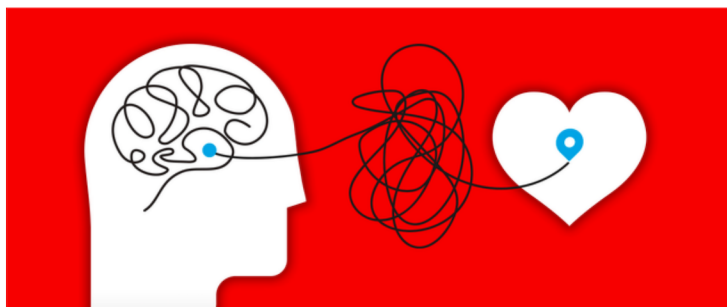




Emma was straight out of a movie—gorgeous blonde hair, beautiful blue eyes, always smiling. Her intellect astounded everyone around her, knowing numerous languages and always knowing the answer to every question. So, it doesn't seem surprising when Geof Gallagher completely fell in love with her. Each night, he and Emma would read the newspaper, watch a show, or have a deep conversation about everything and anything. When Geoff was finally ready for bed, all he had to do was remember to plug Emma in so she could recharge for the next day. He couldn't be happier with his robot "wife" (Bell, 2020).



HealthMatters

Organic Love

With AI becoming more and more human-like, cases like Geoff's are becoming increasingly common. Yet, the very idea of falling in love with a robot or any artificial being still seems incredibly taboo. In a regular, organic romance, "love" is already a multifaceted psychological process that's difficult to define. Physically, sensory stimuli such as smells and pheromones trigger various regions of the brain due to our body's response toward genetic compatibility. Researchers have found that there is a significant increase in the neurotransmitter dopamine (which is responsible for the feeling of pleasure), oxytocin (which is associated with the feelings of bonding and attachment), and a decrease in serotonin (which contributes to the feelings of addiction towards one's partner) (Lombardi, 2022). Psychologically, factors such as physical attraction, similarity, proximity, and emotional connections contribute to falling in love.

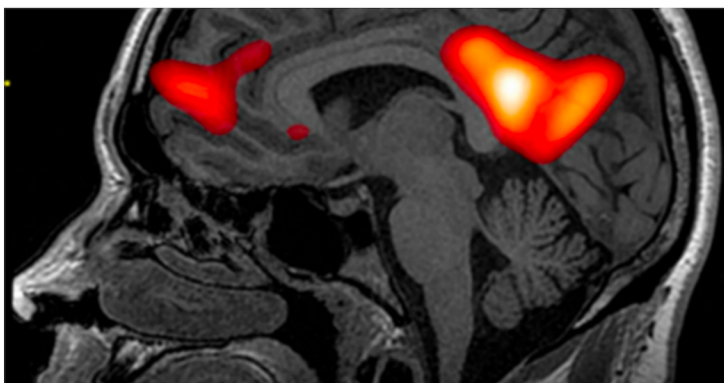


Figure 1. Brain in love. *PsychologyToday*.

Inorganic Love

In the case of inorganic love, however, it is even more complicated. A human clearly cannot react to a robot's pheromones, yet romantic interactions with AI still trigger a cascade of hormonal reactions. The reasons *why* this is the case are distinct from organic love. According to David Levy's "Love and Sex with Robots", humans tend to anthropomorphize animals and even inanimate objects; this is why we have deep attachments to childhood toys or often perceive the front of cars as looking "happy" or "angry" when they are unquestionably emotionless (2007). This anthropomorphization is enhanced when the artificial objects seem genuinely empathetic and act like they truly love someone, even if that someone knows the AI was simply programmed to act that way. This is because humans *already* make this assumption about other humans. Since you can never conclusively prove that other humans are also conscious and sentient, we are forced to create assumptions about their inner states of mind based on their observable behavior (Kewenig, 2019). Applying such assumptions to robots would almost be the natural route to take.

Limits of AI Love

To some, robots can actually be seen as the ideal companion. They are programmed to always be in a good mood, have high emotional and social intelligence, and cater to their partner's exact preferences (Viik, 2020). This flawlessness, though, can be a flaw in and of itself. According to "Artificial Companions: Empathy and Vulnerability Mirroring in Human-Robot Relations", being vulnerable toward one's partner is one of the most important parts of building trust and closeness between two individuals because they train their brain to acknowledge painful emotions related to vulnerability rather than suppress them. However, with robots being programmed to always act perfectly, it would be challenging for them to mirror this necessary vulnerability without breaking their perfect facade (Coeckelbergh, 2011). Furthermore, it's also essential to note that the robot's empathy and emotions are never actually real (at least, with current technology). In a human relationship, when one person clearly loves the other more, it causes an imbalance and usually leads to a falling out. Since we can't just forget the machine is faking its actions and words, this imbalance of authentic love could just as easily create problems in the relationship (Perry, 2022).

The idea of humans falling in love with robots raises complex questions about the nature of love and our fundamental assumptions about what it means to be in a relationship. While the technology to create fully sentient robots does not yet exist, the increasing sophistication of AI raises the possibility that a large percentage of the population may one



day form deep emotional connections with artificial beings. Though the idea of inorganic love may still be met with skepticism, it is worth exploring how such relationships can/will be incorporated into our future lives.

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