Abstract: The extraordinary human capacity to feel and understand what others are feeling: to be empathetic, has been one of the most intriguing aspects of being human. Know empathy has a scientific base and its possible thanks to a group of brain neurons called “mirror neurons”. So the old saying “Walk for a moment in his shoes” has proven to be in the core nature of being human, and a powerful tool to resolve conflicts with others. So we mediators should rely more on the power of empathy and techniques to achieve so.

Walk for a moment in his shoes: mirror neurons, empathy and conflict resolution

By Mauricio Hernández Sarti

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Walk for a moment in my shoes
Indian proverb

Different cultures around the world have very similar and wise old saying “Try to put in his shoes” or “Walk a mile in my shoes” as an advice to understand what the other is feeling, to be empathetic, as and a first step for trying to solve conflicts.

Until now, the possibility of putting ourselves in “another person’s shoes” “or walk in his shoes” had no scientific base. This extraordinary human capacity to feel and understand what others are feeling: to be empathetic, has been one of the most intriguing aspects of being human. Know empathy as a process has a scientific base and its possible thanks to a group of brain neurons called “mirror neurons”.

In 1996 a group of neuroscientists lead by Giacomo Rizzolatti of the University of Parma (Italy) found out a group of brain neurons later called as “mirror neurons” that now are proven to be the source of empathy, social learning and many other functions that makes us the kind of human beings we are. Recently at a www.ted.com talk famous neuroscientist Vilayanur Ramachandran referred to them as “the neurons that shaped our civilization”. [1]

Mirror neurons, it seems, are of the utmost importance in human mind, and on the tip of the collective psychological tongue. “It’s going to make a big change,” says neuroscientist
Marco Iacoboni, University of California, Los Angeles, of the discovery’s impact on psychology. “Psychological studies started with the idea that a solitary mind looks at the world in a detached way. Mirror neurons tell us we’re literally in the minds of other people.” “Our social dimension would be completely destroyed” without mirror neurons, Iacoboni says. “The only way I could understand you would be by complicated mechanisms. It would be a very different world.”[2]

The purpose of this article is to invite you to think about the new reality proven by science: our brain is built to be empathetic towards others, it is in our biology to feel and understand what others are feeling, and empathy as we know could be the first step towards conflict resolution.

**How mirror neurons appeared on scene.**

This extraordinary finding was, as some of the major scientific discoveries, a result of luck and hard work. Giacomo Rizzolatti´s and his team were working with Macaca Nemestrina, a kind of monkey used in many scientific experiments around the world. They studied a part of the monkey´s brain that we humans shared with them that is called F5. F5 contains millions of neurons that are in charge of “codify” specific motor actions such as: holding, grasping, tearing, and specially the motion of taking food and place it in the mouth to feed ourselves. One lucky day between experiments, the neuroscientist Vittorio Gallese was walking through the lab and saw one of the monkeys sitting in a chair waiting to get the assignment of a new task. Suddenly Vittorio took something with his hand, he remember was a nut, and the heard the sound on the computer connected to the monkey´s brain, a sound that came from sector F5 of the monkeys brain neurons. But strangely, he monkey was sitting without doing anything or touching anything with his hands, although the motor neuron related to the act of grabbing objects was activated on the computer.

Then Vittorio grabbed a peanut, and then ate an ice cream and the same happened: the sector F5 on the monkey´s brain was activated as if the monkey himself took and ate the food.

At first the scientists thought that this was only a simple imitation system of the monkey. But then after multiple studies and experiments done since the findings of the mirror neurons scientist had come to the conclusion that it transcends the field of pure neurofisiology. The mirror system of the brain allows making our own the actions, sensations and emotions of others, what we commonly known as empathy. [3]
The human brain has multiple mirror neuron systems that specialize in carrying out and understanding not just the actions of others but their intentions, the social meaning of their behavior and their emotions. “We are exquisitely social creatures,” Dr. Rizzolatti said. “Our survival depends on understanding the actions, intentions and emotions of others. When you see me pull my arm back, as if to throw the ball, you also have in your brain a copy of what I am doing and it helps you understand my goal. Because of mirror neurons, you can read my intentions. You know what I am going to do next.” He continued: “And if you see me choke up, in emotional distress from striking out at home plate, mirror neurons in your brain simulate my distress. You automatically have empathy for me. You know how I feel because you literally feel what I am feeling.” [4]

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On how mirror neurons generate empathy

Why we get emotional by seeing sad or bitter scenes in movies? Why do we suffer by watching those “bloopers” videos of people falling and hurting themselves by hitting sidewalks or falling down of bicycles?

In words of the author of the book “Mirror Neurons” Marco Iacoboni, the answer is simple as this: because mirror neurons in our brain re-create for us the pain that we watch onscreen. We have empathy for fictional characters, we know what their feeling because we literally experience the same feelings as them... And when we see they kiss in movies? The same sells that activates when we kiss a person are activated by watching kissing onscreen” [5]

But first, what’s empathy? The oxford dictionary defines empathy as: “the ability to understand and share the feelings of another”. [6] In other words empathy implies sharing the emotion felt by other, to feel with other.

The term is attributed to the German psychologist Theodore Lipps, who stated that when see the acrobat walking in the tightrope we feel that ourselves are inside the acrobat. [7]

Until the development of mirror neurons experiments there were two different explanations about the process of empathy:

a) The moderate version sustains that the act to be in other’s situation is a deliberate and cognitive process that is sustained in an effort to do that.
b) The radical version sustains that the process is pretty much and automatic and unconscious one.

