

The background of the slide features a light gray silhouette of a group of people in a workshop or meeting. On the left, a person is seated and looking towards the center. In the middle, a person is seated with their back to the camera. On the right, a person is standing and gesturing with their right arm towards the center. The overall scene suggests a collaborative work environment.

Lessons learned from EMSHRI workshops

Evaluation Methods Standardization in HRI
Céline Jost

ReHRI'17

March 6th 2017

EMSHRI organizers



**Tony
Belpaeme**



**Cindy
Bethel**



**Dimitris
Chrysostomou**



**Nigel
Crook**



**Marine
Grandgeorge**



**Céline
Jost**

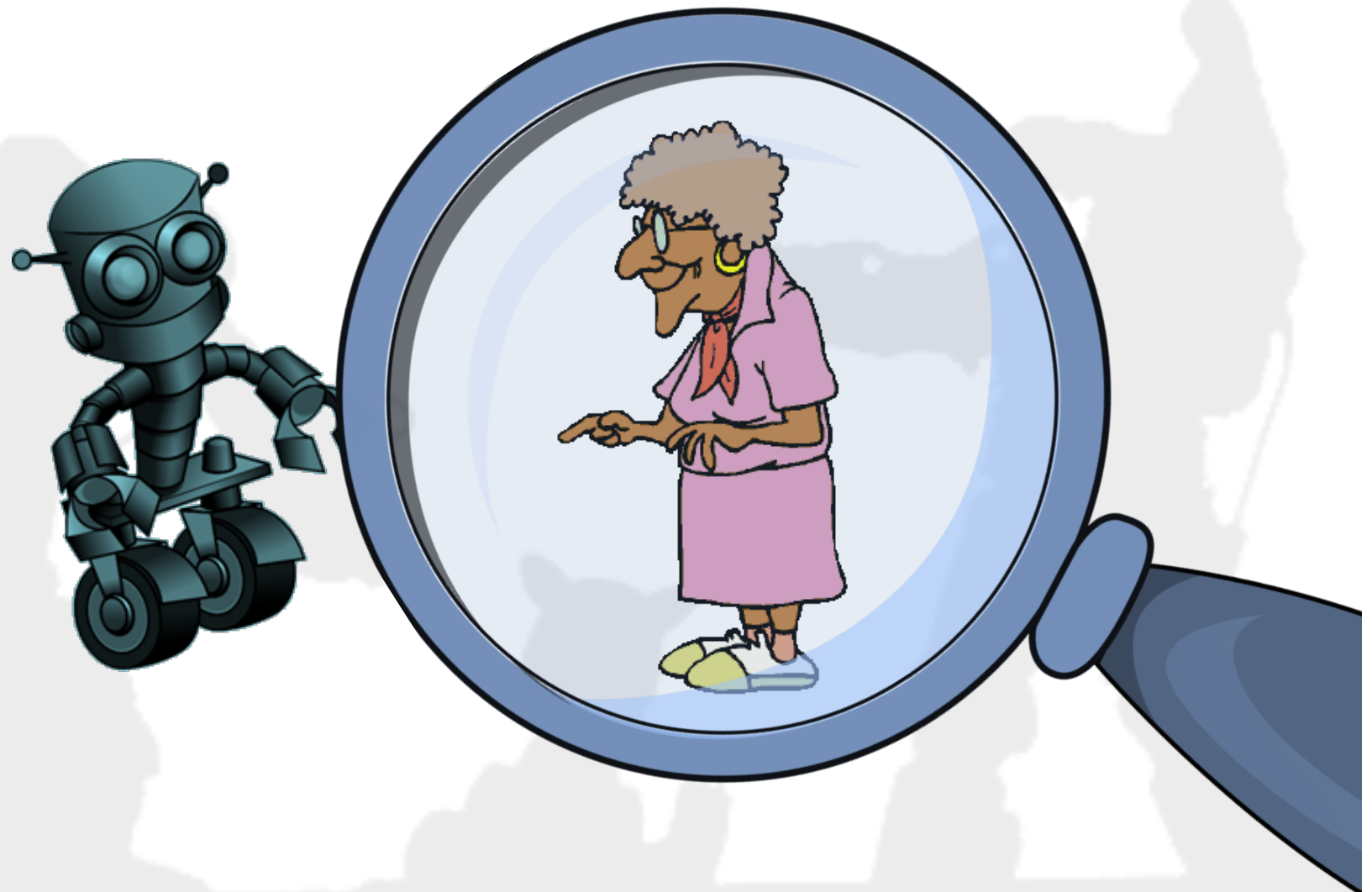


**Brigitte
Le Pévédic**



**Nicole
Mirnig**

Context



Kind of questions

What is the impact of robots on people?

Are people more motivated to do exercises with a robot than with a computer?

What are the role of robots in our future daily lives?

How does a robot have to behave to be accepted by people?

Our objectives

2015

Which are good and bad practices? Common mistakes and biases?
Which methodology can be applicable to Human-Robot Interaction?

2016

