

Mirror neurons, human intentions, and their impact on mediation

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I have been gently chiding the mediation community for years that we really don't know what goes on during mediation. It is a black box into which we shove conflict and out of which we hopefully pull resolution. Yes, we deal with interests, work on relationships, generate options, and seek commitment, etc. And, in the last decade or so, there has been more emphasis on parties' emotions through acknowledgement and empathy. Unfortunately, that is about as far as our knowledge extends. From a psychological and neuroscience point of view, we really know very little. At most it is a hodgepodge of ideas, theories, and folk wisdom.

Consequently, our models for mediator training are equally flawed. Because we often get that warm and fuzzy Kum Ba Yah moment at the end of our trainings may mean that we are doing at least some things right. It doesn't, however, indicate that we know what it is we are doing. There is correlation, not necessarily causation.

Fortunately, work being done in neuroscience and cognitive psychology may provide breakthroughs for understanding human behavior in conflict and conflict resolution. Further, these discoveries may help us to build reliable models for training mediators who can further optimize decision making by parties in conflict.

Specifically, the discovery of mirror neurons in Milan, Italy in the early 1990's has led to an explosion of research on human emotions, imitation, and the understanding of human intentions. First discovered in the motor cortices, mirror neurons are activated both when we reach for and grasp an object and when we see another person reaching and grasping. Mirror neurons are essential in understanding the intentions in other physical activities.

For centuries, the common parlance of brain theory held that the motor systems of the human mind were only executive. The frontal lobes of the brain got the thinking done about what was to be accomplished and then signals were sent to the motor areas of the brain to be executed. The discovery of mirror neurons turned this thinking on its head, so to speak. The motor cortices are inextricably linked to the understanding of other's physical actions, their motor intentions, and the formulation of appropriate responses.

Subsequently, mirror neurons were discovered in the emotional centers of the brain. For instance, these neurons will "light up" when a person observes facial expressions on another person that cause the observer's face to take on, or mirror, the same expression. From this, the observer then feels the emotion expressed by the other. This is the essential pathway to the creation of empathy (or, the putting oneself in the shoes of the other) on the part of the observer. This near-final step is not at all intuitive. If the face of the observer mirrors or reflects the expression of the observed, how can this induce the same emotion in the mind? Amazingly, the connections between the emotional centers of the brain and the facial muscles used to create

expressions exist as a two way street. When the mirror neurons cause the creation of the mirror expression on the face, the expression tends to induce the same emotion in the mind of the observer.

This produces numerous questions. How might the discovery of the mirror neuron system impact our understanding of what the parties are experiencing as the mediation proceeds? How might we better understand the change from the parties seeing each other as opponents or “the other” to the point where they can see each other as “like me” such that the parties can reach resolution? To what extent might this new research demonstrate how emotions shift and change as the mediation proceeds?

How would these discoveries impact our models for understanding conflict escalation and resolution? How does mediation cause emotions to shift or change as mediation proceeds. Can we finally jettison the old ideas of “venting” that is based upon the hydrodynamic model of emotions advanced by Freud?

More specifically, how might this work impact our models for teaching mediators? Should mediators intentionally try to mimic or mirror the parties in mediation? How might the mirroring of emotions impair neutrality of the mediator?

In addition to neuroscience, this work will draw together knowledge from cognitive psychology, sociology, and philosophy. It will be a difficult task and I will be stretching the envelope since much of the research is still very basic, but the positive ramifications for our field are, I believe, immense.

I am just now on my way to LA to meet with neuroscientists who are at the forefront of research in mirror neurons. I hope their input will help refine these efforts. This summary of my work will be expanded to 15 – 30 pages to be handed out at ASU during the conference if you choose to accept this proposal.

Thanks,

scott