

Applying Findings from Infant Research

There is no such thing as an infant.

Winnicott, 1965, p. 39

Introduction

There is an active, vibrant interpersonal field between the child and mother from the start. This forms the cornerstone of all relationships throughout life. Contemporary research paints a picture of an infant actively engaged in lively person-to-person contact. The newborn has an impressive array of cognitive, emotional and relational abilities that help them deepen their attachment to their caregiver. We now know, too, that 'An infant can develop an early sense of self' as they discover the world around them (Nugent *et al.*, 2009; Rochat, 2001, p. 32).

One of the most important developments for psychotherapy over the last 40 years is the compelling evidence from developmental psychology, neurobiology and attachment research that cognitive and emotional development depend on interpersonal relationships from infancy (Schorer, 1994; Stern, 1985; Piontelli, 1992). Findings from infant research are becoming increasingly incorporated in psychotherapy and in psychoanalysis and analytic thinking. They provide an extensive understanding of the essentially relational nature of people and how this plays out in psychotherapy. Infant development research also helps us understand the

consequences of developmental disruption from trauma. Because arrested development limits an individual's ability to reflect, sense, express, respond, defend and repair, we need in psychotherapy to address the developmental capacities of our clients.

Psychoanalyst Esther Bick is famous for her introduction in 1948 of infant observation as part of training in psychoanalysis, a part still required today. She saw observation of babies and mothers in their own homes as an objective way to 'understand the earliest experience patients bring with them into therapy' (Sayers, 2000, p. 139). Direct observation of caregiver–infant interactions can counter or support traditional theories about the development of the infant that are based on hypotheses drawn from the clinician's understanding of the adult. The result of such theories is what Stern (1985) calls a 'clinically constructed child'. Clearly there are limits to such a construction and its attempt to show early processes of experience, function and expression and the way they develop. Fonagy (2001) questions the assumption that experience drawn from the consulting room corresponds to an actual infant's early life. He states that 'to accept clinical data as validating developmental hypotheses flies in the face not only of ferocious opposition from philosophers of science ... but also of common sense' (Fonagy, 2001, p. 8). In contrast, infant research from the latter half of the twentieth century uses advances in technology to observe both the capacities of the infant and the finely tuned interaction between the infant and the caregiver as they are happening and even from the inside.

We know now from close observation that babies sense and engage with the other in much less disorientated ways than previously thought. This has led to key concepts in developmental theory such as Stern's Representations of Interactions that have been Generalized (RIGs)¹ and reports by scientists like Rochat and 'schema-of-being-with'² on research showing that an infant probably has the ability to differentiate between self and non-self stimulation from birth. Rochat concludes that 'rather than being absolutely separate from their environment or confused about it, infants are attuned to it from the outset' (Rochat, 2001, p. 32). As the trend towards inclusion in psychotherapy of new findings and concepts continues, I think it is interesting to note that many concepts like projection, introjection and internalization still appear to stand up well, and even find support from new work.

Studies from neuroscience, meanwhile, reveal the remarkable extent of the body–mind connection. Schore describes how the structure of the brain is influenced by 'early socio-emotional experiences'. He summarizes this as 'experience-dependent maturation' and quotes Cicchetti and Tucker

(1994, p. 538). 'Nature's potential can be realized only as it is enabled by nurture' (Schoore, cited in Green, 2004, p. 24). Science has begun in particular to show how non-verbal, affective processes are mediated by the right brain. As a result, we need to recognize the significance of the transmission and regulation of affects as threads that stitch and potentially repair the cloth of development.

I have found these key scientific findings helpful in my own work with clients and in guiding my supervisees. In Chapter 5, I explore the body-mind connections that they uncover in more depth, and below introduce some from infant research that can also be readily applied in our practice.

Intersubjectivity

In intersubjectivity, we find one of the vital elements of the therapeutic relationship, one that I take up in more depth as the topic of Chapter 4. Infant studies suggest that 'Learning how to communicate represents perhaps the most important developmental process to take place in infancy' (Papousek and Papousek, 1997, cited in Green, 2004, p. 34). Infants have an ability to engage in interpersonal communication from birth (Stern, 2004, p. 85). They develop within a matrix of 'primary intersubjectivity' defined as 'an active and immediately responsive conscious appreciation of the adult's communicative intentions' and as 'a deliberately sought sharing of experiences about events and things' (Trevarthen and Hubley, 1978; Trevarthen, 1979). The infant has an awareness specifically receptive to subjective states in other people (Trevarthen, 1998, pp. 124–136). Winnicott's famous remark that 'there is no such thing as an infant' makes us realize this receptivity is crucial when he explains that 'if you set out to describe a baby, you will find you are describing *a baby and someone else*. A baby cannot exist alone, but is essentially part of a relationship [italics in original]. (Winnicott, 1965b, p. 39).

Intersubjectivity – 'minds attuned to other minds' (Stern, 1985, p. 85; see also Chapter 4 on the Intersubjective Experience) – naturally forms the basis of our work as psychotherapists. Knowledge about its elemental role and form can help to shape a therapist's way of working with the individual needs of each client. Babies engage in empathic and reciprocal communication. Even at just a few days old, an infant can imitate the caregiver's expressions, including opening their mouth, smiling, sticking their tongue out, pursing their lips, expressing surprise and moving their head, hand or fingers

(Beebe *et al.*, 2005, p. 37; Meltzoff, 1985; Rochat, 2001, p. 143). From neuroscience, we learn that the capacities which facilitate intersubjectivity, including face recognition (Wilkinson, 2006, p. 5), the ability to tune into the rhythm of the human voice and to self-soothe (p. 19), are linked to the right hemisphere of the brain. 'Self awareness, empathy, identification with others, and more general intersubjective processes, are also largely dependent upon right hemisphere resources' (Decety and Chaminade, 2003, p. 557, cited in Wilkinson, 2006, p. 20). Schore examines the right brain connection and points out that 'preverbal maternal-infant communication' that occurs before the ability to speak³ represents 'transactions between the right hemispheres' of the mother and child (Schore, 2003, p. 26).⁴ He suggests that the essence of development is contained in the concept of 'reciprocal mutual influence' where these same forms of non-verbal, pre-rational mother-child communications 'continue throughout life to be a primary medium of intuitively felt affective communication between persons' (Orlinsky and Howard, 1986, cited in Schore, 2003, p. 26). This non-verbal, emotional coregulation forms our earliest experience of intersubjectivity and the rudiments of social understanding. Mutual engagement, unavoidable and filled with possibility, plays a central role in our work with clients as it infuses the working alliance and serves as the ground for what occurs within it.

