

# Mutual Care in Social Assistive Robotics

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## Idea

Current approaches in social assistive robotics have:

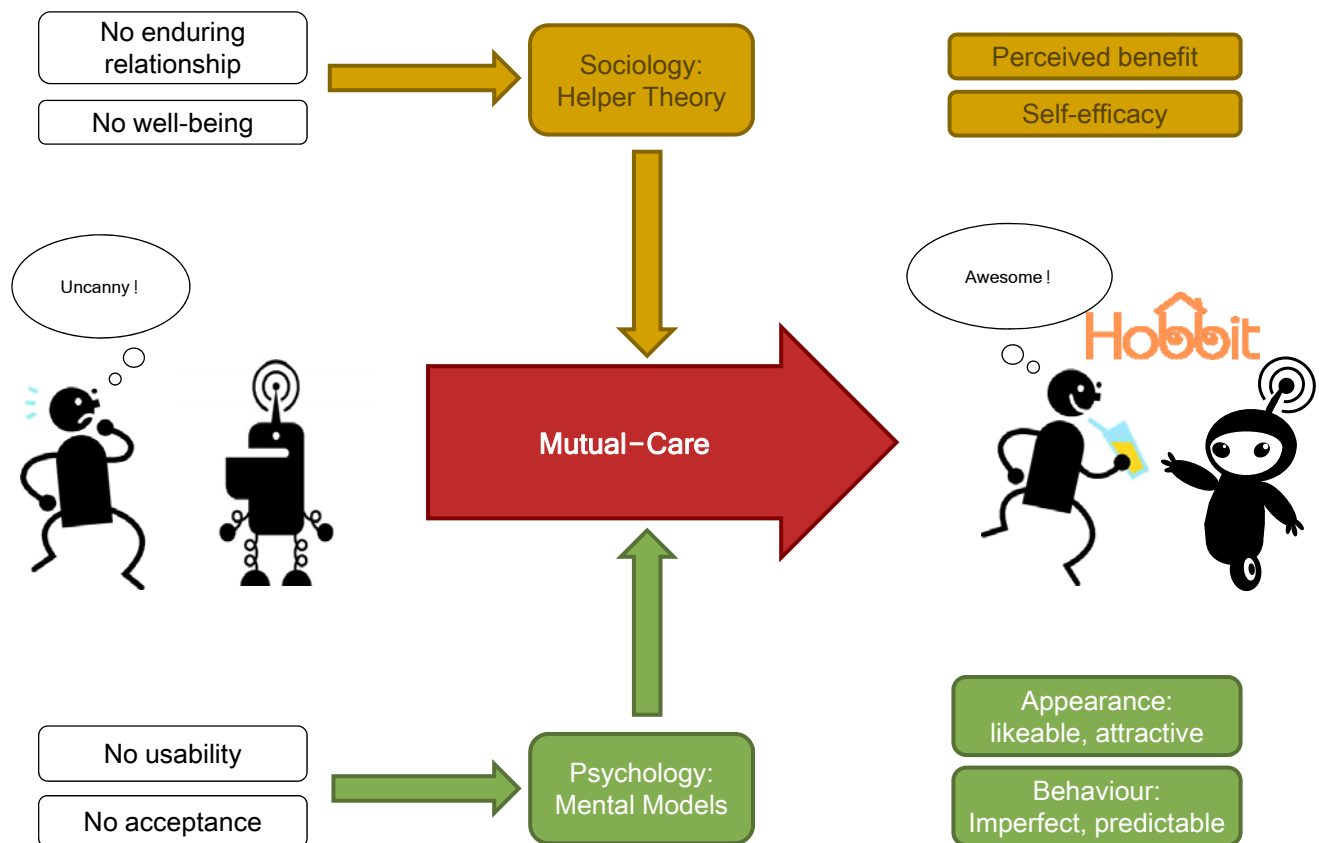
- Insufficient concepts to achieve long-term relationships between humans and robots.
- A insufficient understanding of the complex nature of interpersonal relationships.
- Problems to define the position of robots in already existing social environments.

➤ What real people actually do in relationships:

- They influence each other
- They share thoughts and feelings
- They engage in activities together

➤ Applied to human-robot interaction research:

The design focus shifts from the cognitive and emotional effects elicited by the robot to the different roles which can be taken by humans and robots.



## Result

Taking **sociological** and **psychological** explanations into account we derived the **Mutual-Care** concept whose idea is simple:

➤ User and robot take care of each other.

Social robot that is designed following the Mutual-Care paradigm should encourage the user to help and care for the imperfect robot. It might be easier to expect and accept assistance from a robot if the user can also assist the machine in certain situations.

## Outlook

Studies at the *Akademie für Altersforschung am Haus der Barmherzigkeit*.

- Older persons are asked to physically model ideal "little helpers" which are nice to live with at home.
- Investigation of the mental models (= ideas/inner images) they are using during the creative process.
- The results of these studies will help us to deepen the theoretical background of the Mutual-Care concept.