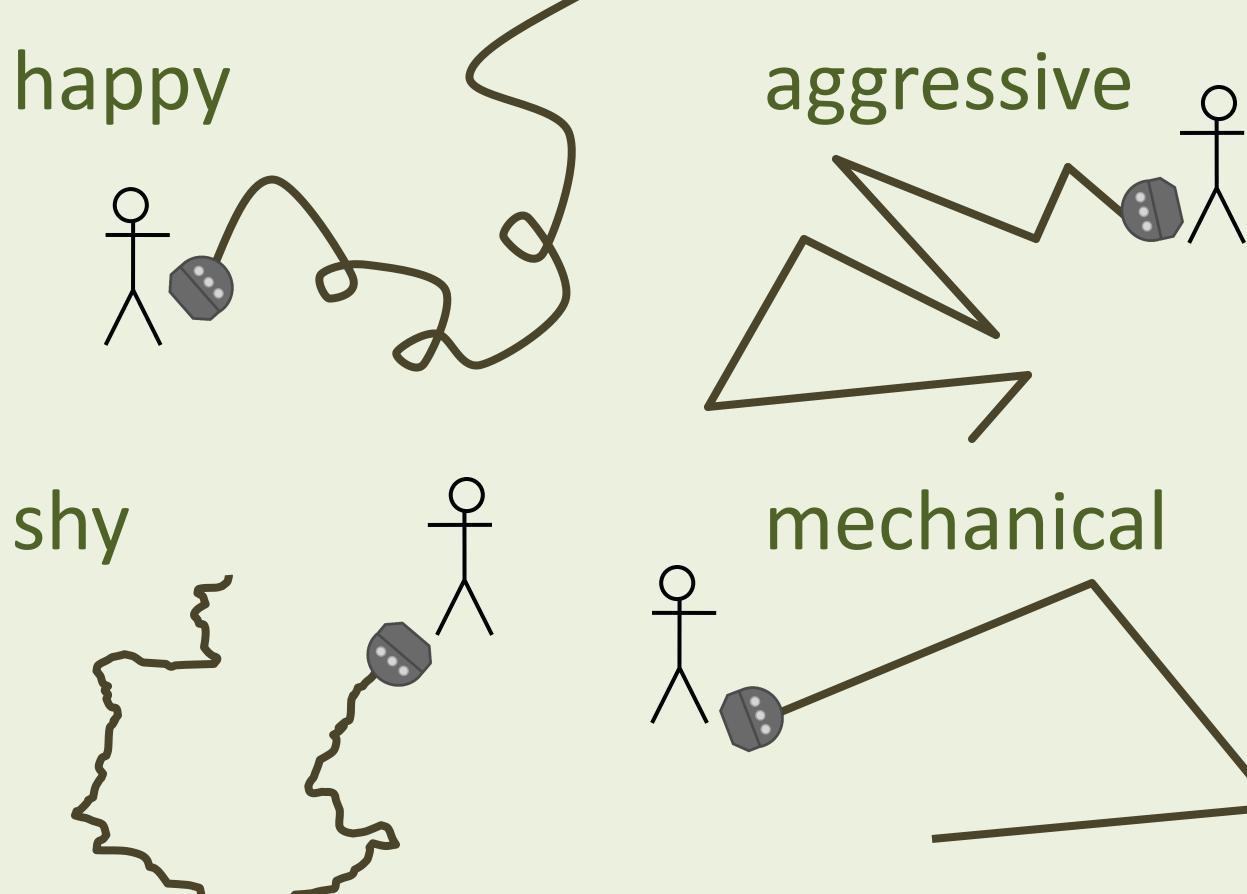
Showing Robots how to Follow People Using a Broomstick Interface

Style by Demonstration in what style should a robot move?



style is a communication medium

difficult to explain, easy to show

Implementation

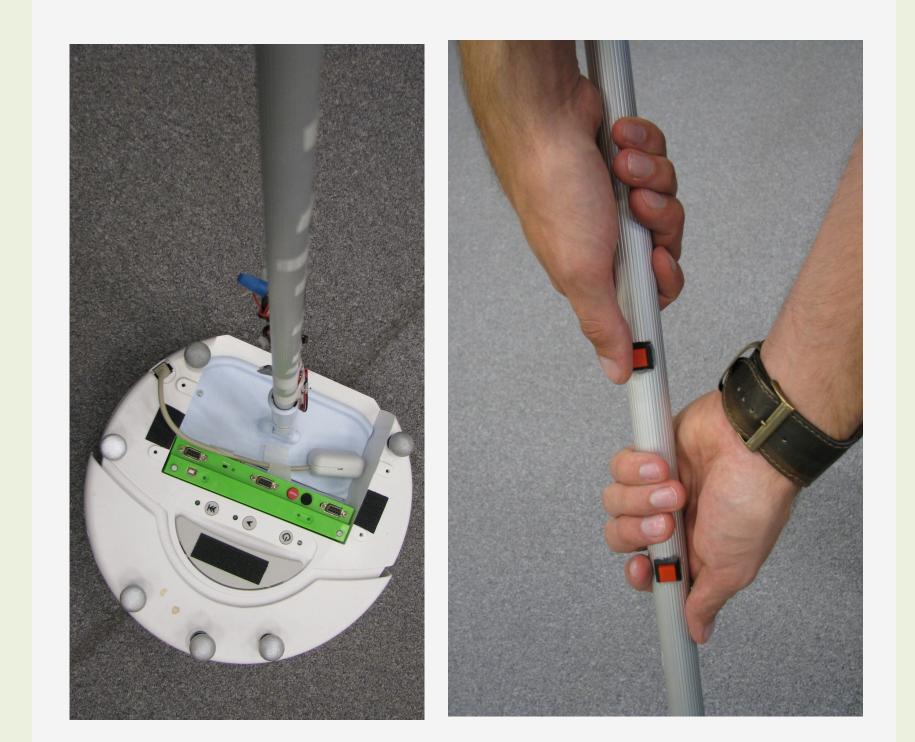


James Young^{1,3}, Kentaro Ishii², Takeo Igarashi^{2,3}, Ehud Sharlin¹ ¹University of Calgary, ²JST ERATO, ³University of Tokyo jim.young@ucalgary.ca, kenta@designinterface.jp, takeo@acm.org, ehud@cpsc.ucalgary.ca

Tangible Interface broomstick interface

enforces robot's movement restrictions

natural and familiar



Puppet Master programming by demonstration

- <1min training, instant results
- Vicon real-time tracking
- iRobot Roombas

Procedure

(1) demonstrate following style to robot

(2) robot follows people in real-time, mimicking demonstrated style

Demonstration





Generation