Two-way exchange: Including the other

Therapy involves the kind of interpersonal exchange that Buber (2008) called 'dialogic': 'a relation between persons that is characterized in more or less degree by the element of inclusion' (p. 97). The ideas around two-way exchange include concepts like empathy, containment, correspondence, mirroring, holding, metabolizing, reflecting, resonance and being in tune with the client. Communication that recognizes and responds to the other without any need to change the other is inherent in infants. It becomes a lifelong resource and one to fall back on if later aspects of development fail (Rochat, 2001).

The infant's readiness to perceive the qualities and features of the other orients them, and helps them establish an intentional relationship with their caregiver. Mutual imitation, empathic social mirroring and proto-conversations⁵ improve the early bonding process and make the infant and caregiver eager to engage. I believe that this form of interacting is similar to the positive rapport that can develop between the therapist and the client.

Reciprocity

Recognizing and communicating with their caregiver at the earliest stages after birth helps the infant not only in bonding, but also in the infant's health and development. Two-month-old babies come to have specific social expectations in face-to-face exchanges around smiling and gazing towards others. They become sensitive to the timing involved in taking turns in social interactions, which enhances the flow of communication and increases the possibility of those around tuning into the affects communicated by the infant (Meltzoff, 1990). The reciprocity of this early 'dialogue' feels gratifying to those with the infant and makes them more likely to try to develop this contact.

Developing trust and safety as central to the therapeutic relationship relies partly on reciprocity. But it moves beyond mutual gratification. As therapists, we all know clients who share our interest in engaging in the task of therapy. With them in therapy, we may feel that they are like us in, say, their sense of humour or sharp intellect or kindness. This sense of shared attributes helps in forging a strong therapeutic bond and makes these clients the ones that we look forward to seeing. However, for therapy to progress we must address the negative aspects of the therapeutic relationship. If we enjoy reciprocity with our clients, we risk lapsing into cosy mirroring and an unconscious avoidance of necessary confrontation. Attending to the level and types of reciprocity becomes useful as we assess the effects of interventions, the state of the client and how we are including them in the therapeutic exchanges.

Rhythmic coupling

The infant's ability to imitate and match the other is a fundamental aspect of pre-verbal communication. As described by Trevarthen and Aitken (2001), playful reciprocal interactions between a baby and their caregiver involve matching of form, timing and intensity. For example, as a caregiver's expression builds from a very small smile to a broad one, a baby will mirror and respond excitedly to them step by step. At four months, the child is able to time the starting, stopping and pausing of their vocalizations in rhythm with a partner. Using this 'rhythmic coupling', infants can tune into their own and the other's timing in any modality, including body movements, vocal, facial and gazing patterns. Studies suggest that the timing of rhythmic coupling between an infant and an adult corresponds to that of an adult communication process, making it a basic trait underlying verbal interactions (Beebe *et al.*, 1992, p. 72, cited in Stern, 2004). From infancy

and beyond, rhythmic coupling enhances both synchronicity and access to the other's experience (Jaffe *et al.*, 2001). This makes it another of the natural and essential ways in which the client and therapist sense each other empathically.

Turn taking

An aspect of timing in all communication revolves around turn taking, where each participant constantly sends or waits for cues indicating whose turn it is to be active or receptive. For verbal communication, Beebe *et al.* (2005) define 'the momentary silence that occurs at the point of the turn exchange' as a '*switching pause*' (p. 64). The pause establishes how long to wait before taking a turn, thus enabling a smooth changeover. If the switching pause is too short, the person interrupting is experienced as abrupt. If the gap is too long, the sense is of the listener as absent. This pattern of exchange is evident even in four-month-old infants (Beebe *et al.*, 2005). I believe it is a form of regulation that is central to the way we negotiate our ongoing relationship with the client. Keeping an eye on the switching pause in therapy can help us as therapists stay in touch with the interactive dynamic and assist in assessing the type of relating pattern the client may have had as a child (see Case Example 1.1).

Matching

Infant-caregiver exchanges have been described as the caregiver 'reflecting back the baby's aliveness' in a 'positively amplifying circuit mutually affirming both partners' (Schore, 2003, p. 8). Matching or mirroring experiences across sensory modes provide a feeling of closeness, of being on the same wavelength, and are basic ways in which one person senses the state of another. Matching between the caregiver and child is integral to the bonding process. As such, the quality of matching experiences sets the scene for later development and communication, and goes on to colour the moment-by-moment interactions in psychotherapy. Matching is an essential aspect of developing rapport and containing clients, and operates as an implicit part of the empathic exchange between the therapeutic pair.

The experience over time of predictable matching helps the infant to perceive what is familiar, what repeats and what is invariant. It is a primary principle of early cognitive development as well as neural functioning (Bornstein, 1985, pp. 115–138, cited in Beebe *et al.*, 2005). By serving as a source of self-knowledge, empathic social mirroring gives infants a way of seeking and objectifying their own affects; what they feel inside is projected

to the outside and then reflected back to them by the other. If the caregiver fails to reflect the child's reality on an ongoing basis, this may result in an inability of the child to develop a secure sense of self. Similarly, we need to be empathic and to be able to communicate our understanding of our clients' experience in order to reinforce their self-knowledge, their sense of their affects, and to develop their capacity to interact with others. Without empathic mirroring, the client feels less recognized and more alone, a point inferred in Ferenczi's warning that if analysts are too aloof they risk retraumatizing clients.

