

*Robert Lewis*

## Neurobiological Theory and Models



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# Neurobiological Theory and Models

## A Help or Hindrance in the Clinical Encounter?

*Robert Lewis*

### Abstracts

#### English

This paper examines the clinical relevance of recent neuroscience data to the practice of bioenergetic analysis. I conclude that the nonverbal, bodily basis of our approach is affirmed by the evolving picture of a right-brain-to-right-brain infant-caregiver dialogue engraving our attachment experience into the right limbic system as a model of relationships to come. But I also conclude that, for most of us, the neurobiological data does not help us in real time to be present with our patient in the clinical encounter. Two clinical vignettes illustrate both the above perspective and the continuing relevance of our basic Reichian/Lowenian model of our patient as the trillion-celled amoeba.

*Key words:* neurobiology, relational, mirroring, intuitive, paradigm

#### Neurobiologische Daten: Eine Hilfe oder ein Hindernis in der klinischen Begegnung? (German)

Dieser Vortrag prüft die klinische Bedeutung der neuen neurobiologischen Daten für die Praxis der bioenergetischen Analyse. Ich komme zu dem Schluss, dass die nonverbale Körpergrundlage unseres Ansatzes bestätigt wird durch das sich entwickelnde Bild eines Dialoges der rechten zur

rechten Gehirnhälfte zwischen Säugling und Bezugsperson. Dieses Zwiegespräch prägt unsere Bindungserfahrung in das rechte limbische System ein als ein Modell für kommende Beziehungen. Ich komme aber auch zu dem Schluss, dass den meisten unter uns die neurobiologischen Daten in Echtzeit nicht helfen in der klinischen Begegnung gegenwärtig zu sein mit unserem Patienten. Zwei klinische Beispiele demonstrieren beides, die obige Perspektive und die andauernde Bedeutung unseres Reich/Lowen-Grundmodells unseres Patienten als eine aus Billionen Zellen Bestehende.

*Schlüsselwörter:* Neurobiologie: relational, Spiegelung: intuitiv, Paradigma

### **Données Neurobiologiques: Une Aide ou un Obstacle dans la Rencontre Clinique? (French)**

Cet article étudie la pertinence clinique des données récentes de neuroscience à la pratique de l'Analyse Bioénergétique. Je conclus que la base corporelle non verbale de notre approche est confirmée par l'image d'un dialogue du cerveau droit de l'enfant au cerveau droit du donneur de soin se développant et gravant leur expérience d'attachement dans le système limbique droit comme un modèle de relation à venir. Mais je conclus aussi que, pour la plupart d'entre nous, les données biologiques ne nous aident pas dans le temps présent réel à être présent avec notre patient dans la rencontre clinique. Les deux vignettes cliniques illustrent à la fois la perspective ci-dessus et la pertinence continue de notre modèle Reichien/Lowenien de notre patient comme l'amibe au milliard de milliard de cellules.

*Mots Clés:* neuroscience, cerveau droit, limbique, Reich, Lowen

### **Modelos y Teoría Neurobiológica: Una Ayuda o una Dificultad en el Encuentro Clínico? (Spanish)**

Este artículo examina la relevancia clínica de los hallazgos neurocientíficos recientes para la práctica del análisis bioenergético. Concluyo que la base no verbal, corporal de nuestro enfoque queda afirmada por la imagen cambiante de un diálogo de cerebro derecho-a-cerebro derecho entre el niño y el cuidador, que graba nuestra experiencia de apego en el sistema límbico

como un modelo futuro de relaciones. Pero también concluyo que, para la mayoría de nosotros, los datos neurobiológicos no nos ayudan en tiempo real a estar presentes con nuestro paciente en el encuentro clínico. Dos ejemplos clínicos ilustran la perspectiva antes mencionada y la continua relevancia de nuestro modelo Reichiano/Loweniano básico de nuestro paciente como la ameba con trillones de células.

