

# RELATIONSHIP MACHINES

Carson Reynolds, Tomoko Hayashi and Eric Siu  
*University of Tokyo, Department of Creative Informatics*

**Abstract:** If humans are information organisms, then what are relationships and what are online relationships? While it is common to think of human beings as nodes in a graph whose edges are relationships, a slightly different model following Nozick is to think of relationships as a type of machine, which transforms information organisms. These transformations that we speak of metaphorically as machines have different outcomes for those involved: communication, partnership, identity shifts, recombination, procreation, and sometimes death. We will further argue that social media to greater and lesser degrees mimic human relationship transformations. As the fidelity of these relationship machines becomes hard to distinguish or separate from pre-online relationship transformations it is our belief that we will see some unusual varieties of information organisms arise.

**Key words:**

Experience Machine, Relationship Machine, Information Ethics, Social Media, Social Networking, Transhumanism

## 1. INTIMACY

Human intimacy is an emotional topic whose understanding has confounded philosophers and created more and less legitimate economic niches for self-help authors, couples therapists, relationship psychologists, pornographers, robotic sex dolls, sex workers, singles bars, advice columnists, dating sites, and social networking systems. Intimacy is a difficult concept to define as some psychologists (Diamond, 2004) are

recognizing distinctions that exist between romantic love and sexual desire both of which might be viewed as intimate psychological states.

In trying to precisely define intimacy we might ask some of the following specious questions:

- Can a person be intimate with himself or herself?
- How much time is necessary for any intimacy to occur?
- Is there some maximum number of entities that can be party to an intimate experience?
- Does individual intimacy degrade as more and more people take part in an intimate experience?
- Can you be intimate with a person who you have never and will never meet?

Heron (1970) examined intimacy from phenomenological perspectives. While his approach is revealing, it leaves those seeking abstraction wanting. More specifically, if we take the stance that humans are information organisms then we might ask how intimacy transforms them. If we model human relationships as a social network then how does intimacy act on this network? One flip answer would be that intimate relationships could gradually result in new information entities (or less obtusely; children).

So if information organisms (for which we use entities as shorthand) are the nodes in a social network, then what are the edges? Are relationships information organisms themselves or a property of multiple entities? Can entities have relationships with themselves?

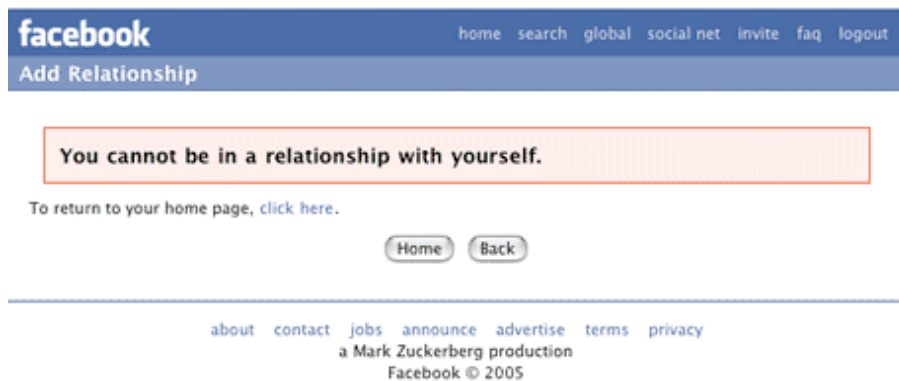


Figure 1: Facebook does not allow users to list a relationship with themselves.

If the more people taking part in a relationship increases intimacy then it would seem that pervasive social network and communication systems would lead to deeper feelings of intimacy. Instead, Burke, Marlow and Lento (2010) reported, “users who consume greater levels of content report reduced bridging and bonding social capital and increased loneliness.” The always-on and invasive nature of social media has strained many relationships as Gould (2008) comments in her discussion of “oversharing.” Echoing Rovai and Wightings (2005) findings, alienation appears to be mistakenly reinforced by the current crop of social media like Facebook, Twitter, Tumblr, and Skype.

## 2. INFORMATION INTIMACY

We believe that humans are attempting to imitate social experiences using this online media. These experiences might range from rowdy cocktail-party conversations digesting events that frequently occur on Facebook to simulated sexual experiences provided by so-called camwhores. Instead of the “experience machine that would give you any experience you desired” as Nozick (1977) imagined we arrive at machines that give us a subset of experiences similar to those we experienced in pre-online life such as breaking up, announcing engagements, or flirting.

But at what point will breaking up on Facebook be less real than telling a person to their face that a relationship is over? Some might argue that we have already crossed that threshold. Online simulacra of relationships are proliferating, but so are physical instantiations in the form of sexbots as Sullins has recently noted in a lecture (Sedo, 2011). Transgressions such as narcissism, stalking, intentional infliction of emotion distress, or outright abuse already have analogs to the online world. Some such as Whitby (2008) argue that they will also eventually extend to the world of robotics. We similarly see no technological barrier to relationship machines existing that alter aspects of relationships between any information organism (human, software, robotic, or otherwise). What remains to see is what moral, political, and social barriers will be erected.

Burke, M., Marlow, C., & Lento, T. (2010). Social network activity and social well being. Proceedings of the 28th international conference on Human factors in computing systems - CHI '10 (p. 1909). New York, New York, USA: ACM Press. Retrieved from <http://portal.acm.org/citation.cfm?id=1753326.1753613>.

- Diamond, L. M. (2004). Emerging Perspectives on Distinctions Between Romantic Love and Sexual Desire. *Current Directions in Psychological Science*, 13(3), 116-119. SAGE Publications. doi: 10.1111/j.0963-7214.2004.00287.x.
- Ellsworth, P., & Ross, L. (1975). Intimacy in response to direct gaze. *Journal of Experimental Social Psychology*, 11(6), 592-613. Retrieved December 14, 2010, from [http://dx.doi.org/10.1016/0022-1031\(75\)90010-4](http://dx.doi.org/10.1016/0022-1031(75)90010-4).
- Heron, J. (1970). The Phenomenology of Social Encounter: The Gaze. *Philosophy and Phenomenological Research*, 31(2), 243 - 264. International Phenomenological Society. Retrieved December 16, 2010, from <http://www.jstor.org/stable/2105742>.
- Gould, E. (2008). Exposed. *The New York Times Sunday Magazine*, pp.32. Retrieved from <http://www.nytimes.com/2008/05/25/magazine/25internet-t.html>.
- Nozick, R. (1977). *Anarchy, State, And Utopia* (p. 384). Basic Books
- Rovai, A., & Wighting, M. (2005). Feelings of alienation and community among higher education students in a virtual classroom. *The Internet and Higher Education*, 8(2), 97-110. Retrieved from <http://dx.doi.org/10.1016/j.iheduc.2005.03.001>.
- Sedo, A. (2011). "Robots and Sex" lecture to discuss technology and ethics. *Mustang Daily*. Retrieved from <http://mustangdaily.net/robots-and-sex-lecture-discusses-technology-and-ethics/>
- Whitby, B. (2008). Sometimes it's hard to be a robot: A call for action on the ethics of abusing artificial agents. *Interacting with Computers*, 20(3), 326-333. doi: 10.1016/j.intcom.2008.02.002.