Perceiving and organizing the experience of interaction

Born with the beginning of a sense of self and separateness, attuned to their environment and able to use their competencies, the healthy infant reaches out for interaction and learns how to navigate the world, discovering the others they find there. The interactive journey begins not with cognition, but affects in lively, flexible and acute exchanges of perception and sensing. These exchanges help the infant to develop their sense of self and to find ways of relating. As psychotherapists, we follow the client's affective path of interaction to find the places where they limp, avoid, stumble or fall. The therapeutic relationship restores and stays with the conscious vitality subdued in the course of life, and does so imbued with processes active from infancy that we are now beginning to understand.

Vitality affects

Describing how babies experience the world, Stern makes a distinction between category affect, relating to our emotions,⁶ and vitality affects, the way the experience of an emotion, sensation, thought, image or movement feels.⁷ According to Stern, vitality affects, which we experience from birth, 'correspond to the momentary changes in feeling states involved in the organic process of being alive' (Stern, 1985, p. 15). They ebb and flow in intensity in a way that accompanies all actions, and take on kinesthetic, elusive qualities such as 'surging', 'fading away', 'fleeting', 'explosive', 'crescendo', 'bursting', 'drawn out' and so on (Stern, 1985, p. 54). From research, we see that infants perceive and sense themselves mainly through these kinds of fluctuations in their own bodies, such as stillness and movement, silence and self-produced noises, feelings of satiety, comfort, joy, hunger, pain or discomfort.

The flow of vitality affects is an ongoing human process and gives the 'present moment the dramatic feel of a lived story' (Stern, 2004, p. 70) Stern

suggests that for the most part, vitality affects operate outside awareness, except perhaps in moments of intense experience like blushing, feeling in love, having a tantrum or in encountering nature or a piece of art. The right-brain-to-right-brain attunement that neuroscience is discovering extends to adults and means that we as therapists can experience the vitality affects felt by our clients and vice versa – adding to the complexity and colour of therapy.

Affect attunement

Vitality affects are elicited and shared by both caregiver and child (Stern, 1985, p. 54). When, for example, a parent feels (attunes to) the rising tension behind their baby's cries, they match the baby's emotion – anxiety – and quickly but gently pick up the child. The parent sees nothing is physically amiss, the baby attunes to the parent's vitality affect of smoothly decreasing tension, their crying fades away, and, feeling more secure, they allow their body to sink fully into their parent's arms, attuned to the steadiness of the parent's reassured and reassuring state. If the caregiver ignores the child or beats them for crying, the infant is likely to go into a state of hypervigilance in which they hold their breath, bracing themselves because they feel very frightened, insecure and watchful in a situation lacking a reciprocal resolution of shared vitality affects or 'affect attunement' as coined by Stern (1985, 2004, glossary). Without positive attachment and therefore affect attunement, the infant cannot learn to regulate affects, and the development of essential adaptive capacity becomes disrupted.

Stern describes affect attunement as 'the performance of behaviours that express the quality of feeling of a shared affect state without imitating the exact behavioural expression of the inner state' (Stern, 1985, p. 142). This process is based on emotional resonance with the inner state of the partner rather than with their overt behaviour, and is essential in the intersubjective exchange between caregiver and child. In affect attunement, rather than behaviour matching, the caregiver shares what an experience feels like through cross-modal matching. This involves micromomentary shifts in intensity, forms and timing *from the inside*. A sudden, arms raised gesture of frustration from a client might, for example, be met with a reflecting verbalization that matches the duration of the gesture, rises to a crescendo, then falls quickly to a firm stop. The therapist's attunement to the 'form' (Stern, 2010, pp. 42–43) of the affect is expressed as they match the dynamics of the gesture – its speed and its pattern of rising and falling – but the expression of the attunement has switched modes from physical by the

client to verbal by the therapist. And, in everyday attunement, all of this will occur outside the awareness of either, although it might be available for later reflection.

When the caregiver does not imitate an infant's action, the infant can still read the caregiver's attuned response (Stern, 2004, p. 241). This emotional and energetic resonance, at a pre-verbal level and outside awareness, gives the child a sense of being recognized, which enhances their sense of self. Feelings that have been attuned to can be shared and validated as real and as the baby's own. But, as Wright states, 'where [the caregiver] imposes her own interpretations on the baby's experience, a different story will unfold' (Wright, 2009, p. 24). Those experiences that do not find attunement come to define what cannot be validated about the self.

As described in more depth in Chapter 5, we can find and attend to vitality affects on many levels in psychotherapy, as they occur in association with bodily senses, thoughts, feelings, imagination, and conscious and unconscious fantasies and defences. Sensing the subtle relational impacts involved is akin to an intuitive way of engaging. The automatic way we can 'feel what-has-been-perceived-in-the-other' (Stern *et al.*, 1985, p. 263, cited in Beebe *et al.*, 2005, p. 66) can act as a fine-tuned way to share without altering. It gives us a subtle way of being present, automatically mirroring the moment-by-moment non-verbal process, and affords an empathic way of tracking and reaching clients. Vitality affects can also alert us to significant responses that might hold clues to an individual's pattern of communication or behaviour and their history. I saw this with Veronica, an intelligent and competent, upper middle class woman, socially sophisticated and pleasant in the way she related. But under the surface, I could sense a floating away, or adrift quality. I told her I could feel this as she spoke, and asked her if it reflected anything going on in her experience. She responded that it made her think of the loneliness and isolation she had experienced in her family as a girl, and how she still did not feel close to her siblings or parents. As we talked on, she saw that similar feelings had crept into her relationship with her husband. She had come to me originally wanting to find out how to be closer to him, and looking for practical suggestions about how to communicate. Sensing the original vitality affect had opened a path to the problem she had brought to therapy and the deeper intrapsychic events behind it.