*Conceptos clave:* relacional, reflejar, intuitivo, paradigma

### **Teoria e modelli neurobiologici: un aiuto o un impedimento nell'incontro clinico? (Italian)**

Questo scritto esamina la rilevanza clinica delle recenti scoperte neuroscientifiche per la prassi dell'analisi bioenergetica. Giungo alla conclusione che la base corporea non verbale del nostro approccio è confermata dal quadro del dialogo tra i cervelli destri del care-giver e del bambino che incide sulla nostra esperienza di attaccamento nel sistema limbico destro in quanto modello di relazione. Ma concludo anche che, per molti di noi, i dati neurobiologici non sono di aiuto per essere presenti in tempo reale nell'incontro clinico con i nostri pazienti. Due vignette cliniche illustrano quanto già affermato e la perdurante rilevanza del nostro modello reichiano/loweniano di base dei nostri pazienti che possiamo considerare amebe con miliardi di cellule.

*Parole chiave:* neurobiologia, relazionale, rispecchiamento, intuitive, paradigma

### **Aporte neurobiológico: Ajuda ou Obstáculo no Encontro Clínico? (Portuguese)**

Este artigo examina a relevância clínica de recentes dados da neurociência para a prática da Análise Bioenergética. Concluo que a base corporal para nossa abordagem reside no processo evolutivo do diálogo cérebro-direito-para-cérebro-direito do bebê com o cuidador, gravando nossa experiência de apego no sistema límbico direito, como modelo de futuros relacionamentos. Mas, concluo também que, para a maioria de nós, os dados neuro-

biológicos não ajudam a estar presente com nosso paciente, em tempo real, no encontro clínico. Duas vinhetas clínicas ilustram tanto a perspectiva citada acima como a contínua relevância do nosso modelo Reicheano/Lo-weniano básico do paciente como a ameba de trilhões de células.

*Palavras-chave:* neurociência, cérebro direito, límbico, Reich, Lowen

## **Introduction<sup>1</sup>**

This paper concerns the clinical relevance and implications of recent neuroscience research ... that is, new data about the mind/brain/body continuum. Not surprisingly, perhaps obviously, my overall message will be that the relevance of these discoveries resides in and depends on who *you*, the therapist are, who the patient is, and what's happening or not happening in the therapy process between the two of you.

So, I will be examining what Neurobiology can and cannot do for the clinical craft of conducting Bioenergetic therapy. I will also consider whether we are moving toward a new paradigm along the mind/brain/body continuum, and will touch on a few related clinical issues. Implied in all this, is the practical question: will neurobiology change our Bioenergetic curriculum and the way we teach our craft?

We need all the help we can get in our chosen profession as wounded healers. We are sorely tested when our work is with patients whose grief, abuse and other traumatic experiences have broken their connection with their essential value as human beings ... whose wounds, in other words, resonate with our own. Often, because we earn our livelihood from this work, many of us do not (I know I do not) often sufficiently reduce our fees so that our patients can see us as often as would be optimal for them. We ask these patients to face the dark night of their souls, even though they are actually often only with us for a single session during a week's time. So we need all the help we can get to both be with them in the shame of their raw, inchoate brokenness and in the beauty and grace of self that is deeply interwoven with that woundedness.

A theory or model is a kind of story, and we all develop stories that explain our interventions, both to our patients and ourselves. In line with our

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1 In this paper I will use the masculine personal pronoun for purposes of simplicity.

conference theme<sup>2</sup>, these stories may incorporate data from neuroscience, just as they have done with Reichian/Lowenian models or the Attachment paradigm. These stories often give us more faith, as therapists, in what we are doing, because we feel our interventions are supported by “science”. If, for instance, you are a predominantly left-brained, top-down kind of therapist, neuro-imaging gives you a left-brained way of understanding that your attuned, attentive right –hemispheric response to your patient is building balance and integration into his psyche-soma.

However, state of the art fMRI studies are of healthy volunteers lying in a huge machine. When the brains of these volunteers respond empathically to something they view via high-tech goggles, inferences are made as to what might be going on generically in the brain between people or in an actual therapy situation! The overarching principle here is that, as always, the stories we tell and the way we embody them in the room with our patients, has a relational/transference/counter-transference significance to our patient. In this sense, I do not believe that clinical neurobiological constructs are exempt from a general truth about clinical theory: that our patient will be moved towards a more secure and balanced self, to the extent that it, the theory or construct, helps us, the therapist, to be the kind of person that was lacking in our patient’s family of origin: someone attuned to the body and mind of the other, someone who cares deeply about the patient’s subjective inner experience, even while respecting that he can never fully know it.

