicament of the Family*: A Psycho-analytical Symposium, ed. P. Lomas. London: Hogarth Press, pp. 26-33.