Monitoring the interplay of vitality affects also helps in staying ready to work with the client in different modalities, which is useful in a range of ways, from strengthening the therapist-client bond and helping

with ego-strengthening work, to supporting clients who are experiencing disassociation, psychotic states and other defences.

The developmental concept of affect attunement overlaps with ideas in psychotherapy of congruence and positive regard.⁸ Several supervisees have expressed concern that they were not doing their job properly when they repeatedly encountered choppy waters. They had encountered quite extreme occurrences of 'failure' and mending in therapy. These are necessary for the deepening of the therapeutic relationship, and parallel the way misattunement and repair are crucial to an infant's development. In therapy, affect attunement typically becomes a sign that the therapist has achieved the required balance of being empathic and separate, a balance necessary particularly with distressed or traumatized clients. As well as signalling and contributing to an optimum balance, attunement helps to create a space for the client to be with their experience, free of impingement. Misattunement has become for me a subtle way to detect when mending might be needed and to watch for overattunement, which can encourage (Stern, 2010, p. 114) but can also monopolize the therapeutic (and developmental) process. We can also underattune, which discourages a behaviour (Stern, 2010) (see section on 'Misattunement and repair'). Knowing this, however, makes Fonagy (2001) no less accurate when he observes that a negative therapeutic reaction or sudden rupture in the alliance may leave the therapist 'perplexed and uncertain about how to react' (Fonagy, 2001, p. 100). Fonagy also notes, though, that these disruptions are co-created by the therapeutic pair, and here we have the way through in the need to be 'the explicitly reflective therapist, who retrieves his own mentalizing⁹ ability quickly, following a collapse in the relationship, is most likely to negotiate severe ruptures in the alliance successfully, and the capacity may be a key factor in maintaining borderline patients in treatment' (Fonagy, 2001, p. 100).

Case Example 1.1

Theresa, a professional woman in her late 30s, had been beaten by her father and overly controlled by her mother. She was allowed no voice in her family. She was bullied and at times beaten in her relationships as an adult and was unable to defend herself in these situations. In therapy, she took on an abrasive style of relating that did not allow *switching pauses* in the exchange. She responded to my interventions by falling

silent. The *affect attunement* at these times involved deflation and a sense of quickly draining away. After a while, she would resume, initially speaking slowly, but gathering in pace and volume until the attunement was around surging and a strong intensity level. I felt as if she had assigned me the role of spectator while she performed a one-man show. After some sessions, I pointed out her response of falling silent, which produced the same response. Over time, I let her silent response go sometimes unremarked and would sometimes point it out. In examining the attunement in the silence as it occurred, I found I associated the *vitality affects* with feelings of being pushed down and at a loss. Therapy felt like a power struggle in which Theresa's loud speech held a sense of triumph. It became clear that my interventions represented traumatic moments of abuse where she felt powerless and terrified. She needed to build back up from *vitality affects* of fading and disappearing. Eventually, I told Theresa my thoughts about what went on for her when I indicated that she fell silent. This led over time to a point where she could tolerate the insecurity of *turn-taking*, and engage in a more resilient way with me and in her relationships outside therapy. (To read more about this case, see Chapter 2, Case Example 2.2.)

Intermodal perception

The concept of intermodal¹⁰ perception refers to the capacity to translate a communicative behaviour expressed in one sensory mode to another. This involves a narrower sense of the term 'mode' as applied in Chapter 6, which encompasses expression and perception also in the modes of cognition, emotion, imagination and movement. Additional research may show, in fact, that intermodal perception along these other modes may also occur as an infant develops. As in the attunement example above of a therapist's statement matching a client's gesture, attunement discovers the 'common currency that permits [the expressions] to be transferred from one modality or form to another' (Stern, 1985, p. 152). Schore details how specific connections in the brain facilitate cross-modal sensory transfer and allow the infant to perceive and sense the world in a unified way. In this form of 'sensory integration' (Schore, 1994, p. 307) things seen, touched, heard or smelled are not perceived by young babies as disconnected and unrelated. Research shows, for instance, that the baby experiences simultaneously touching their caregiver's face, seeing their eyes and hearing their voice in a

unified way. The infant is able to follow cross-modal sensory cues where visual information, for instance, is used in speech perception, 'hearing lips and seeing voices' (Schore, 1994, p. 481). 'This inborn capacity to transfer information from one channel to another in order to orient itself makes the baby less vulnerable to incoming stimuli and more able to organize itself in the complex world around' (Broden, 2002, p. 88). Intermodal experience binds inseparably with the constant flow of vitality affects, and is regarded as essential in helping the infant to bridge their inner state and the world outside; it also enhances the child's sense of self and helps in their bonding with their caregiver and in their development (Stern, 2010, pp. 53–61). Being aware of intermodal perception helps as we attune to vitality affects and assess patterns of relating. I have often seen, too, how the experience of it in therapy builds a client's capacity for experience and expression in different modalities.¹¹

Affect regulation

Van der Kolk states that the 'loss of ability to regulate the intensity of feelings is the most far-reaching effect of early trauma and neglect' (van der Kolk and Fisler, 1994, cited in Schore, 2003, p. 24). He notes that, 'In attachment theory [see below], the main purpose of defences is *affect regulation*' and that, 'The main mechanism for achieving this is *distance regulation*' (Knox, 2003, pp. 112–113; Schore, 2001, p. 4). He makes the case that the infant's experience relating to attachment, 'can either positively or negatively influence the maturation of brain structure, and therefore, the psychological development of the infant' (Schore, 2001). A client's capacity for self-regulation, then, becomes a significant factor when we assess our clients, for example, in relation to trauma.

