

The Relational Brain

by Lois Walker, M.Div, RCC

Although psychotherapy had its origins in neurology in the 19th century, the two fields diverged. Dr. Louis Cozolino cogently describes this divergence in *The Neuroscience of Psychotherapy*. Dr. Cozolino explains that psychotherapists developed a rich metaphoric language of mind while neurologists built a detailed knowledge of the brain-behaviour relationships.

Today the neurosciences and psychotherapy are beginning to converge again with a ripening of ideas, conversation and a deeper understanding of how these complex systems interrelate and integrate.

Dr. Cozolino describes how, at the heart of the interface between neuroscience and psychotherapy, human experience is mediated via two interacting processes. The first is the expression of our evolutionary past via the organization and functioning of the nervous system—a process resulting in billions of neurons organizing into neural networks, each with its own developmental timetable and requirements for growth. The second is the shaping of this neural architecture within the context of significant interpersonal relationships. The human brain is an “organ of adaptation” to the physical and social worlds; it is stimulated to grow and learn through positive and negative interactions. The quality and nature of our relationships are translated into codes within neural networks that serve as the infrastructure for both brain and mind. Through this translation of experience into neurobiological structures, nature and nurture become one. Dr. Joseph LeDoux, a notable neuroscientist, says “we are wired together (neurologically) by life.” Dr. Murray Bowen has been quoted as saying “that which is learned in the family can be unlearned in the family.”

Dr. Cozolino elaborates by explaining that when one or more neural networks necessary for optimal functioning remain underdeveloped, under regulated, or under integrated with other networks, we experience the complaints and symptoms for which people seek psychotherapy. He states, “At the heart of psychotherapy is an understanding of the interwoven forces of nature and nurture, what goes right and wrong in their developmental unfolding and how to reinstate healthy neural functioning.”

In May two bright thinkers, Jaak Panksepp, Ph.D. and Michael Kerr, MD, discuss and elaborate on the organization of the individual and how the individual is shaped in relation to the human family. For details about The Relational Brain Conference on May 23 and 24, 2008, visit livingsystems.ca.