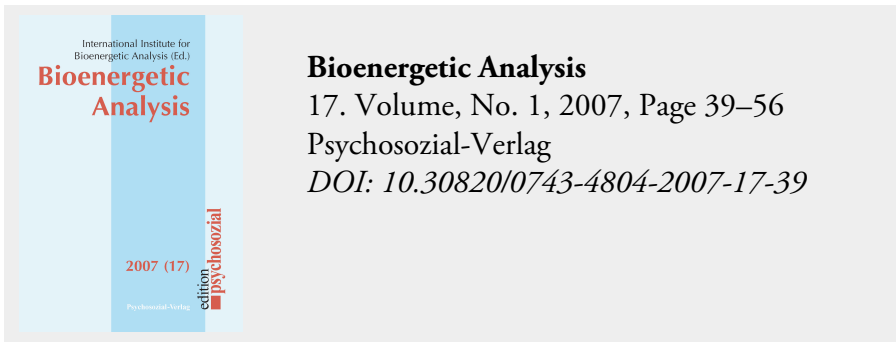


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The Embodied Mind



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The Embodied Mind

Helen Resneck-Sannes

»Put your ear down close to your soul and listen hard.«

Anne Sexton

Summary

Focus is on the salient aspects of neurobiological research, which are relevant for psychotherapy and particularly for Bioenergetics. This research concludes that the brain informs the body and the body in turn informs and sculpts the brain. The implications of this finding are discussed in relation to the Bioenergetic theory of character development. A brief overview of the anatomy and functions of the brain is presented with references to theories regarding the processing of traumatic memories. Finally, a more in-depth analysis of some of the findings from neuroscientific investigations are summarized regarding how empathic interactions between caretakers and infants build neuronal structures in the sensory motor areas of the brain.

Key words: attachment, Bioenergetics, brain, embodied, empathy, mirror neurons, neurobiology, trauma

In the September issue of the »Psychotherapy Networker«, Kathy Butler writes: »No longer is the skull a black box, its clockwork invisible as it was to Sigmund Freud, Carl Jung, and I will add here, Reich and Lowen (*italics are mine*) and the seminal thinkers and clinicians who have shaped 20th-century psychotherapy. For the past decade, in well-funded university neuroscience laboratories from Boston to Madison to San Francisco, the black box of the skull has been opening and spilling out diamonds. (Butler, K. 2005, p.28)

Understanding this research is important as I agree with Angela Klopstech's (2005) conclusion that:

»At this point in time, it is obvious that Bioenergetic Analysis can neither remain solely within the limitations of its original energy concepts, nor can it afford to lose its roots and become lost in the recent relational and process oriented approaches. In part, its viability will require that it open itself and cast a curious eye on the research from contemporary neuroscience.« (p.101)

Because of the current interest in the field of psychotherapy in neurobiology, and in order to converse with our colleagues, I think it is important that we, in the Bioenergetic community have a basic knowledge of the anatomy of the brain and how it functions. This article focuses on some of the salient aspects of this research, which are relevant for psychotherapy and particularly Bioenergetics. This research, which is concluding that the brain informs the body and the body in turn informs and sculpts the brain, has implications for the Bioenergetic theory of character development. A brief review of theories regarding the processing of traumatic memories is presented. However the major focus of the article will be on early infantile attachment. Some of the findings from neuroscientific investigations will be summarized regarding how empathic interactions between caretakers and infants build neuronal structures in the sensory motor areas of the brain.

The Brain

As Bioenergetic analysts, we talk about being body therapists and learn the various muscles and their functions. However, we leave off the head, as if it isn't part of the body. I thought it might be interesting to take a look at these different brain parts and at least have some kind of visual representation of what we are talking about.

I will focus on those brain structures, which develop during the first three years of life and are important for the development of attach-

ment, empathy, emotional regulation, and the processing of traumatic events.