Before the capacity for self-regulation develops, a caregiver acts as a 'self-regulating other'¹² for the infant and child, and regulates most of the affects occurring in interactions. 'Regulation' means governing the manner, timing, intensity and variability of stimulation. This includes gratifying or tolerating hunger, modulation of affect intensity as in smiling between the child and other, arousal intensity as in games like peek-a-boo, or modification of attachment interactions such as physical proximity to the caregiver, gazing and holding or being held (Stern, 1985). In these joint engagements, the caregiver and the infant mutually influence each other's behaviour and coordinate with the other moment-by-moment.¹³ Both can anticipate and accommodate to the other from when the infant is as young as two months. The infant is also

able to modify its communication and send specific cues to which the caregiver has previously responded (Tronick, Cohn and Shea, 1986).

A baby may, for example, still its movements or widen its eyes when ready to play.¹⁴ Affect regulation accompanies this kind of body regulation and expression, and occurs at an implicit rather than explicit level. A caregiver regulates affect, for example, when they tune into the need of the baby to avert its gaze after 'a moment of meeting', such as in a game of peek-a-boo or an intense open smile where there has been a strong affective contact. The intuitive caregiver will look away and so allow an 'open space' where both are simply together in the presence of the other. This allows the infant to avoid overstimulation while the caregiver gauges the interaction and prepares to respond to the child's initiating cues for re-engagement. Applying this observation to psychotherapy, the Jungian analyst Wilkinson (2006) suggests that the arrangement of the chairs in analysis should allow for the possibility of the gaze and gaze away. She points out that 'the gaze and gaze-away sequences characteristic of infancy, accompanied by the sound exchanges of "proto-conversation", may be a significant part of the experience of the analytic dyad' (p. 53).

A caregiver's comforting sounds as well as words often provide a lower pitched reflection of an infant's cry of distress. In a similar, more fine-tuned way, we can mirror the tone of a distressed client, acting as if we feel the same way, but without ill effect. This helps them to feel recognized and to see us as separate and not distressed. Their response tends not to escalate. We might become genuinely troubled, or, in Stern's (1985) terms, over-attuned. This 'steal[s] the thunder', and does not give the client space to feel their experience (Stern, 1985, pp. 218–219).¹⁵ 'As-if' exchange is very common in pretend play (Fonagy *et al.*, 2002), and we see it used especially in psychotherapy with children and in body work.

Affect regulation is a critical and constant aspect of psychotherapy in terms of the level of intensity that the client and therapist can tolerate. It becomes particularly important in working with fragile and traumatized clients (see Chapters 6 and 7). We need to assess and adjust to intensity tolerance not only over the course of therapy, but also during the moment-to-moment relating within a session.

As I use the tools drawn from infant development research, I find I can more easily meet clients at the subtle levels that often lie behind explicit behaviour. It is satisfying, too, as a therapist to use ways of relating drawn from infancy to help to address some of the harm that may have begun in that time.

Midrange regulation

The interactive regulation of psychotherapy develops optimally to a 'midrange' combination of mutual and self-regulation where neither person is too preoccupied with monitoring self ('withdrawal' or 'inhibition') or the other ('interactive vigilance'). This is the finding of Beebe *et al.* (2005) whose studies show that caregiver–infant regulation in the midrange is related to secure infant attachment. These conclusions correspond with Bowlby's work from the 1940s to the 1980s with mothers and babies (see section on 'Attachment theory'). His research led him to conclude that infants need a secure relationship with an adult caregiver and that the quality of the relationship forms a central factor in the child's health and development. Infants were more securely attached where the mother was both emotionally available and encouraged the child to have autonomy (Summers, 1949; Bowlby, 1969, 1988; Ainsworth *et al.*, 1978), in other words, where regulation operated in the midrange. I use the midrange notion to assist in monitoring the quality of the interactive exchange with the client, watching, for example, any tendency to be over-vigilant with traumatized clients who may be paranoid or primitively critical.

Case Example 1.2

Ann, a professional woman in her mid 50s, had experienced extreme childhood neglect and deprivation both in terms of not having basic security and of not feeling loved and cared for. She had spent several periods in residential care when her alcoholic parents were unable to look after her and her younger siblings. Consequently she had withdrawn to an inner solitary world to survive, but was able to work and raise a family, possessing the underlying tenacity of a 'dandelion baby',¹⁶ one that manages to grow in any terrain. She experienced periodic bouts of anxiety and depression.

In therapy, she spent much of the time initially lost in an undifferentiated mix of fear, anger and stubbornness. She lacked a good inner figure to give her hope or to be self-soothing, and was stuck with very little capacity to reach out or respond to my attempts to engage with her.¹⁷ During this period, I largely played the role of *self-regulating other*, managing the affects in therapy, and allowing her to

be alone, private and fearful. For several years, I held the therapeutic space, processing within myself, and attuned to her traumatized state. Gradually, I became more active in naming her stubborn, fearful and angry attitude towards me in the transference and how this was linked to her inner life. We also worked on her depression and her low-energy way of being. Being mindful of sexual transgressions she had experienced in the past, I maintained very clear boundaries and a willingness to be more self-disclosing than usual as this seemed important in order to deepen the alliance. Working in this way helped Ann become less vigilant, able to engage more directly and vitally, and better able to self-regulate. As this occurred, she built a stronger and more lively sense of self that led therapy more into a *midrange* way of relating with a much more lively, robust, reciprocal exchange. Although she continued to experience periods of depression, she could push out more into the world of work and in her intimate relationship with her partner. She also developed a greater capacity to be in touch with and assert her sexual needs.

If I were working with Ann now, I would engage more actively and directly at an earlier stage in an attempt to bring the therapy more quickly to a midrange level of regulation. My experience with Ann and other clients, and what I have learned about misattunement and repair, has led me in general to become much more active earlier in the therapy. Where I think a moment is ripe, I move on from receptive mirroring to explicitly name what is happening in the here-and-now relationship between me and the client (see also Chapter 7, 'Choosing a level').