In summary, like Margit Koemeda (2011), I have been both impressed with recent discoveries in neurobiology and yet convinced that they do not inform us how, in real time, to better practice the craft of being a Bioenergetic therapist. Having said this, many of us **are** helped by this new information.

## **Head, Brain, Body – a Paradigm Shift?**

Neuro-biologically informed clinicians and researchers are in a well-established tradition, that builds on the unity and duality of psyche – soma, on which bioenergetics is based. Alan Schore, Joachim Bauer, Daniel

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2 This paper was adapted from a keynote presentation at the October 2011 IIBA conference held in San Diego, California

Siegel, Marco Iacoboni, Robert Scaer, and many others in recent decades have been filling in Reich's equation with incredible detail – down to the subunits of the genes as they interact with our experiences. But the mind/brain/body continuum, with which they are concerned, represents, in my opinion, a major shift in emphasis – perhaps even a paradigm shift – from that of classical Bioenergetics. The shift I am talking about is from the centrality of the body, to its getting no more than co-equal billing with the mind/brain/head. As you know, in classical Bioenergetics, the head/brain/mind were seen as blocking our deeper, more vital experience, and the therapy was structured to get one out of the head and into the body. Now I *do* realize that the head is part of the body, and some of you may know that I have been urging it's integration with the rest of the body for about 35 years. Actually, I did this while Al Lowen was still at the helm of our ship, and on several occasions he let me know that I was straying a bit too far. In support of this changed perspective, I quote my colleague Helen Resneck-Sannes. In her 2007 IIBA Journal article, "the Embodied Mind", she quotes Kathy Butler:

"No longer is the skull a black box, its clockwork invisible as it was to Sigmund Freud, Carl Jung, Reich (Helen adds, Lowen) and the seminal thinkers and clinicians who have shaped 20<sup>th</sup>-century psychotherapy ..." (2005) (p. 39, IIBA, 2007(17)).

Now Helen and I mostly agree, but we also have a tantalizing way of not quite being on the same page. Helen continues and I quote:

"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" (p. 40).

To the extent that Helen is accurate here, then our choosing our conference theme of integrating brain/mind and body would indeed represent a full-fledged paradigm shift. But as I said a few minutes ago, I have for many years been writing about and teaching and practicing the view that many of us choose a body-oriented therapy, precisely because we live in our armored, dissociated heads, which we do not experience as part of our bodies, and this condition dissociates us from the vitality of our bodies from the neck down. I call this condition cephalic shock (1976), and it is the somatic correlate (1984) of what Donald Winnicott (1960) called the



mind as the locus of the false self. A more current name for my construct might be “cephalic freeze immobility response”. While I have not yet tried the amygdala maneuver that Helen employs later in her same article, I have long worked to help my patients experience their heads as part of their flesh and blood (living) body, and thereby reduce their driven mentation or compulsive thinking, and even find some peace of mind. Neither Winnicott nor I, when I first described the clinical construct of cephalic shock in 1975, had the benefit of fMRI technology, and our clinical constructs clearly lack the specificity of the correlations of various functions with activity in specific areas of the brain. I was heartened to hear from her vignette,<sup>3</sup> that Dr. Koemeda was moved to engage her patient’s head as a crucial entry into a healing rebirthing experience. *I do hope* that well into our post-Lowenian era, many Bioenergetic Analysts have been including the head as part of the body, even before showing up for this conference.

In summary, I suggested that in 1976 I initiated a paradigm shift within bioenergetics, a shift that included the head and mind/brain within it as co-equal in importance to the trillion-celled pulsatile amoeba that we are. I consider this my most important contribution to Bioenergetic analysis: an alternative explanation to that of Reich for the mind/body dissociation. I proposed, as did Winnicott, that the reason people are not able to experience the vitality of their bodies is precisely because they are trapped in a dissociated cerebral fortress, in which they are holding onto themselves for dear life against a fear of insanity/falling forever. This head (fortress) cannot be gotten out of. It must be gotten into, via encountering the “unthinkable anxieties” (Winnicott, 1962. P. 57–58) that are held within it. Standing our classical paradigm on its head is disorienting, so many of my colleagues may not grasp (let alone agree with) how substantially different a view of somato-psychic integration and dissociation is represented by my clinical construct of cephalic shock.