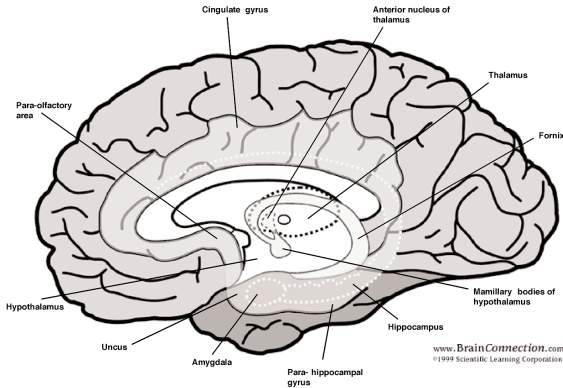
Daniel Siegel has a description of the brain, which he refers to as: »The Brain in the Palm of Your Hand«. If you take your thumb and bend it into your palm and fold your fingers over the top, you will have in front of you a surprisingly accurate rough model of the brain. Of course, the brain is made up of impossibly complex interconnections among 10 to 20 billion neurons and can hardly be reduced to a human fist. Nonetheless, we can take a shortcut and divide the brain into three major areas – the cortex, the limbic system, and the brain stem – and talk about what role they play in the larger system.

Now, hold your curled hand up – the »brain« – so that you are looking at your exposed fingernails. Unlike Daniel Siegel, I also have pictures of the brain. The »eyes« in this imaginary head will be just in front of the two center fingernails, the »ears« will be coming out the side, the top of the head will be at the top of your bent fingers, the back of the head will correspond to the back of your fist, and the neck will be represented by your wrist. Looking »inside« the head, your wrist represents your spinal cord coming up from your back. Then the center of your palm symbolizes the brain stem, which emerges from the spinal cord. The brain stem, the lowest area of the brain, is an interface between the brain and the outside world: it takes in information from perceptions, from the body, and it regulates states of wakefulness and sleep.

If you raise your fingers up and reveal the thumb curled into your palm, you're looking at the area symbolizing the limbic structures, which generally mediate emotion and generate motivational states. This crucial function influences processes throughout the brain. Emotion is not simply based or limited to the limbic circuits, but appears to influence virtually all neural circuits and the mental processes that emerge from them.

For clinicians, several regions of the limbic system are especially important to know. First is the *hippocampus*, which is important for integrating processes that result in »explicit memory« or factual and autobiographical memory. (Remember that the brain is divided into a left side and a right side, so there are really two hippocampi, as there are

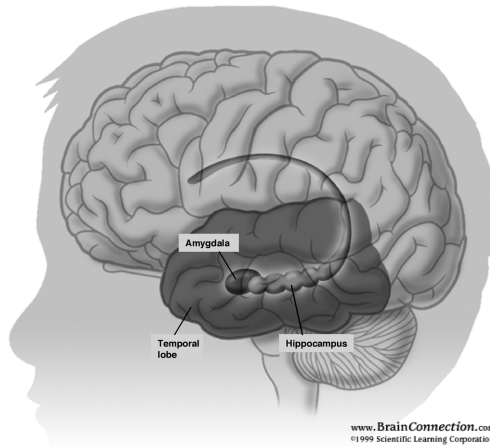
two of most structures in the brain.) As you can see the hippocampus extends up into the cerebral cortex.



The *amygdala*, represented on the second to last segment of your thumb, is more toward the center of the temporal lobe. As you can see, the amygdala is out there all by itself, only connected to the hippocampus. The amygdala evaluates whether an incoming stimulus is safe or is a threat and does this isolated from the cerebral cortex. The reaction is simultaneous, e.g. suppose I'm about to begin a walk with a friend. As we walk by the fence that is the boundary of the trail, we notice a sign that says: »I think I saw a mountain lion today, be careful.« Further on down the trail I spot a flash of gold out of the corner of my eye. Immediately, my heart begins pumping blood into my extremities, my neck lengthens, extending my head so that I can orient to the spot, where I think I saw the gold which now, in my mind's eye, appears as gold fur. My body is in a high state of arousal, hopefully instigating its fight/flight response and not freezing. Another 30 seconds passes and my mind is wondering, whether I actually saw a mountain lion or whether it is the pampas grass waving in the wind that appeared to me in that millisecond out of the corner of my eye as gold fur.