Misattunement and repair

A comprehensive picture of the caregiver-child interaction includes both attunements, such as matching and mirroring, and misattunements where each of the pair misses the other's cues and fails to mirror the other. Misattunement is both inevitable and necessary for developing a deeper and more challenging relationship. Studies show that the level of misattunement between mothers and infants is about 50 per cent (Stern, 1985) or 70 per cent (Tronick and Cohn, 1989). Tronick describes an interactive process involving matching, mismatching and rematching (cited in Green, 2004) where the capacity to repair failures is as important as matching. The infant's ability to

modify their communication in response to feedback from the caregiver helps in this reparation process (Tronick *et al.*, 1986). Short-term misattunements, then, raise no cause for concern, but longer periods of disruption can be traumatic. Children who have, for example, spent prolonged periods in hospital can experience deep trauma that may have long-term effects (see the cases of: Joseph, Chapter 2, Case Example 2.3; Gary, Chapter 5, Case Example 5.4; and Gemma, Chapter 6, Case Example 6.5).

In order to foster a secure attachment, a caregiver must be proactive immediately after a misattunement; this helps to reassure the child and enable them to move from an anxious or despairing state to a secure way of being with the caregiver (Schore, 2003, p. 33). The attachment strengthens as the child learns that disappointments in the relationship can be tolerated and mended. Shore suggests that, 'Infant resilience is best characterized as the capacity of the child and the parent for transition from positive to negative and back to positive affect. Resilience in the face of stress is an ultimate indicator of attachment capacity' (Schore, 2003, p. 33).

I look at misattuning and re-attuning in a session as a microcosm of the process of disruption and repair that makes up much of the work of psychotherapy. I take up this topic in Chapter 3, but the essence of a larger, more significant break and the process of mending remains the same. The notion of the 'good enough' therapist implies that clinicians will inevitably fail the client. Kohut captures this when he writes: 'There is *never* any need ... to be artificially traumatic. Simply to give the best you can give is traumatic enough, because ... you always limp behind the patient's needs ... you realize his hurt or disappointment after the patient is already hurt' (Elson, 1987, p. 91).

While it is not the role of the therapist to gratify or indulge the client, there are periods in psychotherapy, particularly with clients who are very fragile, when it becomes necessary to adopt the highly attuned manner of a caregiver with a young infant (Balint, 1979; Winnicott, 1965a). Providing a safe, containing 'holding environment' can in time allow the client to develop a stronger sense of self (see Chapter 7).

Vygotsky (1962) describes how a caregiver works with the child's 'zone of proximal development'. The caregiver teaches the infant to behave or speak a little ahead but not too far ahead of the child's capacity. The caregiver holds the future in mind and works with the infant's developmental potential. Similarly, interventions, such as focusing on the body or interpretations, work partly by implicitly asking the client to move outside their usual limits of experience and interaction. We need to take care, though, since therapy can become disrupted when the invitation to do so is premature or overdue.

Deliberate misattunement is one way that can help to stretch a client's capacity. Studies show how mothers, largely without full awareness, use misattunement with infants in order mainly to increase or decrease the infant's level of activity or affect. Attunement sees a continuance of activity and affect, but misattunement causes an interruption and a shift in attention (Stern, 1985, pp. 148–149). In therapy, a client can 'catch on' to purposeful misattunement, and respond in a manner that tests and increases their capacity to self-regulate. Wilkinson (2006) notes the application by psychotherapists of purposeful misattunement 'to later stages of clinical work where the patient's prime need is to experience safe separateness' (pp. 54–55). As she points out, though, use of this technique with traumatized clients 'relies very heavily on the empathic capacity of the analyst'. If the therapist does not attune to the new internal state of the client they risk retraumatizing the client (Wilkinson, p. 54). (See the case of Mary below and 'The necessity of disruption and repair in Chapter 2.)

Case Example 1.3

James was homosexual and, although he had experienced some short-term relationships, he did not yet feel he belonged in the gay community. He talked about difficulties in 'coming out' and his strong desire to do so coupled with harsh self-criticism for being attracted to other men. In one session, he talked intensely about a man in an art class he was attending. His way of talking about the man had an erotic quality, and yet he did not seem to be aware of this. This prompted me to ask if he was sexually attracted to the man. James retorted sharply with an ironic tone, 'Why would you suggest such a thing?' I felt stung, attacked, hurt and exposed. He quickly moved on to another subject, and I retreated, taking time to process both my intervention as a *misattunement* and the attack. After a while, I pointed out that he seemed angry in response to my asking him if he was attracted to the man. He talked about feeling exposed and criticized by me, and needing to defend himself; in doing so he made me feel that I had the problem rather than him. I attempted a *repair* by pointing out that perhaps I had asked a question he may not have felt ready for and that possibly the way it left me feeling exposed was similar to how my question made him feel. He took this on board, marking a step towards greater separateness and increased affect regulation that led to us exploring his sexual desires and fantasies more deeply.

Case Example 1.4

Mary was a client in her early 40s whose psychological fragility made her extremely vulnerable in social interactions. She suffered from severe depression and episodic psychotic episodes. When Mary told me she was irritated that a nurse had scolded her for her poor attendance at the psychiatric day centre, I felt protective of her, but also relieved and pleased that the nurse's challenge had helped Mary to attend more regularly. My satisfaction came across as I commented, 'So it seems that what she said actually helped to get you to the centre.' I knew immediately that I had become too confrontational. My *purposeful misattunement* was poorly judged. Mary snapped accusingly, 'It sounds like you're glad she picked on me.' Her voice had taken on an edgy, desperate tone. Her face had become childlike with wide open eyes and a defenceless gaze. She braced her upper body and held her breath.

Mary did not have a strong capacity to *self-regulate*. She would quickly become very agitated and suspicious or even paranoid if I moved out of attunement in any way. She had not overcome her anxiety about attending the centre and needed support around the feeling that she had been bullied. I attempted to *repair* first by *attuning to the vitality affects* of pulsing and tightening, reflecting her vulnerability and hurt. From there, I moved to *affect regulation* as I listened more carefully to her complaint and slowed down my breathing, inviting entrainment on Mary's part. Softening my voice, but using *as-if matching* of her tone, I said empathically, 'I understand how difficult it was for you to actually go to the centre.' Mary did not respond verbally. Instead, her face relaxed, her eyes lost their startled look and she became once more at ease and ready to continue. In the following sessions, we looked at what had occurred, and over time Mary became more able to tolerate my misattuning to her.