## How Does Neurobiology Help Us?

As I have said, we all need explicit and/or implicit theories or models and related interventions to help us in this impossible profession. Those of us who came to the healing profession with more than our share of wound-

3 This vignette was part of Margit Koemeda’s keynote at the October, 2011 IIBA conference. Her keynote, including the vignette, also appears in this volume of *Bioenergetic Analysis*.

ing and despair, cannot afford to underestimate the importance of whatever sustains our hope – the hope, I might add, that will then resonate in our patients. Many of us who as children were not attuned to by our parents, carry a deep wound regarding the value of our deeper self. When we now try to offer the empathy and compassion that we were not given, and our difficult patient does not respond positively, our doubts about the real worth of the person we are often surface. How fortunate are we that Allan Schore, for instance, teaches us that these amazing neuro-images demonstrate that our simple kindness and attunement are quietly brain changing.

Let me give you a personal example of the use or misuse of one of these models. I don't know how many of you know that I used to be a bad copy both of Al Lowen and myself (there are no good copies, by the way). For the first 5 or 10 years of my Bioenergetic career I kept my self and my patients busy. I filled my thoughts with characterological schemas and interacted with the patients around Bioenergetic techniques and exercises, so that I would not feel my fear of the intimacy of being in the same room with another human being. In this sense I used the classical Bioenergetic model quite like a therapist would use self-touch, to soothe himself and regulate his arousal and feelings. In spite of this horrific description, I believe that some of my patients were well served both because of the inherent efficacy of the Bioenergetic interventions, and because my Bioenergetic armamentarium provided me with scaffolding from which I felt safe enough for something healing in me to come forth to my patients.

As time went by, I myself felt that my Bioenergetic approach was deeply validated by the attachment paradigm, and especially the work of mother-infant observers such as Karlen Lyons-Ruth and Beatrice Beebe. First, I felt that the empiricism and inter-observer reliability of the attachment paradigm brought a solidity and respectability to the field of therapy that had been lacking. They posited classifications of infants and their parents that had good predictive ability to code for secure and insecure attachment outcomes. And then, the split-second, mutual, intuitive interactive regulation captured on mother-infant videos, spoke strongly to me of Bioenergetic analysis as an embodied relational encounter.

Neuroscience data are more empirical and objective than the data supporting many therapeutic schools or approaches. I believe they offer many of us a sense of scientific affirmation for our work, similar to what I just shared about the attachment paradigm. I think this is particularly true for us in the

area of body-oriented psychotherapies, since we have been marginalized by the mainstream “talk therapies” since Ferenczi and Reich parted ways with Freud. I remember, some years back, for instance, feeling good about Allan Shore’s delineation of a right-brain-to-right-brain, infant-caretaker dialogue which lays down the neural circuitry of affect regulation. The child’s attachment experience, Shore proposed, has been hard-wired into his right limbic system as a model of relationships to come.

As I have said, this is a very individual matter with each of us. I had already felt affirmed by and drawn to the split-second, nonverbal communications explicated in the studies of mother-infant interaction. So, although I was intuitively drawn to Alan Shore’s work, and had been fascinated by neuroanatomy from the time I was a medical student, the neuroscience data which supported Shore’s model was not so important to me: I was already convinced. What we find useful from neuroscience depends on how well our existing models are working for us, and what kinds of transferences we form to the people who teach us the models, which, in turn, depends partly on how well they embody the content that they are teaching us. If we never meet them in person, it may be easier to have an idealized transference to them and their models.

Additionally, sharing knowledge about how the brain works may be helpful to some patients. Understanding something of the neural circuitry that underlies their behaviors may give the patient the necessary distance to reflect on such behaviors and thereby reduce the accompanying shame and guilt.

Also, knowledge of the brain’s neuroplasticity, that is the lifelong capacity of our brain cells and their connections to change, often gives hope to both therapist and patient that it is never too late.