This entire arousal reaction happens without the direct involvement of the cerebral cortex. The amygdala is in fact, one of the important

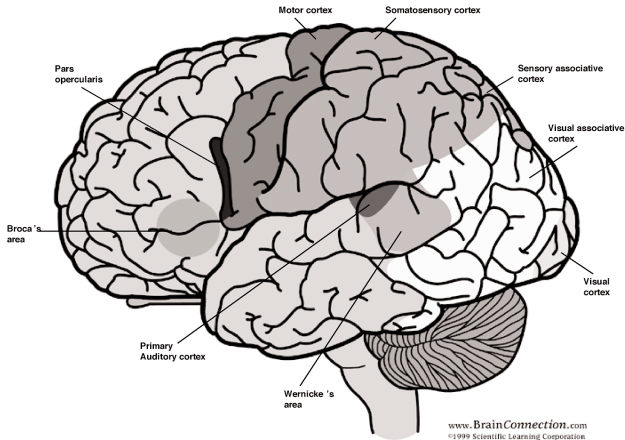
appraisal centers in the brain and may be part of a general purpose defense response system. It is important for processing emotions, especially sadness, fear, and anger. *Processing* means not discussing the meaning, but generating the internal emotional state and the external expression, as well as the perception of such states in others. The amygdala, for example, has face-recognition cells, which become active in response to emotionally expressive faces.



Then, toward your thumbnail, we can imagine the anterior cingulate cortex. Some people think of this region as the chief operating officer of the brain. It helps coordinate what we do with our thoughts and our bodies. Some experts include the hypothalamus here as part of the limbic system. The hypothalamus is a crucial neuroendocrine center, which initiates hormonal secretions and neurotransmitter flow involved in coordinating many brain-body functions, including the experience of hunger and satiety.

Putting your fingers back over your thumb will represent the third major area of the brain: the cerebral cortex. Also known as the neo-cortex or cortex, this region sits at the top of the brain and is generally regarded as the center of the most evolved functions of reflection and awareness – functions that distinguish human beings from other animals. The cortex has lobes that mediate distinct functions. In mental

health, we're interested in the frontal part of the cortex, called the frontal lobe. Symbolized by the front of your fingers from the second-to-last knuckles down to your fingernails, the frontal lobe mediates reasoning and associational processes. Its front part is called the prefrontal cortex, and is symbolized by your last knuckles down to your fingernails.



Two major areas of the prefrontal cortex are the side parts called the dorsolateral or lateral prefrontal cortex, where your two outside fingernails are. These are the centers for working memory, the chalkboard of the mind, which enable us to remember a phone number long enough to dial it, or a sentence long enough to say it. The middle part includes the orbitofrontal region, so called because it's behind the orbit of the eyes. In the hand model, the *orbitofrontal cortex* is symbolized by the middle two fingers, from the last knuckles down to the fingernails.

The orbitofrontal cortex is the only area of the brain that is one synapse away from all three major regions of the brain. It sends and receives neurons to and from the cortex, limbic structures and brain stem, integrating these three areas into a functional whole. This unique structural position gives it a special functional role in integrating the complex system of the brain. It appears to play a critical role in the human capacity to sense other people's subjective experience and understand interpersonal interactions. The or-

bitofrontal cortex regulates emotion and emotionally attuned interpersonal communication (often involving eye contact). This is the region of the brain where neuroscientists are beginning to believe that empathic understanding happens. The orbitofrontal cortex also has to do with response flexibility, i.e., the ability to take in data, think about them, consider various options for responding, and then produce an adaptive response. Finally, it is believed that the orbitofrontal cortex is essential for self-awareness and autobiographical memory.