Attachment theory

The wealth of findings based on infant–caregiver interactions helps us not only with the two-way exchange of therapy, but with the broader context of our clients' way of relating. I think this is particularly true of attachment theory, which is largely evidence-based and a theory I find applies well in

practice. It incorporates research from a wide range of fields, including ethology and evolutionary psychology, and depends to a large degree on non-clinical observation and experimentation. The three original categories of attachment were described by Mary Ainsworth based on her 1970s 'Strange Situation' experiment (Ainsworth *et al.*, 1978). Children aged between 12 and 18 months showed very different responses to the return of their mother after being left alone with a stranger for several minutes: (i) *secure attachment* occurs in an infant who feels secure, nurtured and protected by their caregiver. The child uses them as a base to explore the world. This kind of early relationship contributes to clients who are in touch with their emotions and can recount their childhood in a coherent way. (ii) *Insecure/avoidant attachment* is seen in infants who experience their caregiver as rejecting of their need for emotional and physical comfort. This kind of attachment can be an important factor in clients who need to 'get in touch with cut off feelings of loss, sadness and anger in response to severe disappointment in the past' (Fonagy, 2001, p. 143). It is associated with pseudo independence, limited affect, attempts to hide distress and distorted (often idealized) memory of childhood (see example of Thomas in Chapter 6). (iii) *Insecure/resistant attachment* develops out of an anxious dependence on an inconsistent caregiver who can be uninvolved or intrusive. When distressed, the infant is simultaneously upset, not easily reassured, angry and clinging or unresponsive in relation to the caregiver. In therapy, the individual may be very needy and excessively demanding. In 1986, researchers Main and Solomon added another category: (iv) *disorganized/disoriented attachment* describes the confused, frozen and unresponsive reaction of a distressed infant to their caregiver. The infant is unable to use the caregiver for closeness or comfort. The caregiver themselves may have been traumatized. Clients from relationships featuring this kind of attachment have difficulty in regulating affect and sometimes also in remembering trauma.

Psychotherapy and developmental psychology

There are several points on which psychotherapeutic theory and developmental psychology disagree. Evidence showing that a baby engages actively with others supports the criticism by developmental psychology of psychotherapists for the lack of empirical evidence to back their clinical and theoretical assertions about development (Nolan, 2003). Examples include the psychoanalytic concepts of symbiosis and autism that assume

that the infant at an early stage of development has an essentially passive way of relating as if not yet separate from the caregiver. These are concepts we now know have been overtaken by empirical observations in infant development research.

Traditional psychoanalytic therapists would hold that developmental psychology needs to embrace psychoanalytic theory in order to appreciate the complex and at times mysterious nature of conscious and unconscious dynamics. Psychoanalysts emphasize the influence and distortion of perception and relational experience by unconscious expectations and consider unconscious desires, conflicts, fears and ego-defence mechanisms as essential to understanding the personality. Parker, commenting on Stern's work, suggests that developmental psychology does not take these unconscious factors into account (Frosh, 1997). Many writers have commented that this is a world of interpersonal rather than intrapsychic events. Stern's baby does not develop images of the mother mediated by its unconscious phantasy¹⁸ or archetypal imagery. It seems that Stern's view is that as unconscious conflicts cannot be observed in babies they cannot be taken into account (p. 32).

However, Stern, writing in 1985, does see the infant engaging in phantasies alongside the defences of splitting and projection, and the capacity for symbolization, but not developing before the second year. He post-dates Kleinian psychological processes to the period when the child is beginning to use language, rather than the months after birth (1985). Data increasingly suggest that the right brain provides the physical ground for the unconscious and for the development processes that help in turn to shape the structure of the brain as well as the life of the infant. A developmental perspective does not preclude conceptualization of intrapsychic experience. What research reveals about the capacities of babies to generate unconscious imagery and content of any kind can inform approaches to psychotherapy without invalidating them.

But the question arises of why resistance to incorporation within psychotherapy of evidence-based findings on infant development has continued in some quarters to be unrelenting, and take-up in general quite slow. It is not possible or advisable simply to transpose the type of exchanges between caregiver and infant onto the interactions that happen within therapeutic work with adults. They can instead illuminate and guide possibilities for psychotherapy. The inclusion of evidence from research findings will, I believe, inevitably result in a revision of some of the long-held assumptions of psychotherapeutic theory and practice. There is a growing interest, however, within the world of psychotherapy in bridging

the gaps between the clinical world of unconscious scripts and repetitions, and the world of research (Fonagy, 2001; Knox, 2003; Wilkinson, 2006).

The findings from studies of infant development offer clinicians a more accurate reconstruction of the client's early life. They help to avoid working in ways that may be incongruent with the actual early experience of clients when transference, resistance and regression arise. The assumption, for example, of normal autism, symbiosis, infantile dependence, undifferentiation and splitting as inevitable phases of life implies set developmental points at which the client may be fixed and to where regression can lead back. What is now understood about the infant's concept of self and the plasticity of development suggests that regression of this kind cannot occur *per se*.

Humanistic psychotherapists work with concepts of attunement and congruence based on a largely Rogerian focus on the authentic self. I believe this approach could benefit from more theoretical grounding in developmental concepts. The idea of a 'healthy person' as sketched by Stern (1985) comes out of observations of what occurs when development unfolds without exceptional interruption or distress. The related understanding of the mechanisms that shape individual capacities sharpens the notion of 'potential', and our work to unlock potential becomes more nuanced and substantial when we can assess the client and direct therapy with the aid of a picture of human development. Perhaps those like Rogers offer the composition and tone, while Stern *et al.*, add lines and texture to a canvas for psychotherapy – one that captures the colour and rhythm of vibrant, varying themes and the fine-tuned patterns of individuality that together resolve in a unique abstract form we call 'relationship'.

