

What Would Dutton Say about the Paradox of Fiction?

Since the publication of Colin Radford's "How Can We Be Moved by the Fate of Anna Karenina?" in 1975, philosophers of art have been concerned with the paradox of fiction. How is it that humans can react emotionally to fiction when they know it is not real?¹ It seems that to react emotionally to the fate of someone like Anna we must believe she exists or once existed. Yet we know Anna does not exist and has never existed. So how can we be moved by her fate?

In *The Art Instinct: Beauty, Pleasure, and Human Evolution*, Denis Dutton drew on evolutionary theory to illuminate an array of issues in the philosophy of art, but he neglected to consider the paradox of fiction.² In this discussion we supply a response to the paradox that fits with Dutton's evolutionary approach to aesthetics and had his endorsement.³ The solution lies in denying the first premise. Contrary to what it states, to react emotionally to the fate of someone like Anna we do not need to believe she exists or once existed. Understanding why this is so will not only resolve the paradox but will explain why indeed we do react emotionally to fiction.

The paradox assumes that our conscious awareness that something is not real should prevent an emotional reaction. Of course, sometimes it can. If a friend says he will kill me, but I know he is joking, I will not be worried. But not all emotions are preceded, brought about, or effected by related conscious thoughts. Quite often, emotional reactions are instinctual and unconscious, a result of automatically mirroring the emotions of those around us. Such reactions are often the result of the aptly named "mirror neurons" that mimic the brain activity of those around us.

Mirror neurons were first discovered in relation to action emulation—watching another person do an action will cause one’s motor cortex to fire in a way similar to the actor’s, allowing one to imitate the other’s action.⁴ But it has become evident that mirror neurons play a role in many other things, including empathy and emotional mirroring.⁵ Studies in humans have shown that watching someone else display an emotional reaction will cause one’s brain to mirror their brain activity in the relevant (emotion inducing) respects.⁶ Some have argued that the insula, which connects the motor regions to our emotion center (the limbic system) plays a role in this.⁷ Others have even argued that malfunctioning mirror neurons cause the lack of empathy in autistic people.⁸ Mirror neurons’ emotional mechanisms likely evolved for numerous reasons. They help us learn from others, to relate and get along with those in our community, and to develop a theory of other minds. They may have even played a role in the development of language. Regardless, the reaction is automatic, a result of unconscious brain activities beyond our conscious mind’s ability to control.

So, when we watch a movie version of *Anna Karenina*, which we know is not depicting real events, we can and will still react emotionally to what we see. Our brains will mimic what Anna’s brain would be doing if she were real, and consequently we will feel emotion and empathy. Our mirror neurons, which cause us to mimic the emotions of others, do not distinguish between fiction and reality, nor would they be more adaptive if they did. And, for the same reason that we can react emotionally to hearing or seeing that someone is suffering, we can react emotionally to merely reading *Anna Karenina* as well.

Some may think this odd. Why doesn’t knowledge of one thing (that the movie is not real) affect how we emotionally react to that thing (the events of the movie)? But this

only seems odd if we incorrectly assume that the brain (and consciousness) is one homogenous whole, where knowledge in one part necessarily affects and controls another. Take for example, the famous optical illusion of two straight horizontal lines against a “sun burst” of smaller diagonal and vertical straight lines. You consciously know the lines are really straight, but you cannot help but see them as bent. We can find an even better example in fiction: the 3D movie. You know the screen is flat, you even know that the glasses you are wearing are helping to produce an illusion of depth, yet you cannot help but flinch when the spear bounces off the airship and comes “flying at you” while watching *Avatar*. Our conscious experience of the illusion does not change, despite the fact that we are consciously aware that it is an illusion. There are processes, even ones that produce conscious awareness, in our brain that we simply do not have conscious control over. So, just as the part of our brain that is responsible for visual experiences is not smart enough to see through the illusion, the part of our brain responsible for emotional reactions is not smart enough to see through the illusion (e.g., that the movie is not real). In fact, one might even think of works of fiction in this way—not only as optical illusions (at least in the case of movies), but as emotional illusions. This is not to say that we never have control over our emotions. Sometimes, when we feel like crying at a movie, we can suppress it, but we can do that in the real world too. Still, both in the real world, and with fiction, sometimes we cannot control our emotional reactions.

As Dutton said in correspondence, “It seems to me that evolutionary psychology says, look, make-believe and understanding make-believe are deep adaptations. Mind-reading, sympathy, and so forth are also deep adaptations (or aspects of an adaptation). So what’s ‘the problem of fiction’?”⁹ We agree, and we hope to have shown why.

¹ Colin Radford's "How Can We Be Moved by the Fate of Anna Karenina?" *Proceedings of the Aristotelian Society* 49 (1975): 67-80.

² *The Art Instinct: Beauty, Pleasure, and Human Evolution* (New York: Bloomsbury Press, 2009).

³ Sadly, Denis Dutton passed away in 2010. In an e-mail from June 13, 2009, he endorsed the approach to the topic given in this discussion note.

⁴ See Giacomo Rizzolatti and Laila Craigherl, "The Mirror-Neuron System" *Annual Review of Neuroscience* 27 (2004): 169-192.

⁵ See Marco Iacoboni, "Imitation, Empathy and Mirror Neurons" *Annual Review of Psychology* 60 (2009): 653-70. See also Vittorio Gallese, "The 'Shared Manifold' Hypothesis: From Mirror Neurons to Empathy" *Journal of Consciousness Studies* 8(2001): 33-50.

⁶ See Giacomo Rizzolatti, "The Mirror Neuron System and Its Function in Humans" *Anatomy and Embryology* 210 (2005): 419-421.

⁷ See Laurie Carr, Marco Iacoboni, Marie-Charlotte Dubeau, John C. Mazziotta, and Gian Luigi Lenzi, "Neural Mechanisms of Empathy in Humans: A Relay from Neural Systems for Imitation to Limbic Areas" *Proceedings of the National Academy of Sciences of the United States of America* 100(2003): 5497-5502.

⁸ See Marco Iacoboni and Mirella Dapretto, "The Mirror Neuron System and the Consequences of its Dysfunction" *Nature Reviews Neuroscience* 7 (2006): 942-951.

⁹ E-mail from June 13, 2009.