It is believed that an important function of the orbitofrontal cortex is the regulation of the autonomic nervous system, the branch of our nervous system that regulates body functions such as heart rate, respiration, and peristalsis, systems we work with a great deal in Bioenergetic therapy. It has two branches: the sympathetic, which is like an accelerator (up regulates) and the parasympathetic, which resembles a braking system (down regulates). Together, the regulation of the two systems keeps the body balanced, ready to respond with heightened sympathetic arousal to a threat, for example the mountain lion, and able to calm itself down when the danger is past. In PTSD there is a malfunction of the system in that the danger is past and the body is still activated, as if the threat is still present. Optimal stress is an important concept emerging from the neurobiological research. As Cozolino (2002) says:

»Although stress appears important as party of the activation of the circuits involved with emotion, *states of moderate* arousal seem optimal for consolidation and integration. In states of high arousal, sympathetic activation inhibits optimal cortical processing and disrupts integration functions. States of *moderate arousal* maximize the ability of networks to process and integrate information.« (p. 62)

Siegel has referred to this optimal state as the therapeutic window. I do want to highlight, that when Siegel is talking about integration, he is referring to verbal integration, as revealed in a coherent narrative. We, Bioenergetic therapists are tracking somatic coherency as well, by noticing not only the breaks in the verbal story but also by paying

attention to when the client's breath is shallow or held, when the shoulders rise in fear, when the thigh muscles contract and feet lift off the ground. We help move the energy of the body when it is stuck, and we also have mechanisms of somatic down regulation, discharge, and soothing, supporting the vibrations of the body to evolve into streamings of flowing energy.

Brain Research and Bioenergetics

Now, that we have a cursory understanding of this brain, you might say, that is interesting, but what does that have to do with Bioenergetics and character analysis? First of all, an important finding from the brain research, using pet scans and neuroimaging is confirming that the mind grows in relationship to its environment, especially during the first three years and that various parts of the mind are affected as a result of different parenting. The neurobiological research is supportive of Lowen's (1975) theory of character development, that the amount of trauma and support during the first three years of life influences a person's ability to develop emotionally and handle traumatic events. In my view it is also supporting his definition of character formation and its representation in the body.

Daniel Siegel (1999), Allan Schore (2003, 2003b) and others have summarized a great deal of research indicating that early attachment experiences primarily affect the development of the right brain, specifically the right orbitofrontal cortex. The right brain contains a more integrated somatosensory representation of the body, including the state of tension of the body's voluntary muscles and the position of the arms and legs. A major finding is that excitation, which follows from attuned parental stimulation builds structure by laying down neurons in those parts of the infant's brain that are concerned with sensorimotor functioning. Those neurons in the brain are responsible for sending signals to various muscle groups throughout the body as they mature and come into action at various ages. It appears that stimulation from caregivers during the first few years of life is necessary for the forming of those muscular, visceral, and sensorial structures that go into the building of

the form and functions that Bioenergetic theory has labeled as character. When a therapist analyzes character, she is gathering information about the form and function of her client's body and from that information, develops hypotheses about the early relationships that person had with her caregiver. These early interactions built a neuronal network in the sensory motor part of the brain. These neurons sent signals to the muscles to contract or to expand, to build structures. However, if the parts of the brain didn't receive the necessary stimulation, then signals weren't sent to those muscle groups, and the body wasn't built, or it was weak, or collapsed. Think of the pictures in Stanley Keleman's (1985) book, *Emotional Anatomy*. When there is a great deal of invasion, the body is dense, without support; there is an oral collapse. When the input from the parent is attuned, the body is represented in the development of a balanced musculature. Now, we also know that some people are born with more resilience to handle the stresses of life, while others are more easily over-whelmed and traumatized by the same events. Some of these differences may be genetic, and some people may from the very beginning already have a greater capacity for managing stress.

Our early relationships with our caregivers influence our reactivity, and sculpt the form and functioning of our brains. Daniel Siegel uses a computer model to describe how the mind works. Summarizing recent neurobiological theories, he says that the human mind emerges from patterns in the flow of energy and information within the brain and between brains (p. 2). He says: that engaging in direct communication is more »than just understanding or even perceiving the signals – both verbal and nonverbal – sent between two people. For »full« emotional communication, one needs to allow his state of mind to be influenced by that of the other« (p. 69). Allan Schore has talked about how the mother uploads information from the infant's mind and re-processes it, presenting it back in a more regulated experience to the mind of the child. Notice the language. He talks about uploading and downloading information, terminology of computers, but one of the purposes of this transfer of information is to provide regulation of emotional needs (drive theory). Recently those neurons that are being affected in this emotional empathic communication have been discovered and given the name of: *Mirror Neurons*.

