

# Mirror neurons and UNCONSCIOUS MODELLING

By Eve Menezes Cunningham

I recently read that Leonardo DiCaprio, in preparing for his role as obsessive compulsive disorder suffering millionaire Howard Hughes for *The Aviator*, became so adept at playing someone with OCD, he developed symptoms himself and required three months' therapy after filming to recover.

I remember from my own NLP training that the exercises where we simply mirrored a partner's facial movements and posture were quiet remarkable in allowing us to gain unexpected insights into how they were feeling at that moment, even though we had no idea what they were thinking about.

Some couples are so attuned to each other that years or decades of reflecting back each other's facial expressions become etched on their own faces as they grow to look alike. Research shows that groups of friends of similar weights, income and happiness levels tend to stay there. Some of this is down to what's known as 'mirror neurons'.

While much of this occurs naturally, we can be aware of our tendency and start choosing when we want to be modelling others'. Also, we can consciously dial it down if we find ourselves becoming too empathic when working with certain clients and dealing with loved ones.

'Mirror neurons are brain cells that respond to the sight of someone doing something,' says Rita Carter, author of *The Brain Book* and *Mapping the Mind*.

For example, when smiling, these mirror neurons produce 'an echo of that same action in the watcher. If you see someone smiling, your mirror neurons begin to create a smile in you – along with the feeling of fondness or happiness that usually goes with it – so fast that the "thinking" bits of your brain don't get a look in. If your worst enemy smiles at you will start to smile back however much you loathe them (though you will probably inhibit the smile before it shows on your face).' That's why laughing, smiling, glaring and so on are so infectious.

While Carter says mirror neurons partly explain the story about Leonardo DiCaprio, 'other things are at work too. If you behave a certain way for long enough – even if at first it is just an "act" – the behaviour eventually gets laid down in your brain as a habit. It's not much different from picking up, say, the smoking habit. Once that behaviour is habitual, there is really no difference between it and the other "habits of mind" which make up your personality. You have literally "become" the person who started out as an act and if you want to get

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back to your previous personality you have to “unlearn” the new one.

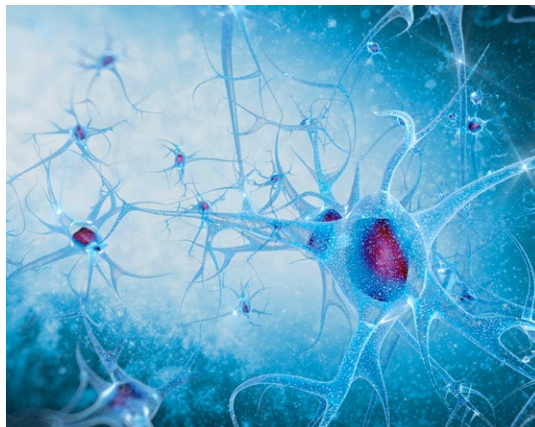
‘That is why dedicated actors get so affected by the characters they play. It’s said of Helen Mirren, when she played the Queen, that the other members of the cast started curtseying to her even when they weren’t filming, and that she seemed to find this quite normal!’ Carter says mirror neurons and habits explain the tendency for close couples to grow to resemble each other over the decades.

‘Empathy is very largely dependent on mirror neurons,’ says Carter. ‘They shortcut the process of “feeling” another’s pain by doing automatically what otherwise would take a whole lot of cognitive effort. It’s certainly very easy for people with a very active mirror neuron system to “over” empathise. Therapists can only really help if they stay at least partly separated from the client.

‘Mirror neurons were first discovered in monkeys, and were thought only to deal with physical actions (allowing learning by mimicry). But there is masses of human research on mirror neurons now and they have been found to be active in many different situations. If a person sees someone they love being physically hurt, for example, brain imaging studies have shown that the “pain” areas of their brain light up to the extent that they might actually “feel” the pain being experienced by the other person.

## “When smiling, mirror neurons produce an echo of that same action in the watcher”

‘Mirror neurons have been found to be less active in autistic people and those who are simply less empathetic. But, like all brain systems, they can be manipulated – made more or less sensitive by training. I think there is huge potential for “training up” the human mirror system and the complicated circuitry that accompanies it.’ ■



### Experiments

You might want to play with the concept yourself. With some of these, you might want to work in pairs to feedback and ask questions about your experiences. With others, just notice for yourself how they feel. It’s not at all about being ‘stalkery’ or at all disrespectful, just getting a sense of what we do unconsciously all the time and making conscious choices about what behaviours and feelings we want more of in our lives.

Notice if and how your feelings change when you see someone glaring or smiling. How quick are you to mirror their expression yourself?

Do you ever catch yourself wearing an expression, either in your reflection or just feeling it, and thinking, ‘Wow, I wonder if this is how ..... felt when s/he looked like this?’ Is there a way

you can check? If you know the person well, you might even ask them.

Think about the people you spend most time with. Do these people have habits (regarding food, finance, general disposition) that you want to enhance in your own personality? This isn’t about heartlessly cutting people out of our lives, just being more conscious of the things we do unconsciously to help us support ourselves (and our loved ones) more by not sabotaging ourselves.

Think about your clients. Who do you feel most affected by? Do you think you’ve been unconsciously mirroring their expressions and feeling their feelings more than you do with others? What might happen if you notice yourself doing this in your next session and dialling your empathy back a little? Might you

be better able to help?

What about someone or a group of people you struggle to empathise with? What might happen if you mirror the facial expressions of someone whose picture you’ve seen in the paper or on the news? Does it give you any insights into what might be going on for them?

Who in your life would you like to be more like? You may have a whole list of people you admire for the way they seem to handle their lives, work and relationships. How does it feel to imagine yourself increasing their influence in your life by seeing if they want to spend more time with you?

Who on TV or film or YouTube might you want to channel more in your own life? You might want to experiment with mimicking their facial expressions and posture and noticing how that feels.