

Social Robotics

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- **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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Marvin (80s & 2000s)



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Marvin?



- Why is there no Marvin in our homes?



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- 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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- 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?

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





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



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- 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 loneliness, less disappointment etc.?



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Buddy (2015)



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- 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?

- '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.