Mirror Neurons and Empathy

Like much of the early developmental research, mirror neurons were initially discovered in animals. Giacomo Rizzolatti and his colleagues (1992) attached electrodes to monkeys' brains. It was discovered that when the monkey reached for an object, a certain neuron was activated. Later it was discovered that the same neuron was activated when the experimenter reached for the object. It was called a mirror neuron, because it fired whether the animal itself was initiating the action or it saw someone else, like a mirror initiating the same action.

Although the experimenters eagerly inserted electrodes into the monkeys' brains, they weren't willing to succumb to the same treatment themselves. Instead, functional magnetic resonance imaging (*fMRI*) was used to evaluate the neurons in the experimenters' brains. Keysers and his colleagues (2004) looked at »tactile empathy«, or how we experience the sight of others being touched. They found that the same area of the somatosensory cortex was active both when the participants, men and women were lightly brushed on the leg with a feather duster, and when they viewed someone else being touched in the same spot (Keysers, C. and Bruno, W. 2003). This finding is somewhat interesting in and of itself, but the researchers were interested in whether the intentionality behind the action made a difference. They discovered that different neurons were activated depending on whether the experimenter lifted the teacup to pour tea or reached for the cup to clear the table. Although they didn't find the identically same mirror neurons that were activated in the minds of the monkeys, they did find that similar neuronal systems were activated.

Researchers speculate that the amygdala, which resides in the limbic system, may be the area of the brain where the mirror neurons are formed. It is thought that the amygdala sends signals to the hypothalamus, which in turn stimulates the neuroendocrine chemicals such as: adrenaline, noradrenaline, dopamine, gamma-aminobutyric acid, thyrotropin-releasing hormone, neurotensin, enkephalins, and endorphins. These chemical reactions generate the processes of internal emotional states – sadness, rage, fear and their external expression – tears, trembling, etc. The amygdala is also capable of identifying the

emotional states in others. For instance, babies' understanding of mothers' emotions was demonstrated in an experiment in which young infants used their mothers' emotional expression to navigate a »visual cliff« (a sheet of glass over which the baby crawls, under which a bottomless cliff appears in the midway). The infants looked at their mothers, before crawling on the glass to get the toy on the other side of the visual cliff. When mothers displayed fear, no infant crossed the cliff, but when mothers showed joy, about two-thirds of infants crossed the cliff to get the toy (Hojat, 2004, p. 29). According to the theory of mirror neurons, the mothers' emotional responses stimulated the same neurons in the infants' brains, which then empathically generated the same state in their bodies. Researchers are very interested in mirror neurons, because this may be the beginning of how empathy is transferred and taught. By using functional brain imaging, it has been shown that the system of mirror neurons that was first discovered in monkeys also exists in humans' brains. The mechanism of mirror neurons is innate, and constitutes a basic organizational feature of our brain that can cause a set of neurons to »fire together« by observation of the mother's behavior, and subsequently »wire together« in later stages of development. It has been proposed that the mirror neuron activation could be the basis of action recognition and this mechanism can sow the seeds for understanding others and thus development of empathy in children.

They are also discovering that infants are capable of imitating facial expression, motor mimicry, and of understanding their mothers' emotions, which suggests that infants have a remarkable ability to communicate nonverbally in the early days of life. This can provide a foundation for the development of a capacity to share subjective states with others and fosters understanding of other people's happiness as well as pain and suffering. Although Bob Lewis (2005) doesn't explicitly refer to mirror neurons, he does review the work of Beebe and Lachman (1997, 2002), and Ekman (1983) and discusses the mirroring of facial expression as a precursor to empathy, and explores the role of expressive matching of body posture, and the rhythms of speech in terms of mutual regulation during the therapeutic process.

