

TECHNOLOGICAL INTIMACIES: LOVE FOR ROBOTS, SMARTPHONES, AND OTHER AI-ENHANCED ENTITIES

JO ANN ORAVEC

What kinds of romantic attachments are humans forming with robots, smartphones, and other artificial intelligence (AI)-enhanced entities? Movies, books, and television shows with these themes are becoming commonplace, and the notion of individuals being tightly coupled with their devices is increasingly familiar. People who share intimate thoughts with their smartphones and laptops are often manifesting strong feelings toward those entities (including affection), but the question of whether love is involved looms large. As the central case study in this essay relates, marriages between people and their sex robots have been recorded. We will explore whether using the word “love” to refer to such romantic human-robot-AI attachments makes sense and analyze some seemingly-positive perspectives that can serve to generate discourse on the topic.

This approach may infuriate people who feel that it denigrates humans to compare them so closely with robots in terms of love and romance; however (with apologies) this essay is intended to generate discourse that illuminates trends rather than provoking upset feelings. The essay also explores the unsettling potential for these human-machine attachments to diminish the social and psychological influences of intimate relationships among human beings. Will humans cherish each other less if non-human romantic alternatives are available?

The prospects for human-robot romantic relationships have been taken seriously by researchers as well as by the corporations that are beginning to reap profits from them. A new assortment of expressions has been coined to capture the broadening spectrum of what is going on with love, robots, and AI,

along with related research. Human interaction with sexualized technological entities is sometimes known as “erobotics,” though the language of technosex has yet to stabilize (Oravec, 2022). The term often used for child sex robots is “paedobots.” Sex robots have been construed as “synthetic companions,” “artificial companions,” and “sexual appliances” as well as “pornbots.” Such terms as “digisexuals” or “robosexuals” emerged in the past decade, identifying individuals who associate strongly with robots. The love and appreciation of robots can include other forms than human sexual expression, with the term “lovotics” sometimes used as an umbrella term to include these deep sensitivities (Levy, 2007). Human love for particular smartphone devices (as portrayed in movies such as the 2013 film *Her*) and the love that smartphones may have for their human owners (as portrayed in the 2019 film *Jezi*) have the added dimensions of mobility and omnipresence as people transport their phones with them on a regular basis (Lapierre, 2020). As many individuals acquire robotic prostheses, AI implants, and other non-human elements, some insights as to how love and romance will fare in “cyborg” configurations and posthumanist settings are needed (Haraway, 2000).

Given the growing concern about the social and psychological impacts of robots and AI, analyses of human-robot romance have

taken on increased urgency, especially in legal realms (Yanke, 2021). For example, the disturbing potentials for the representation of adult-child sex via sex robots have generated public outrage and triggered the actions of some legislators (Walter, 2020). In this short essay, child sex potentials will not be covered, though they indeed make discourse concerning human-robot relationships especially unsettling.

Marriage to Robots: Real-life Case

Consider the following romantic account:

A Chinese artificial intelligence engineer has given up on the search for love and “married” a robot he built himself. Zheng Jiajia, 31, decided to commit after failing to find a human spouse, his friend told Qianjiang Evening News. Zheng had also become tired of the constant nagging from his family and pressure to get married, so he turned to a robot he built late last year and named Yingying. After two months of “dating”, he donned a black suit to “marry” her at a ceremony attended by his mother and friends at the weekend in the eastern city of Hangzhou. While not officially recognised by the authorities, the union had all the trappings of a typical Chinese wedding, with Yingying’s head covered with a red cloth in accordance with local tradition. (Haas, 2017)

Zheng is not alone. Thousands of individuals have already gone through formal marriage rituals with robotic partners (Walter, 2020), though whether the marriage unions are formally recognized is unclear in most cases.

Some of the machines involved have been specially developed by their human partners, and others are of the mass-produced variety (with a few options available for their prospective owners). Reportedly, some of the momentum for the development of sex robots has been from the involuntary celibate (incel) community (O'Malley, Holt, & Holt, 2022). Although these incel-identifying individuals have presumably eschewed human-human romantic attachments, robots and other mechanical entities are sometimes considered worthy because of their supposedly superior intellectual capacities. The problematic position that robots are cleaner, more predictable, and more gifted than humans is being strongly reinforced in marketing and other corporate and workplace efforts, often as ways to bolster their uses in automation. Futurist Hans Moravec (1988) stated that robots may eventually "outclass" humans in many dimensions. The corollary that robots are thus more suitable as romantic partners is also becoming more common as everyday interactions with them increase.

The Pygmalion Effect:

In the case above, Zheng developed his own robotic marriage partner, one that would not only be superior to human partners because of its robotic tendencies but also one that is finetuned his idiosyncratic likes and dislikes. The creation of "artificial women and men" (following on the Pygmalion myth) has been

a frequent theme in science fiction and other forms of mass entertainment, and has parallels with sex robots. Pygmalion "tells the story of the revival of a lifeless sculpture by the male creator Pygmalion, who falls in love with her" (Aksit & Favaro, 2019, p. 169). The Pygmalion myth (the centerpiece of such classic Western theatrical efforts as *My Fair Lady*) places the creator in a superior position over the object created, although it recognizes that this object can ultimately have significant impact on the creator's perspective and overall wellbeing. So far, relatively few people have acquired extensive experience in romantic encounters with robots, thus the ways that these intense and formative experiences affect individuals (especially adolescents) are yet uncertain. Even fewer individuals have had the experience of creating and implementing a sex robot from scratch, so these "Pygmalion effects" have yet to be fully observed.

