Social Robotics

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Outline

- Today: Attempt to understand the concept of a social robot (and the 'big questions' related to it) by reflecting upon the way how social robots are displayed in pop culture.
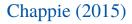
Rosie (60s & 80s)

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Rosie?

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Marvin (80s & 2000s)

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- Why is there no Marvin in our homes?

Chappie (2015)

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Chappie: Discussion

- What are the pros and cons of learning for social robots? What is the alternative to learning?
- Should there be robotic police officers?

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Ex Machina: Discussion

- What's the point in building robots like Ava?
- What's the difference between a human and a robot?
- Is 'being programmed' a valid difference?
    - Robot being programmed to flirt vs. Human being programmed to perceive the robot as flirting
- Is friendship between humans and robots possible?

Comparison: Erica

- Android research by Hiroshi Ishiguro and colleagues (Osaka University)

Westworld (2016)

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- Should it be forbidden to abuse robots?
- Should robots have rights?

Real Humans (2012)

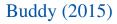Pictures not shown for copyright reasons.

Real Humans: Discussion

- Can robots be the better humans?
- What's the impact on human relationships if humans prefer robots as friends and partners?
    - A chance for less lonliness, less disappointment etc.?

Jibo (2014)

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Buddy (2015)

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Jibo & Buddy: Discussion

- Do we really need such robots?
- Can they keep what they promise?
- What kind of entities are these robots?
    - Just tools like smartphones are?
    - Family members?
    - Something in between?

Conclusions

- 'Broad questions in social robotics'
    - What's the purpose of social robots?
    - What do social robots reveal about human nature?
    - How do social robots affect human behavior, thinking, relationships?
    - How to design a social robot for a specific role or task? How to design interactions?
    - Do we need regulations that restrict what kind of social robots are allowed?

- Next Lecture: Brief introduction to Robo-Ethics as a field.