Finally, when trying to decide how helpful some aspect of neuroscience can be for our healing, I cannot fully separate the neuroscience from its relational significance to the patient. I have developed this perspective over more than 40 years of clinical practice, and it has become deeply engrained in my neural circuitry. So, for instance, tomorrow<sup>4</sup> I expect you will learn about how Dan Siegel has woven aspects of neuroscience into a rich clinical method of healing that he calls mindfulness. Among the many facets of his approach, I am struck, as Dr. Siegel himself was, by the overlap between

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4 This is a reference to the fact that Dan Siegel was a keynote speaker at the October 2011 IIBA Conference.

mindfulness and the processes of secure attachment. He says, “at the heart of this process, I believe, is a form of internal “tuning in” to oneself that enables people to become “their own best friend” (p. 86). So people learn how to treat themselves well, that is, they learn to tune in to themselves, from the way they are treated by Dr. Siegel. Dr. Siegel shows an exquisite sensitivity to his patient’s subjective experience of their mind and body. This strikes me, as I believe it did Dr. Siegel, as a later day version of the respectfully attuned parent whose awareness of his child’s inner life codes for a secure outcome. How do we distinguish the healing effect of this relational dynamic from the neuro-scientific parts of his explanatory model such as the middle prefrontal cortex, the insula and the rest of what Dr. Siegel has named the resonance circuitry? His clinical vignettes, by the way, show an extremely creative and nuanced application of an understanding of the brain/mind/body to each of his patient’s unique issues.

In summary, neurobiology helps by affirming the brain changing power of the right-brain-to-right-brain attuned dialogue that is at the basis of our nonverbal Bioenergetic approach. This affirmation can support our own security in the therapeutic encounter.

## **What Neurobiology Does Not Do for Us**

So the science, as Dr. Koemeda told us this morning, is fascinating. Marco Iacoboni’s book “Mirroring People”, describes the way science really happens ... in this instance, the personalities and process that surrounded the discovery in Parma, Italy, of these amazing neurons – it is a really good story. We now know that these neurons are at the base of our imitating, identifying with, and internalizing, and who is to say what discoveries are yet to come?

Drs. Bauer, Arbib, Iacoboni, and Rizzolatti (who is credited with their discovery) have written entire books about Mirror neurons, and there are probably more on the way. There is something truly fascinating about the discovery that there is an area in the brain that, without any effort on our part or even conscious awareness, automatically equips us to read the intention of another person by watching his behavior and simulates the actions and inner state of the person we are observing. It is exciting to see proof that we are equipped to intuit what is going on in another fellow human, that the neural building blocks of the resonance and attunement allow our intimacy

with each other, and can be seen lighting up a functional magnetic resonance screen. We know so much more than we did even 10 or 15 years ago.

Yet, there is still so much we do not know about the clinical encounter. Let us be excited by this new knowledge, but let us also stay grounded clinically. First, when I mention mirror neurons, they are obviously not acting alone when they allow us to feel the inner state, emotions and all of a fellow human. Another area, the insula, seems to link the mirror neurons with the limbic system, and the basic functions and rhythms of the body. In other words, as we learned in Bioenergetics “101”, we need a resonating body to be attuned and empathic.

Second, the correlations that we see when a research subject does something and a neuroimaging monitor shows a change in activity in a brain area, *are only correlations*. The two events are occurring at the same time, but this does not constitute a proof that one is causing the other. To get closer to such proof, we would have to have the resolution to look at the activity of single cells, but the technology required to do this is unethical in human subjects.

Here is a description by Beatrice Beebe, before motor neurons became so pervasive in clinical research, of what she believes happened for her patient Dolores, while Dolores viewed a video of their therapy process:

“In watching the video Dolores discovered that I was seeing what she herself ‘carried’ in her face and body, or ‘sensed’ about herself, without being able to describe it verbally. Seeing my face seeing her, and hearing my sounds responding to hers, alerted her to her own inner affective reality ... Dolores would find herself ‘putting on’ my facial expressions while watching the video. By ‘wearing’ my face Dolores became more affectively aware of her own inner experience, presumably through the proprioceptive feedback of her face ... as well as the feedback from various physiological arousal systems ...”(p. 49).