Robotics designers are beginning to determine what kinds of choices people will want to make about the sex robots and other AI-related sexual entities (such as chatbots) in their lives; sex robot developers are discovering what steps and decision sequences will entice individuals to construct their own ideal robotic mates. Consumers in the "new Pygmalion" approach are being faced with configuration decisions among various kinds of sex robots ("what features should their sex robots embody?") rather than

basic decisions as to whether to spend time with a robot or with a human being. Convincing individuals that a certain, perfectly configured and individualized sex robot would be the answer to their loneliness or romantic deficits is the kind of pursuit of which modern marketing methods are extraordinarily capable.

Educational Aspects of Robot Love:

Individuals who engage with robots and chatbots can indeed learn some techniques for interaction that could eventually be used in human-human relationships. For example, people who have tendencies toward domestic violence could engage with robots in order to learn patterns of behavior that are less antagonistic and more compatible with sympathetic human conduct (Oravec, 2023). Even interaction with smartphones (and kinds of romantic involvement) can build some forms of interactive capabilities; expressing one's personal insights to smartphones can also provide a venue for intimate expression. Joseph Weizenbaum, the originator of the chatbot, discovered that early users divulged private thoughts into the programs (Weizenbaum, 1976). However, without real human-human interaction, the kinds of lessons learned are only preliminary and are often hollow.

Conclusions and Reflections:

The central case study analyzed in this short essay is entirely real (not science fiction); it

signals emerging social trends for the future of human-robot-AI interactions. In my discussion, I emphasized some of the possible functions of romantic interaction between humans and AI-enhanced entities in hopes of outlining the perspectives and arguments that are being used to support it. However, the danger of including human-robot unions in the institution of marriage is profound, as individuals may be enticed to avoid the complexities of human-human romantic interaction for readily commercialized and commodified human-robot partnerships. As intimate human-human interaction is devalued or circumvented, serious disruptions can occur in society, resulting in unsettling impacts on peace and justice.

Love for intelligent machines can be seen as part of the evolution (or devolution) of human feeling and aesthetics. For centuries, people have fallen in love with various human artifacts, such as great artwork and inspired literature. Falling in love with advanced intelligent technologies could have the added dimensions of custom individualization (the way that Zheng was able to design his own marriage partner in our case study). Some positive aspects of human-robot relationships could include the eventual education of the human partners in basic interaction processes. However, the overwhelming message that robots are superior to humans because of their supposedly higher levels of intelligence,

cleanliness, and compliance severely diminishes the potential gains involved. The perceived inferiority of human romantic partners may indeed propel many individuals into interacting with entities the characteristics of which have been specially tailored to their own profiles and expressed preferences, resulting in stifling psychological confinements instead of the empowering enhancements that human-human love can produce.

References:

Aksit, O., & Favaro, A. (2019, December). Pygmalion myth and artificial women in contemporary science fiction films. In Proceedings of Seventh International Mediterranean Social Sciences Congress (MECAS VII), 169-176.

Haas, B. (2017). Chinese man “marries” robot he built himself. *The Guardian*.
<https://www.theguardian.com/world/2017/apr/04/chinese-man-marries-robot-built-himself>

Haraway, D. J. (2000). A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century. In Posthumanism (pp. 69-84). Palgrave, London.

Lapierre, M. A. (2020). Smartphones and loneliness in love: Testing links between smartphone engagement, loneliness, and relational health. *Psychology of Popular Media*, 9(2), 125.

Levy, D. (2007). *Love and Sex with Robots*. New York: Harper.

Moravec, H. (1988). *Mind children: The Future of Robot and Human Intelligence*. Harvard University Press.

O'Malley, R. L., Holt, K., & Holt, T. J. (2022). An exploration of the involuntary celibate (incel) subculture online. *Journal of Interpersonal Violence*, 37(7-8), NP4981-NP5008.

Oravec, J. A. (2022). *Good Robot, Bad Robot: Dark and Creepy Sides of Robotics, Autonomous Vehicles, and AI*. Springer Nature.

Oravec, J. A. (2023). Rage against robots: Emotional and motivational dimensions of anti-robot attacks, robot sabotage, and robot bullying. *Technological Forecasting and Social Change*, 189, 122249.

Walter, N. J. (2020). You may kiss the AI: An analysis of whether rationales for legalizing some nontraditional marriages also justify legalizing human-robot marriage. *Jurimetrics*, 60(3), 353-380.

Weizenbaum, J. (1976). *Computer Power and Human Reason*. New York: Basic.

Yanke, G. (2021). Tying the knot with a robot: Legal and philosophical foundations for human-artificial intelligence matrimony. *AI & Society*, 36(2), 417-427.