How to design evaluations to avoid biases and to insure valid results?
Which methods fit to which scientific questions?

2017?

Which methods, protocols , and questionnaires can be applied to HRI?
Which are rules about statistical analyses?

EMSHRI presentations

Ethology

Objectivity

Good and bad practices

Methods survey

Interpersonal synchrony

Lessons learned from HRI

Interpreting survey

Ethnographic methods

EMSHRI discussions

Need more studies in the real-world context with real end-users

Need to use validated constructs from other fields -> replication studies might be necessary

Need to take into account effect sizes or confidence intervals

Need to consider different user groups

A few words about ethology



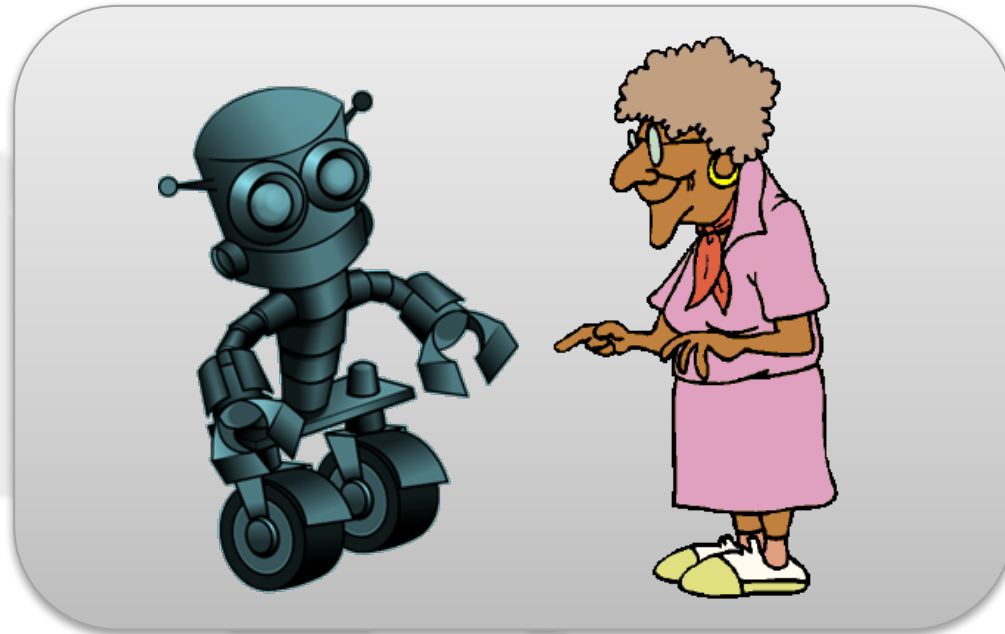
**Scientific and objective
study of animal behavior**

Lorenz & Tinbergen

Finding examples

- Cultural transmission in various animals
- Rudiments of language in monkeys
- Animals, from humans to insects, feel emotions
- Animals have short and long term memories

Ethology point of view about HRI



Robots are becoming a new species that could be studied as such

International book project