I am not certain that knowledge of mirror neurons would have enabled Beebe to participate in the described mirroring process more effectively. Perhaps if she had had a patient whose facial expression was quite frozen, and whose limbic system was out to lunch, Beebe would have been sustained by the knowledge that her patient possessed neural hardware, dormant at the moment, but waiting to be quickened.

If our mirror neurons are so smart, why are we so often in the dark about what is going on with our patients? Why are most of us amused, amazed and aghast when our patients tell us how important to them some

off-hand gesture or casual comment we made was to them? Often, it was something about our simple humanity ... the people we were before we became wounded healers, that the comment or gesture betrayed to our patient. How much can we ask of our mirror neurons?

First, mirror neurons (and our limbic circuitry) neurons are necessary for our attunement, but they may not be sufficient. Some variety of them may help us to see into the mirrors (eyes) of our patient's soul, but we still have to be able to tolerate what we see in their mirror. We will not be relieved of the struggle to stay present with the patient when what they bring into the room is too intense, not intense enough and/or brings up material in us that is too uncomfortable. Second, we are tough to read. Ekman and Friesen (1980) studied facial emotional expression for decades, and concluded that it is the rare person whose natural intuitive talent enables them to read what is on the heart and mind in the fleeting nuances of facial expression. And, there is projective identification adding a layer of complexity to what the mirror neuron has to decipher.

Then, as Reich (1961) taught us, there is the patient's character armor. Whatever impulses and desires of our patient that were intolerable in his environment, have been unconsciously defended against and disguised. Any specific gesture, or posture of part of the body, may be a complex compromise between core impulses, traumatic experience, and chronic defenses. Finally, there is irony. In Irwin Yalom's wonderful book, *Love's Executioner* (1989), it was the two ironic smiles of his patient that brought home to us the limits of intuition. Each time she smiled, the smile expressed such a nuanced, complex reality within her that no one could possibly grasp its meaning without knowing many interlocking details of her current and past life. So, it remains to be seen if mirror neurons can decipher the array of inner experiences that can lead a person to *smile* or fathom the multiple, contradictory levels of meaning embedded in character structure.

What these neurons actually support is our "implicit relational knowing", (to borrow Lyons-Ruth (1998) apt phrase), which is really a kind of not knowing in the left hemispheric sense. They invite us to trust our intuition, and dwell in the interactive space where what we "know" remains true for only fractions of a second, even as we feel our facial expression mirroring that of our patient. As we were told by the early twentieth century French philosopher, Merleau-Ponty, "I live in the facial expression of the other, as I feel him living in mine" (p. 146). These neurons embolden us to listen more attentively to what comes to us intuitively in fleeting images, whis-

pers, body sensations or fully articulated sentences. I called this “listening with the limbic system” (Lewis, 2004) in an earlier paper of mine. As a bioenergetic therapist over the years, on a good day, I learned to quiet my mind and listen to my hands: they quite often knew where and how I should be touching my patient before I did. Sometimes my hands and I both learned what we should be doing by watching what my patient was doing with his hands.

The above remarks raise the question of whether or not mirror neurons and their like will change the way we teach our craft to our students. This question I cannot answer, other than to wonder with you if the ratio of explicit to implicit will change in our effort to teach expertise in reading the story of a person in the form and motility of their body. And, by the way, when I am trying to get a sense of what is actually going on in the moment in a session, I often explicitly ask my patient how they experienced what just happened. This often seems like a good idea in the moment, but then I realize the potential of the query to pull him out of an important experience for which he has no words, into a premature left hemispheric derailment. How will we teach our students and ourselves when to speak and when to listen to the silence? A Last point on what mirror neurons cannot do for us ... and again, I say mirror neurons when I mean the neural systems that enable attuned interactions with our patients. They cannot relieve us the burden of living through the shame, rage and despair in the inevitable enactments with our patients in which we fail them as they once were failed – in which we participate as the old bad object, so that they can revisit the original traumatic failures and perhaps, this time come closer to mastery of them.

