

ALTER European Society for Disability Research  
11th Annual Conference  
Protection, Autonomy and Emancipation; an (im)possible alliance?



## Whose needs and what needs?

### Needs of Older Adults Facing the Loss of Autonomy and Technological Responses : a Case Study of Social Robots in Long-term Care Facilities in Japan

SESSION 23 : INSTITUTIONS, SERVICES AND TECHNOLOGIES  
(30 June 2023, 2pm-3h30pm, Centre des colloques [Room 3.01], Campus Condorcet, Aubervilliers, France )

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# Presentation plan

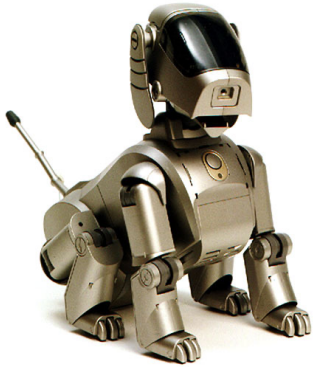
Introduction: Older adults and social robots

Research Method

Findings and Discussion: needs, protection and autonomy

Conclusion: Complicated nature of needs

# Research Context



<https://robots.ieee.org/robots/>

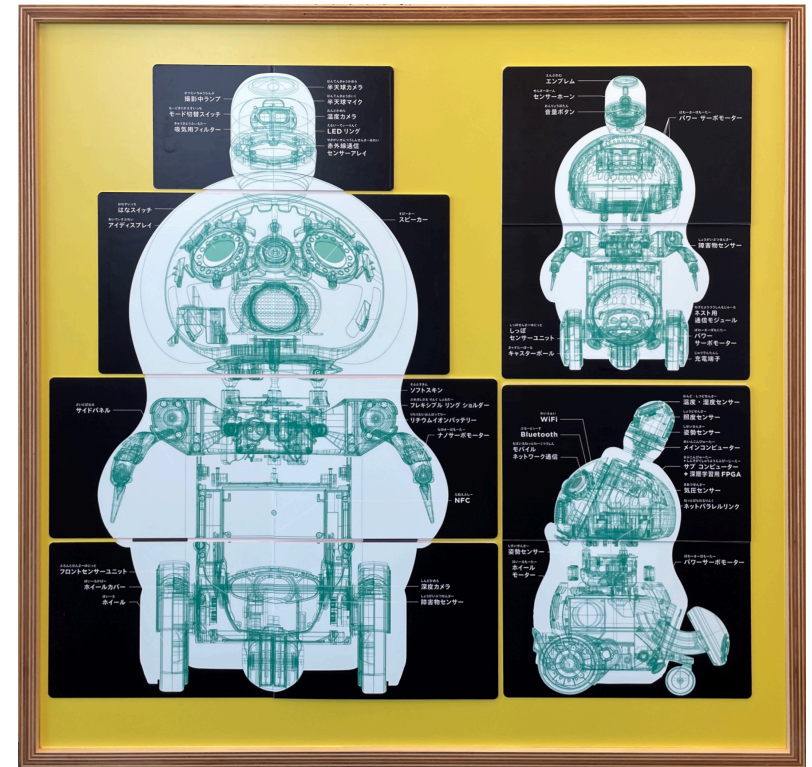
- Much research to quantitatively assess the impact and effectiveness of social robots on older adults facing a loss of autonomy (Banks et al., 2008; Robinson et al., 2013; Shibata & Wada, 2011)
- Studies to qualitatively understand how social robots shape social relationships in care have increased (Chevalier, 2022; Wright, 2018)
- Uncertainty about end-user needs
- The term “needs” : “the physical and emotional requirements of dependent adults and children” (Daly and Lewis, 2000).



# Method



- Participant observations in a care home where the social robot was installed (Kawasaki City, Kanagawa prefecture) in spring to summer 2022
- Semi-structured in-depth interviews with the care home staff and the robot provider staff in spring 2022
- Questionnaire survey of residents and care staff in summer 2022
- Qualitative data analysed using a grounded theory approach (Strauss & Corbin 2014)



at the Lovot museum in Tokyo, Japan (taken by the presenter, June 2022)

# Findings and Discussion 1

- Interaction with a robot could provide an opportunity to break a vicious cycle in which a decline in physical function leads to a decline in capability in Amartya Sen's terms (1979)
- Robot's potential in dementia care, especially *Humanitude Care*, a multimodal comprehensive communication training for Alzheimer's patients (Gineste and Marescotti 2010, Luquel, 2008)



The robot at a long-term care facility in Kawasaki, Japan  
(taken by the presenter, July 2022)

## Findings and Discussion 2

- Affective relations towards social robots
  - “I frequently wondered how the robot was doing or whether the robot was not alone or feeling lonely.” (female resident, 84 years old)
  - “I get drawn into it as I look at it.” (male resident)
- Deception among older adults with cognitive impairment? (Sparrow & Sparrow, 2006; Sparrow, 2002)
- Similarities between the relations with the robot fostered by residents in this study and the empirical study conducted by Pols and Moser (2009).

## Findings and Discussion 3

- **Needs of the care staff, rather than those of the residents**
  - **Robot enabling the care staff to avoid encountering resistance from residents**
  - **Overseeing and monitoring their body rather than protection of their body from the resident's point of view**
- **Also embedded in complicated power relationships, therapists also in a difficult position (Kittay, 2011; Fisher & Tronto, 1990).**



# Conclusion

- **Problematic situations as Impairment, disability, and handicap identified by WHO's ICF (2001)**
  - **Opposing perspectives among people who have needs and people who respond to needs**
  - **Person with needs and his/her choice as a matter of autonomy**
    - **Complicated nature of needs**



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**Thank you very much for your kind attention.**