Additional evidence in support of the concepts regarding infants'

understanding of maternal emotion was provided by using the »still face« procedure (Cohn, J.F. and Tronick, E.Z. 1987). In this experiment

»interchanges between mothers and their 2 1/2- to 3-month-old children are filmed and played back in slow motion. In the first phase of the experiment the mother is told to behave normally as she and the infant sit face-to-face. Slow motion review shows the rapt interest with which they view each other. Next, the mother is asked to leave the room for a few moments; and on her return, to sit opposite from the infant *but refrain from making any facial gesture*.

For a short time the child will exhibit a number of facial expressions in an apparent attempt to engage the mother in their normal mode of interaction. After a while the infant will exhibit one of two characteristics. Some children will cry in distress, but many will slump down in the chair with a sudden loss of body tonus, turning the head downward and to the side, averting their eyes from their mother's face. When Demos reviewed the »still face« experiments, she felt that these children were exhibiting a primitive shame response« (Resneck-Sannes, 1991).

I wonder if the neurons in these collapsed infants' brains are sending signals throughout their bodies about the lack of excitation and excitement from their mothers, which leads to a collapse. Once again, I direct you to pictures in Keleman's book, *Emotional Anatomy*, for visual representations of this phenomenon.

Neurobiology, Attachment, and the Therapeutic Relationship

Discussing the mother-infant interchange is important as the conclusion Siegel, Schore, and others have drawn is that there are two situations in which this full emotional communication is paramount: not only the attachment relationship of an infant and her caretaker but also during the therapeutic connection of a client and his therapist. The relationship of the mother and child in infancy has often been a metaphor for the therapy process. Empathy and attunement have been the heralds of a good mother-child connection, and these are the

same factors that seem to influence a good outcome in psychotherapy. Siegel (1999) says: »The alignment of the therapist's state allows him to have an experience as close as possible to what the patient's subjective world is at that moment« (P.69).

One of the outcomes of the neurobiological research is that it is becoming obvious both to developmental psychologists and psychotherapists that clients and patients are in an intersubjective relationship that is somatically based. Psychoanalytic psychotherapists are beginning to include the body in their writings. Shaw writes that »the body is the very basis of human intersubjectivity« (2004, p. 271). And Mathew writes:

»The body is clearly an instrument of physiological processes, an instrument that can hear, see, touch, and smell the world around us. This sensitive instrument also has the ability to tune into the psyche: listen to its subtle voices; hear its silent music and search into its darkness for meaning« (1998, p.17).

For the last three to four years I have been following the notes from the Alan Schore study groups as they appear in articles in the journal, *The Psychologist / Psychoanalyst*. Contemporary psychoanalysis is now viewing psychotherapy as a relational process. The stance the neurobiologists are taking is that we are regulating one another. But as Allan Schore writes in the latest issue:

»that intersubjectivity, an essential construct of current developmental, clinical, and neuropsychanalysis, is more than a match or communication of cognitions, and that the intersubjective field co-constructed by two individuals includes not just two minds but two bodies« (Schore, 2005, p.18).

All those body states that we have been taught to attend to, i.e. facial expression, energetic arousal level, body posture, are now entering the purview of psychoanalysis, albeit in a primitive, and in a somewhat disjointed fashion, as one reads the transcripts. They are monitoring clients' laughter and smiling to assess degree of arousal, and don't

look much below the head. And to quote Bob Lewis (2005), »Of course, as Bioenergetic therapists we work with the expression of the entire body, not just the face« (p.14).

One of the classic Bioenergetic interventions is that of body mirroring. In order to empathically know the body of another, we arrange our body in the same holding pattern as our clients, to enable us to sense our clients' experience of their bodies by sensing ours. By aligning our bodies to that of our clients, we are activating a neuronal mirror of their neural activation patterns, and by engaging in this empathic encounter we may already be intervening or changing the neuronal patterns in the brain. And after all, we are in an intersubjective matrix, so while we are realigning our bodies to our clients' they are also, most likely, aligning their bodies with ours.