The radical version obviously has gained more support since mirror neurons theories have been proven by 20 years of experiments.

How important mirror neurons are to empathy and being human.

The extension of this article does not allow us to describe the many experiments mirror neurons have proven to be the motor of most extraordinary human experiences. Just as an example we want to share a case that describes how mirror neurons can not accomplish their function and the sad consequences of that.

The experiment was developed by the British neuropsychologist Jonathan Cole who investigates the effects on the differences in facial expression between human beings. Some of their patients were born with a syndrome called “Moebius”. Moebius is a congenital incapability to move the muscles of the face. These patients manifest an altered capacity to communicate their emotions, and more, to recognize emotions in other human beings. “I live in the facial expression of other, just like I feel the other living in mine” is an expression to explain what we all, except Moebius patients, experiment by seeing the facial expressions of others. Sadly, Moebius patients can not express their own emotions and consequently to understand or feel through mirror neurons the emotions in other human beings. [8]

In other words, the same mirror neurons system that allows us to observe, interpret and feel emotions in others is the same that allow us to recognize and communicate our own emotions.

Also Patients with autism have hard time understanding the mental states of other people; this is why social interactions are not easy for these patients. Reduced mirror neuron activity obviously weakens the ability of these patients to experience immediately and effortlessly what other people are experiencing, thus making social interactions particularly difficult for these patients. [9]

So the Moebius experiment and many others led Marco Iacoboni to the most powerful conclusion:

“…mirror neurons help us to understand emotions in others through out a form of internal imitation… those neurons activate when we see others expressing their emotions as if
ourselves were experimenting them. The mirror neurons send signals to the brain centers of emotion in the limbic system in order to make us feel the same that others are feeling. [10]

There is no better non scientific narration to explain what Iacoboni says than in the own words of August Dupin, protagonist of Edgar Allan Poe’s short story “The purloined letter”:

“When I wish to find out how wise, or how stupid, or how good, or how wicked is any one, or what are his thoughts at the moment, I fashion the expression of my face, as accurately as possible, in accordance with the expression of his, and then wait to see what thoughts or sentiments arise in my mind or heart, as if to match or correspond with the expression.” [11]

The process of empathy produced by mirror neurons has been verified with all emotions, but most powerful with an important one pain and suffering in others. After hundreds of experiments that show an A subject observed the pain of a B subject the same conclusion emerged: the brain recreates a complete simulation, as we ourselves were living and feeling the pain. So in the past we thought of pain as a fundamental personal experience, the brain actually creates a shared experience. This neuronal mechanism has been essential to bond social ties and, as we know now, had an essential role when two people through empathy work out to solve their conflict.

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Empathy and conflict resolution

Finally, I propose that we mediators have to start recognizing the tied process between empathy and conflict resolution. And there is no doubt that empathy is one of the most powerful processes that allows forgiveness and understanding between others as a path to resolve conflicts. A vast literature on ADR and psychology has referred to empathy and its power to solve conflicts between human beings. So in this article we only want to share a narration of the powerful relation between mirror neurons, empathy and conflict resolution told by William Ury about the renowned filmmaker Steven Spielberg. [12]

By telling the story of young Spielberg Ury describes a step called “building a golden bridge” in order to negotiate with people with rigid positions about any subject, to obtain a yes instead of a no. But thinking about the process of empathy and conflict resolution I truly believe that what Spielberg did was possible when he tried to understand and be empathetic with the other side.
When Steven Spielberg was 15 his life was terrorized by this bully who was a couple of years older, always beating him and picking on him. One day after months of this abuse young Spielberg maid an important move. He tried to understand what was going on with this bully, what was he thinking and made him doing that to others, how I can get rid of this actions.

Finally he led to a conclusion: that boy needed the attention and of others. So he step in the boy’s house and said “I am making a movie about fighting the Nazis and I need some one of your high and looks to play the hero of the movie”. The boy laugh at Spielberg, but a couple of days later when Spielberg came to him with a wonderful war uniform and invite the boy to try it. The boy accepted and Spielberg says that after filming the movie both became best’s friends in high school.

I think that the courageous move made by Spielberg was possible by the capability of him and the willing of trying to understand the other, of trying to walk in his shoes for a moment. Obviously Spielberg was not aware of the process of empathy; he just tried to understand the other in order to come with something to stop the bullying.

And I’m not saying that this was easy. We all know that the process and the willing to be empathetic to our love ones is rather easy, but doing it with enemies and competitors is something else. But top scientist has proven that is in our brain structure the potential and capability of being empathic to others. So empathy is a natural process that sometimes is blocked by us when in conflict with others, blocked by hate and pain.

Empathy is one of the most extraordinary human processes that lead us to live with others, learn of others, and resolve conflicts with others. We as humans have the tools in achieving so through the miracle of mirror neurons. So we as mediators should rely more on techniques that strongly are based on the power of empathy between human beings in the path to solve their conflict.

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Biography

Mauricio Hernández Sarti, is a mediator and attorney based in Mexico City. Manager of one of the first programs to mediate conflicts between groups of students and teachers of graduate program in Mexico at Universidad del Valle de Mexico, by a technique he calls “The mediation Fish Bowl”, that provides a process that allows a group of persons identified as one side (students), can communicate and share ideas with one person identified as the other side, teacher, in order to resolve classroom conflicts and produce agreements.

His organization advices companies and instructs their personal in workplace conflict resolution. Mauricio also has been mediating family and commercial conflicts for 8 years as a private mediator.

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