In summary, neuroscience has not taken us beyond the ineffable mystery of the clinical encounter. In the next and last section of this paper are two vignettes, which I believe demonstrate that the clinical encounter involves many more variables than can be grasped by mirror neurons or for that matter, be included in an empirical experimental design.

## **Clinical Vignettes**

I am with my patient Marie: Her action, to which my mirror neurons are trying to attune me, is an attempt to express in spoken language a sense of grief about her inability to help her parents to move beyond their highly

dysfunctional relationship, both with themselves and Marie herself. My mirror neurons tell me that her voice is quite strangled, and that her words convey little of the unprocessed anguish, shame, and rage that are trapped in the musculature of her neck and throat. These same neurons also allow me to empathically feel Marie's trapped emotions in my own belly and heart – to the extent that is, that I can tolerate them.

I have discovered via trial and error, primarily by asking Marie about her experience of my interventions, that it is most helpful to her if I sit next to her, and stay with the burning ache in my chest as she expresses her grief in the choked vocal timbre that comes over her at such times. I honestly don't know how much my Bioenergetic training has improved on what my mirror neurons (and limbic system) tell me very directly about the emotions and the motoric act, via which she is attempting to communicate with me. Her feelings are deeply entwined with a shameful, traumatic sense of herself as tiny, bleak and unworthy of being known. So I understand that my steady, long-term commitment to witnessing and empathically accompanying her will slowly lead her to a stronger sense of her worth and ability to integrate and reflect on more of the traumatic material from which she has dissociated. I now know that my middle prefrontal cortex and limbic system, figured this out so that *it is they* that know what to do, or more importantly what *not to do* with the information I am getting from my mirror neurons. But before the explosion of neuro-scientific data, we used to call this kind of thoughtful behavior, clinical experience.

A central theme that unites this paper is that there is a complex, but very specific correspondence between the people we therapists are, and the models we offer as explanations for our interventions. This relationship is so complex that I do not believe that the data of neuroscience and our Bioenergetic approach map meaningfully onto each other, unless, that is, the correlations are *anchored in the details of a somatic psychotherapy process*. It is in the spirit of this conclusion, that I offer the vignettes and the discussion that I juxtapose between them.

I grew up with the Reichian amoeba model – that we “trillion-celled” humans, as Lowen wrote, “function on the organismic level as a single cell”(1984, p. 22) ... Lowen continues, “on the deepest level, the organismic functions are expansion and contraction, taking in and giving forth” (p. 22). I believe that this model is at the base of how I actually work with my patients.

Yet I hope that my working clinical model actually includes more of the



parts of the body that belong to the species that come into my office – that is, homo sapiens, rather than amoebas. Robert Scaer, a neurologist, has developed a sophisticated trauma model in which procedural level neural circuitry acts via a dysregulated autonomic nervous system to cause spastic musculature and illnesses in a variety of the body’s end organs. The model is beautiful, although its clinical application is in its infancy.

So, back to the basics, as Dr. Lowen used to say. We come from our core, and when that impulse is frustrated by the environment, we develop armor that traps the impulse and related emotions. When I conduct Bioenergetic therapy I behave as though the emotions/impulses are indeed trapped in the muscles and tissues of the body. If a patient feels a lump forming in his throat or an ache in his heart, I understand that his subjective experience is happening in the physical tissues of his body, and I work with him accordingly.

Dr. Siegel (2011) on the other hand, tells us what any self-respecting neuro-science expert would. He says,

“neural networks surrounding the hollow organs, such as the intestines and the heart, send complex sensory input to the skull-based brain. This data forms the foundation for visceral maps that help us have a ‘Gut feeling’ or a ‘Heartfelt’ sense” (p. 43).

Interestingly, there are quotation marks around gut feeling and heartfelt. I want this paper to inform the reader of how information relevant to our “hands on” approach emerged from the October 2011 IIBA conference at which I read this paper. Robert Hilton, dialoguing with Daniel Siegel on the day following my keynote address, asked him for me whether the quotation marks above suggest the feeling is not actually going on in the body tissues of the gut and heart. Dr. Siegel clarified that he used quotation marks, only because gut feeling and heartfelt are commonplace expressions in our language. While I understood Dr. Siegel’s answer, Dr. Hilton asked him another question, the answer to which was harder to understand. Bob’s question followed from the vignette in Dr. Siegel’s book “Mindfulness”, about his patient Stuart. A turning point in Stuart’s therapy had occurred when the feeling that he and Dr. Siegel were each held in each other’s mind was embodied (made carnate) by Stuart’s taking Dr. Siegel’s hand in both of his own. Dr. Hilton asked whether touching his patients was part of Dr. Siegel’s approach.