Knowledge of early infant–caregiver interactions leads therapists to sense and work with the intersubjective pattern of exchanges realizing that they may contain echoes of a client's early experience in life. Research-based knowledge of the child offers a more nuanced approach to diagnosis and assessment, and enables the clinician to gauge the client's capacity to address problems, to reflect, to engage in two-way exchange and to regulate affects (see Chapter 7). Discoveries about the relationship between the brain and affect regulation are leading to less emphasis on cognition and more on affect and other modes of experience, function and expression. In my view, approaches to psychotherapy may well integrate around these themes as it moves towards practice with a sophisticated synthesis of findings from developmental, cognitive and affect psychology.

Neuroscience findings offer a fresh perspective on various pathologies and notions of health or cure. A developmental approach stresses the

healthy functioning of the child and tends to align with the emphasis of the potential and the possible capacities of the individual in contrast to a focus on pathology. Green, introducing an overview of work on neuroscience and developmental research, looks at the ties between brain growth and development. She points out they could mean that the lack of certain emotional experiences during critical windows of time leads to 'long-lasting consequences upon which therapy can have little impact'. However, she also quotes the more moderate view of Perry that 'many will reach "normal" landmarks in many areas if they receive love, attention and services' (Perry, cited in *The Observer*, 20 January 2002). It is easy to agree with Green's additional observation that the neurological perspective produces 'a strong case for very early prevention' (Green, 2004, p. 8).

It is true, that infant research has still to fully address whether or not it is inevitable that many individuals are unable to leave behind maladaptive ways of behaving developed in infancy.¹⁹ Questions like this highlight the variations in approaches that neurobiological findings may ultimately decrease or reconcile, from the object relations emphasis on the more internal world of the infant and on the impact of internalization, to the reliance of developmental psychology on social learning.

Object relations, relational psychoanalytic theory, humanistic psychotherapy, and so on can all be shaped by a developmental perspective without losing the advantages of different approaches in fitting the therapy to the client. Indeed practitioners of most schools might come to agree with Winnicott's assertion that the mutual experience of therapy requires that, 'one must have in one's bones a theory of the emotional development of the child and the relationship of the child to the environmental factors' (Winnicott, 1971).

Notes

- 1 Representations of Interactions that have been Generalized (RIGs) 'involve interactions of different types ... interactive experience ... that are averaged and represented preverbally ... RIGs result from the direct impress of multiple realities as experienced, and they integrate into a whole the various, actual, perceptual, and affective attributes of the core self' (Stern, 1985, pp. 97–98).
- 2 Stern describes schema-of-being-with as 'four different kinds of basic and representational formats'. He lists these as 'percepts, concepts, sensorimotor operations and event sequences' (1995, p. 82).

- 3 The left hemisphere is linked to linguistic functioning including reading, writing, spelling, naming. It is also superior in verbal concept formation, verbal memory and analytic reasoning (Pally, 2000).
- 4 The right hemisphere is more mature than the left at birth. It is related to emotion, particularly the perception and memory of social and emotional information. It is also linked to the autonomic nervous system, the regulation of affect states, face recognition and identification of emotional expression of the face. Links exist, too, to non-verbal language, including rate, inflection, pitch, timbre and melody of vocal expression; these aspects are the way through which we detect the emotions and intentions of others (Pally, 2000). The right or emotional brain is dominant in the first three years, this dominance shifting to the left brain in the fourth year (Schoore, 2003).
- 5 In these spontaneous, charged face-to-face 'conversations', the caregiver and infant coregulate high states of positive arousal and pleasurable affect linked to their opiate systems (Schoore, 2003, p. 271).
- 6 Category affects include happiness, sadness, fear, anger, disgust, surprise, interest and shame, some of which occur with acculturation and are therefore not experienced by very young infants (Darwin, 1965).
- 7 Vitality affects correspond with Langer's many 'forms of feeling', which are inextricably involved with all vital processes of life, such as breathing, getting hungry, eliminating, falling asleep, waking up, or feeling the coming and going of emotions and thoughts (Langer, 1967).
- 8 For more details, see Gurman and Messer, 1995, p. 105.
- 9 Mentalizing: 'the ability to be aware of our own internal experience as differentiated from that of others (personification), combined with the ability to "resonate" with others in such a way that we can speculate about their motivations and intentions' (Fonagy *et al.*, 2002).
- 10 The terms intermodal, cross-modal and amodal perception are generally used interchangeably.
- 11 See further discussion and examples of working with different modalities in Chapters 4 and 6.
- 12 The self-regulating other is similar to Bion's concept of metabolizing.
- 13 The mutual regulation of affect between caregiver and infant is also termed 'affect synchrony' (Schoore's piece in Green, 2004, p. 28).
- 14 University of Iowa Maternity Center (2004) Understanding Your Baby's Signals', www.uihealthcare.com/depts/maternitycenter/newborninfo/signals.html (accessed August 2010).
- 15 As Stern (1985) points out, though, overattunement 'can never steal the individual's subjective experience'.
- 16 Origin unknown.
- 17 A state of hypo-arousal (also referred to as tonal immobility): 'Relative absence of sensation; numbing of emotions; disabled cognitive processing;

- reduced physical movement' (Ogdon, Minton and Pain, 2006). Also see Chapter 5, 'The relational body-mind'.
- 18 'Phantasy' is a term coined by Melanie Klein for the conceptualization without awareness of life and objects within it as distinguished from conscious fantasy (Klein, 1991).
 - 19 'Repetition compulsion' is a 'term used by Freud to describe what he believed to be an innate tendency to revert to earlier conditions and used ... to explain the general phenomena of resistance to change' (Rycroft, 1995, p. 156).

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