Sex-bots and touch: what does it all mean for our (human) identity?

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Extended Abstract

I am interested in exploring here the significance of the sense of touch in relation to human/personal identity. I will be using, however, an unusual angle, namely sex-bots and their place in human sexuality. The interest in sex-bots comes from a previous research I have done on the faculty of touch in care settings such as long-term care facilities where various social and medical robots are already, albeit still haphazardly or scarcely, employed. I will be drawing on two previous research projects of mine that have dealt with the faculty of touch (see Apostolova 2021, and Apostolova 2022). In working on touch, especially where AI is concerned, I realized that sex-bots present a unique challenge since their purpose is mainly, if not exclusively, to engage in tactile interaction of sexual nature, broadly construed. In this sense, the use of sex-bots confronts us head-on with the purpose, function, and significance of the faculty of touch. Before I proceed with outlining the skeleton of the paper, a few caveats are in order.

While I may not have a firm position on the use of sex-bots, I certainly do not belong to the group of AI enthusiasts (spearheaded by David Levy) who believe that having sex with robots/AI is unproblematic and/or desirable (see Levy, 2007). My own take on that is informed by the feminist outlook on gender imbalance when it comes to sexual relations, and if I were to have a definitive position on sex with robots/AI, it would probably come close to Kathleen Richardson's grim predictions about the future of humanity, including the proliferation of gender imbalance leading to sex slavery (see Richardson and Odlind, 2023). That being said, however, I would like to say at the outset that my interest is primarily in the faculty of touch and the role it plays in the formation of personal identity. Sex-bots are going to be used by me as a theoretical decoy to explore connections between the sense of self, which includes the sense of sexual self, and the faculty of touch. The purpose of this paper is not to reach any ethical verdict, except in passing only.

As already mentioned, the current project is an offshoot of a couple of recent projects. In one of those projects, I have dealt with medical AI. In said project, I explored the challenges the implementation of certain types of AI in long-term care setting poses when done without consulting both patients and care workers alike. I looked at a couple of case-studies, including testaments of care workers, involving ZORA and PARO in nursing homes throughout Europe. One of the interesting things I came across in doing the research for the project was the preoccupation in the philosophical literature with the functional and cognitive aspects of medical and social AIs, leading to various ethical conundrums. Patient-centered perspectives were dominant. However, what we discovered was that many of the tensions using social robots such as ZORA or PARO in care settings occurred because of the lack of consideration or consultation with the care workers on site, many of whom saw the use of social robots as a generally positive thing but requiring more fine-tuning. Some of the care workers, for example, saw the one-on-one

care relationship with the patient suffer because the use of certain AI such as robotic arms to feed and lift patients, did not provide the crucial tactile feedback that the care worker would have otherwise received from the direct contact with the patient's body.

I will take, for this project, the premise of the existing research, that the formation of human-type consciousness requires the faculty of touch, which in turn, is central for the development of feelings such as compassion and empathy, both of them at the heart of care relationship. But what I failed to delve into and have explored further in another project is the faculty of touch itself. For example, in addition to the paradigmatic direct touch indispensable for intimate care, tactile perception also includes contiguous touch, projection touch, as well as the intriguing "distal touch" (Martin, 1992). I have explored these different types of touch, and which one of them can or cannot be functionally reproduced by an AI, and to what end.

One of the focal points of the current project is the exploration of peripersonal space, which is central for the formation of self. Peripersonal space is "a buffer zone between the self and the world" (see Vignemon 2021, p. 3), while not a well-defined space is, in fact, of utmost importance to the sense of self. It is within this space (a space that incorporates both spatial and temporal proximity) that we, as cognitive and social agents, determine what is safe and not safe for us to come into contact with. It is within this space that we reach and probe the other, be it an object or another subject like us. A part of the great importance of peripersonal space comes from its ties to "self-location and body ownership", without which touch would be inconceivable (see Vignemon 2021, p.9).

At the same time, empirical research seems to favor a bimodal visuo-tactile neural system which allows for both multisensory integration as well as for affective responses to the environment (negative, associated with danger, and positive, associated with safety). It appears, then, that the sense of touch is at the very foundation of our (human) perceptivity. I am very sympathetic to the idea that low-level mechanisms, of tactile association, for example, feed into higher- level mechanisms such as object-recognition (see Dijkerman. and Medendorp. 2021). Multisensory integration causes the expansion or the shrinking of peripersonal boundaries. In other words, peripersonal space appears to be dynamic, as opposed to static. It develops and redefines itself, as it were, according to the multisensory integration mechanisms, starting with the tactile mechanisms (i.e., an estimation of what bodily consequences a certain action or object will have on me), which, in turn, leads to the formation and triggering of predictive mechanisms that allow me to better protect my bodily integrity and successfully orient myself in my environment. These predictive mechanisms are shaped by social cues, among other factors. Without pushing the empirical evidence too far, it seems to me that it would be fair, then, to describe peripersonal space as a constructed space.

If the sense of self is constructed from the bottoms-up, then, not just the interaction but also the use of any type of bot, especially a sex-bot, will have a profound impact on the way we, humans, feel about, and interact with the world. Interacting with other bodies, especially automated non-organic bodies, changes the way we feel about our own bodies. I will engage with such conceptual constructs as "network of desires" and "posthuman desires" in order to elucidate my position on human-robot touch. My tentative conclusion is that perfecting the exoskeleton and overall appearance of the bot/sex-bot to resemble more

and more that of an organic being, especially an organic human being, will not resolve the tensions surrounding the complicated space and role of touch in the formation of the sense of (human) self.

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