

**Keynote Panel Speech for International Creative Arts Therapies Conference,
Tokyo, Japan, October 10, 2006**
The Process of Healing: Expression from Within, Insight, and Release through the Arts
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Abstract: The creative arts therapies best fit how the brain actually functions and can provide more effective means for healing than the current talk therapy methods. Mirror neurons which make empathy and imitative learning possible are actively engaged through the intentional actions used in creative arts therapies. The arts therapies use of verbal and non-verbal expression allow trauma to be released from both sides of the brain. Humans are hard-wired to create through the arts and we should be willing to employ that natural ability on behalf of our own health.

The Process of Healing: Expression from Within, Insight, and Release through the Arts

Human behavior is extremely complex. It develops based on genetic inheritance, environment before and after birth, and experiences in our families, schools, and communities. Our individual and collective histories, as well as our present, contribute to the emotions we feel, the thoughts we think, and the behaviors we express.

Until recently much of what we have known about psychology and human behavior has been guessed at by theorists and researchers. Some of those guesses were incorrect, while others have been intuitively very close to how we actually function. Psychotherapies that developed from those guesses were either “off the mark” and didn’t work or were “on the mark” and did. But even when therapies did work, no one really knew *why* they did.

In the last 15 years brain researchers have made many discoveries about how the brain functions. These discoveries point the way to psychotherapies that are effective and should be the treatments of choice for prevention and intervention by mental health systems.

My belief is that the creative arts therapies best fit how the brain actually functions and can provide more effective means for healing than the current talk therapy methods in favor today. Through the work of Damasio, LeDoux, and others, we now know that the neurological

systems for emotion and reason interact. Emotion and reason work together within the brain to create feelings, thoughts, and behavior (Cozolino, 2002; Damasio, 1994, 1999; Goleman, 2006; LeDoux, 1998). In the process of decision-making there are several intersections where the rational and emotional systems communicate with each other. In fact, it is impossible to make good decisions using *only* our rational mind – we *must* also use our emotions. We know a decision is a good one, if it *feels* right. Individuals whose brains can't communicate between the rational and the emotional systems either make extremely poor decisions or find they are unable to make any decisions at all!

Research in immunology has proven that our minds and our bodies are not separate. They work together. The body affects the brain and the brain affects the body. Chronic stress damages the immune system. Laughter and humor enhance it. Art, dance, drama, music, and poetry all engage the body and the mind together, stimulating neurotransmitters that make us feel better, generating hormones that lower the level of cortisol and other stress hormones.

One of the most important discoveries has been mirror neurons. Mirror neurons are activated whenever we see someone take an action – from an activity as large as running to one as subtle as a look of concern. Mirror neurons activate the identical location in our brain that was activated in the brain of the person we saw. For example, when a dancer moves, the same neurons which are activated in the dancer's motor cortex are activated in the motor cortex of the audience. When a person smiles, the identical motor and emotional neurons are activated in whoever sees the smile (Goleman, 2006; Hagoort, 2003).

What is created from this interaction is an empathic connection from one person to another. We are able to understand what another person is feeling or thinking or doing – because our brain is mirroring virtually, what their brain is doing actually.

Sometimes the mirroring creates more than a virtual experience: as our brain copies what the other brain does, we often copy the action as well. Have you ever found yourself automatically smiling back at someone who is smiling at you? Or feeling sad as someone is crying?

Imitative learning is also made possible by our mirror neurons. Have you ever learned how to do something – play a sport or drive a car – by watching someone do it? That is an example of your mirror neurons at work.

In drama, dance, art, music, and poetry therapy our mirror neurons are actively engaged in the therapy. As we interact with each other to create art and to communicate, we are creating brain connections, social connections, and new understandings that just talking about problems with a therapist does not even begin to access.

Trauma researchers have discovered that traumatic experience re-wires the brain (Cozolino, 2002; Van der Kolk, 2002). Trauma enters the body through the non-verbal, emotional systems and gets “caught” there. Without words the trauma cannot be spoken about and understood by the rational systems (remember the emotional and rational systems must work together for us to truly process and understand an experience), so the trauma stays stuck in the emotional system. Therapists who try to release trauma through talk alone, end up with clients who become overwhelmed and dissociate.

However, the arts therapies have nonverbal *and* verbal elements. Working with line, color, shape, sound, silence, movement, pace, and rhythm allows clients to access the trauma -- then the words of lyrics, role-playing, poetry, and story provide a bridge to allow the traumatic experience to be spoken about, healed and released.

One last thought...the creative arts are natural byproducts of the brain. We are “hard-wired” to acquire language (Pinker, 1994). No one needs to go to school to learn how to speak

her native tongue. The brain is also “hard-wired” to create arts. Cave paintings, musical instruments, carvings, and depictions of dance and drama exist from as far back as 45,000 years ago – long before the written word brought us from the prehistoric to the historic era (Mithen, 1996; Pfeiffer, 1982). Our ancestors didn’t go to school to learn how to paint, sing, draw, or dance – they just did it! Even today, the arts begin to be naturally expressed at early ages: at 2 and 3 children draw, dance, sing, and participate in dramatic play without any formal instruction. However, to begin to learn how to read and write, we need formal instruction. Those abilities are not hard-wired into our brain.

This tells me that the arts are a natural part of our human heritage – a basic, intrinsic aspect of our biology that we should be willing to employ in our own behalf.

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