Mirror neurons may be one of the mechanisms of psychobiological regulation. Psychologists for a long time have known about behavioral contagion, i.e. when one person yawns, it tends to stimulate the desire to yawn in others. So, we can be »down-regulators« or calming, by grounding, slowing our breath, our rhythm of speech and speaking in a quiet voice, or we can be up-regulators by encouraging large muscle movements, loud voices, and being excited with our clients. Sometimes, we do this consciously, sometimes not. When I was in graduate school our sessions with our clients were videotaped. I vividly remember watching my first family therapy session in which my co-therapist and I were working with a hyperactive boy. My co-therapist and I were as hyperactive as the boy in the family. I'm not certain who was influencing whom.

Recently, I was working with a client utilizing a technique, which supposedly down regulates the amygdala. As I was holding the back of her head at the brain stem, I focused my attention on her body, specifically thinking about holding my hands on her amygdala, and then focused on my own amygdala. Whenever my attention was on my own area of my head, she would spontaneously report warmth, softening, calming in her head. Whenever I focused on her head, her energy would jam. The same process was true of other areas of her body. This client suffered from pneumonia, when she was newly born. Her mother was sick and depressed, most likely not very pres-

ent in her own body, or an almost »dead Mother«. This client has worked much of her life attempting to be available to others, trying to feel loved. In this exercise she described herself as feeling wrapped and held by the mother, without having to work to find the contact. The calm she felt was new for her and very much appreciated.

I feel that we as somatic analysts have much to offer the field of psychotherapy as many contemporary psychoanalysts attempt to influence and be influenced by a real body rather than just a metaphorical one. In my article published in the IIBA journal (2002) I wrote about the therapist as a psychobiological regulator. Such regulation is an essential part of therapy when dealing with clients with infantile trauma, and trauma in general. As Bioenergetic analysts we know that we need to stay attuned even when our clients present us with as Bob Lewis (2005) describes: »The kind of primitive, chaotic, visceral (gut wrenching) material that has no words and is delivered into the room sensory-motorically, and tends to be threatening to most of us (p.25)

Just last week I had such an experience with a client I have been seeing for a year and a half. I will refer to him as, Larry. What I know of him is that he is very smart, but has never been able to realize his intellectual gifts, has a good sense of humor and was beaten by both parents, not always certain of the reason behind the hitting. He is currently in a relationship with a woman who I feel treats him badly. She doesn't return his phone calls sometimes for days at a time, is often late meeting with him, and is reactive to his small lapses of courtesy. He has a non-essential tremor and startles easily. My only physical intervention at this time has been to ask him to relax his jaw by letting his feet rest on the floor and opening his mouth slightly. His body went into such violent tremors that I instructed him to close his mouth and tighten his jaw and slowly open and close his mouth.

The session before we talked about how frightened he is of me although I have done nothing to harm him. There was a sudden shift in the atmosphere of the room and I saw him looking at me with slanted eyes filled with such sadistic hatred that it felt like ice cubes were sliding up and down my spine and my stomach and chest had become a familiar iron plate. I saw that he had no idea of the look he was sending me, and I waited awhile, uncertain of whether to say something. Darkness

began to fill the room and I hesitated to move from my chair to turn on the light. I looked him directly in the eyes and said: »I know why you're afraid.« I described the look I had seen and then got up and turned on the light. You know how energy changes the tone of a room. Instead of being bathed in safe yellow warmth, the light had a sickening green tone. However, as we explored that look, his fear, my knowing of what he faced as a young child almost every day of his life, the room began to soften and the shadows seemed more familiar.

The next session he came in visibly trembling. His girl friend had accumulated a \$300.00 cell phone bill during the Christmas vacation (they have the family share plan), when he was on vacation from work and at home alone. He had last seen her when they were together at a bar and she had left suddenly, without saying goodbye or later returning his calls. During this therapy session, the girlfriend was at his house, where after discussing the bill, they had had sex, obviously to keep him attached to her. I asked him if the sex was worth \$300.00, and he said: »no«. He was able to verbalize his dilemma. He needs her to comfort him, even though she is the one causing his suffering. He has named the worse kind of traumatic attachment, when the child needs to go to the parent for comfort and that caregiver is the same person who is frightening the child. Larry was afraid that I would force him (as if I could) to end his relationship with her, and then he would have no one. And as we know, it is better to have an abusing caretaker than no caretaker at all, for infants die without their parents. But Larry is a grown man. He only thinks he will die without his tormenter/ comforting girlfriend. Oh, the limbic attraction. The unconscious zing to that old familiar flame and too bad if it is /was an abusive fire.

