Do Socially Assistive Robots Compromise our Moral Autonomy?

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One of the driving forces behind current research and development of socially assistive robots (SARs) is the upcoming demographic change in many Western countries. A considered way to deal with an aging society is to provide SARs living together with their older users, enabling them to stay longer at home (FP7). To overcome acceptance problems that older users may have, contemporary research focuses on psychological mechanisms to develop robot companions.

We believe that this design approach mistakes social mechanisms to trigger emotional attachment for a kind of extended usability. However, usability is related with the adaption of objects to the needs of persons, while sociability describes the capability of interacting well with other persons. Our work questions this approach from an ethical perspective. Following the well-established bioethical system of Principlism (Beauchamp & Childress) the use of such social mechanisms in robot products stands in conflict with a basic moral principle: the autonomy of the person. This concerns the respect for the views, choices, and actions of others and is grounded on:

- Substantial knowledge: usually provided using the professional practice standards.
- Substantial freedom: usually affected by such aspects as persuasion, coercion, and manipulation.

SARs using strategies confusing emotional attachment with product acceptance stand in conflict with both of these moral principles. The end-users lack substantial knowledge about the social mechanisms establishing an attachment, something which is usually experienced between persons and not towards objects. Substantial freedom is compromised due to the effect of these social mechanisms. The end-user may experience difficulties to escape the unconscious working social mechanisms and to decide against the robot. This way the robot is not judged as an object any more, but rather like a person-like being.

We propose an evaluation framework in our project HOBBIT (Lammer et al.) to explore the ethical dimension of personal autonomy using long-term field trials with a SAR in the private homes of older adults. Our research focuses on how the user evaluates the robot before, at the end and weeks after the long-term trials. This includes questions about

- Anthropomorphization: Does the user perceive the robot as a person-like being?
- Theory of Mind: Does the user perceive the robot as intentional, feeling or empathic?
- Attachment: Does the user miss the robot weeks after the trial like a friend?

Additionally to these factors the methodological framework consisting of logging data, self-reporting techniques, and interviews to gain insights on how the interaction with the robot changes over time.

References:

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