Dr. Siegel was quite candid that he found this question challenging, and

explained that most of his patients had been either physically or sexually abused, and that for such a population, touch was simply too problematic. However, he continued and I paraphrase, when a patient asks to be hugged at the end of a session, and it seems okay, of course I hug him.

In looking over the 14 vignettes in Dr. Siegel's book, some more detailed than others, I found 4 cases of sexual and/or physical abuse, and a fifth that was unclear. As I said earlier in this paper, we all develop theories/stories that explain our interventions to our patients and ourselves. I experienced Dr. Siegel as an attuned clinician, sensitive to psyche-soma in his way, and appreciative of the conference video of Louise Frechette conducting a Bioenergetic session. But Dr. Siegel would seem to be no exception to a basic thesis in this paper: that the connection between what we do as therapists and the stories with which we explain our actions, is both fascinating and formidably complex. He stresses the centrality of restoring to his patients the experience of their body's aliveness.

And yet, he has his reasons for not concluding that, for a physically and/or sexually abused patient, the experience of safe touch may be a risky, but necessary laying on of hands.

Regarding Bioenergetic therapists, and I hope I am not doing violence to my complexity thesis, I suggest *that something in each of our persons has drawn us to a story in which holding and being held, both in the mind and the body, is at the heart of what is healing.*

I will close with my patient Charles, who is gradually coming down from his mind as the location of his false self, and finally feeling something in his chest and throat. He needs me to hold and be attuned to what he has finally tuned into in himself. In therapy with me for almost 5 years, Charles is 40 years old and, although very high-functioning in his career, he has never had an intimate partner. He is intermittently hypochondriacal and recently had a weeklong episode of chest pain for which no medical cause could be found. He describes his life as a slow-motion panic attack. Standing with knees bent or leaning forward in the basic Bioenergetic grounding position, easily triggers strong dizziness and nausea. Leaning back over the Bioenergetic roller, Charles has on occasion heard the very distant wail of a young child.

Two weeks ago, while lying back over the roller, Charles said he felt like pushing out the "junk" that was inside his belly and chest. I suggested that he try to vocalize a sustained exhalation. As he tried to do so, he felt something moving up the front of his body and getting caught in his throat. For a few

seconds I put some pressure on his thyrohyoid membrane – just above his Adam’s apple, and with my other hand I pressed down gently on the front of Charles’ chest. His voiced exhalation began to come out, and over a period of about a minute, the sound became fuller and there was a rhythmic pulse to it – it pulsed from somewhere deep inside him. The life of his sound and the sound of his life filled the room. After a few minutes, in disbelief, Charles said, “I did not make that sound”. He was truly stunned, and as you might say, we (the three of us) sat quietly together, and I was hopeful that Charles was on the verge of becoming intimate with himself.

A week later Charles lay back over the roller and after some time said, “I can’t make *that* sound ... I need your help. ” He reminded me that, although he did not understand why, what had really relaxed his neck and throat the week before, such that the sound had been able to come out of him, was that I had held and supported his head. So I did so again, and this time the pulsatile sound opened into deep gagging that seemed to come from his diaphragm and solar plexus. The moral, then, of this paper is that sometimes a person really is an amoeba, especially if your therapy involves working with his body.

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## About the Author

Robert Lewis, M.D., in private practice in New York, is a senior trainer on the IIBA faculty, and a member of the clinical faculty of the NYU/ Mount Sinai Medical Center. His elucidation of Cephalic Shock and way of working with the head, voice, and diaphragmatic connections to the pelvis, are beyond words. He leads workshops in Europe and the Americas, and residential intensives on Long Island, New York. [bodymindcentral.com](http://bodymindcentral.com), [docboblewis@gmail.com](mailto:docboblewis@gmail.com).