I would like to end this paper with a quote from *A General Theory of Love* (Lewis, Amini & Lannon 2002), which I think best describes the mind to mind, body to body intersubjectivity of the therapeutic relationship.

»An attuned therapist feels the lure of the patient's limbic attractors. He doesn't just hear about an emotional life—the two of them *live* it. The gravitational tug of this patient's emotional world draws him away from his own, just as it should. A determined therapist does not strive to have

a good relationship with his patient—it can't be done. If a patient's emotional mind would support good relationships, he or she would be out having them. Instead a therapist loosens his grip on his own world and drifts, eyes open, into whatever relationship the patient has in mind – even a connection so dark that it touches the worst in him. He has no alternative. When he stays outside the other's world, he cannot affect it; when he steps within its range, he feels the force of alien attractors. He takes up temporary residence in another's world not just to observe but to alter, and in the end, to overthrow. Through the intimacy limbic exchange affords, therapy becomes the ultimate inside job.« (p.178)

Bibliography

- Butler K (2005) September / October, Psychotherapy Networker: 28
- Cohn JF and Tronick EZ (1987) Mother-infant face-to-face interaction; the sequence of dyadic states at 3, 6, and 9 months. *Developmental Psychology* 23 (1) 68–77
- Conzolino L (2002) *The neuroscience of psychotherapy; building and rebuilding the human brain.* WW Norton Inc, New York
- Hojat, Mohammadreza (2004) Development of prosocial behavior and empathy in the hand that rocks the cradle. *World Congress of families:* 29–31
- Klopstech A (2005) Catharsis and Self-regulation revisited: Scientific and Clinical Considerations. *Bioenergetic Analysis* 101–131
- Keleman S (1985) *Emotional Anatomy.* Center Press, Berkeley
- Keysers C and Bruno W (2003) *Neuron* 40 (2) 335–346
- Keysers C, Wickers B, Gazzola V, Anton J-L, Fogassi L, and Gallese V (2004) A Touching Sight: SII/PV Activation during the Observation and Experience of Touch. *Neuron* 42 (April 22) 1–20
- Lewis R (2005) The anatomy of empathy. *Bioenergetic Analysis* 9–31
- Lewis T, Amini F & Lannon R (2002) *A General Theory of Love.* Vintage Press, New York
- Lowen A (1975) *Bioenergetics,* Penguin Books, New York
- Mathew M (1998) The body as Instrument. *The Journal of the British Association of Psychotherapists* 35: 17–36
- Melzack I, Lacroix R & Schultz G (1997) Phantom limbs in people with congenital limb deficiency or amputation in early childhood. *Brain.* 120 (9):1603–20
- Resneck-Sannes H (1991) Shame, Sexuality, and Vulnerability. *Women and Therapy* 11(2) 111–125
- Resneck-Sannes H (2002) Psychobiology of Affects: Implications for a somatic psychotherapy. *Bioenergetic Analysis:* 111–122
- Rizzolatti G & Craighero L (2004) The Mirror Neuron System. *Neuroscience* 27: 169–192
- Schore A N (2003) *Affect dysregulation and disorders of the self.* WW Norton, New York

- Schore A N. (2003b) *Affect regulation and the repair of the self*. WW Norton, New York
- Schore A N (2005) *Psychoanalytic Research: Progress and Process: Notes from Allan Schore's groups in developmental affective neuroscience and clinical practice*. *Psychologist Psychoanalyst*: 18–19
- Shaw R (2004) *The embodied psychotherapist: An exploration of the therapists' somatic phenomenon within the therapeutic encounter*. *Psychotherapy Research* 14: 271–288
- Siegel DJ (1999) *The developing mind: Toward a neurobiology of interpersonal experience*. Guilford Press, New York
- Tronick EZ (2003) *Things Still To Be Done on the Still-Face Effect*. *Infancy* 4 (4) 475–482

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