HORIZON 2020 project nº 731726

REELER

Responsible Ethical Learning with Robotics

www.reeler.eu

AARHUS UNIVERSITY
SCHOOL OF EDUCATION DPU

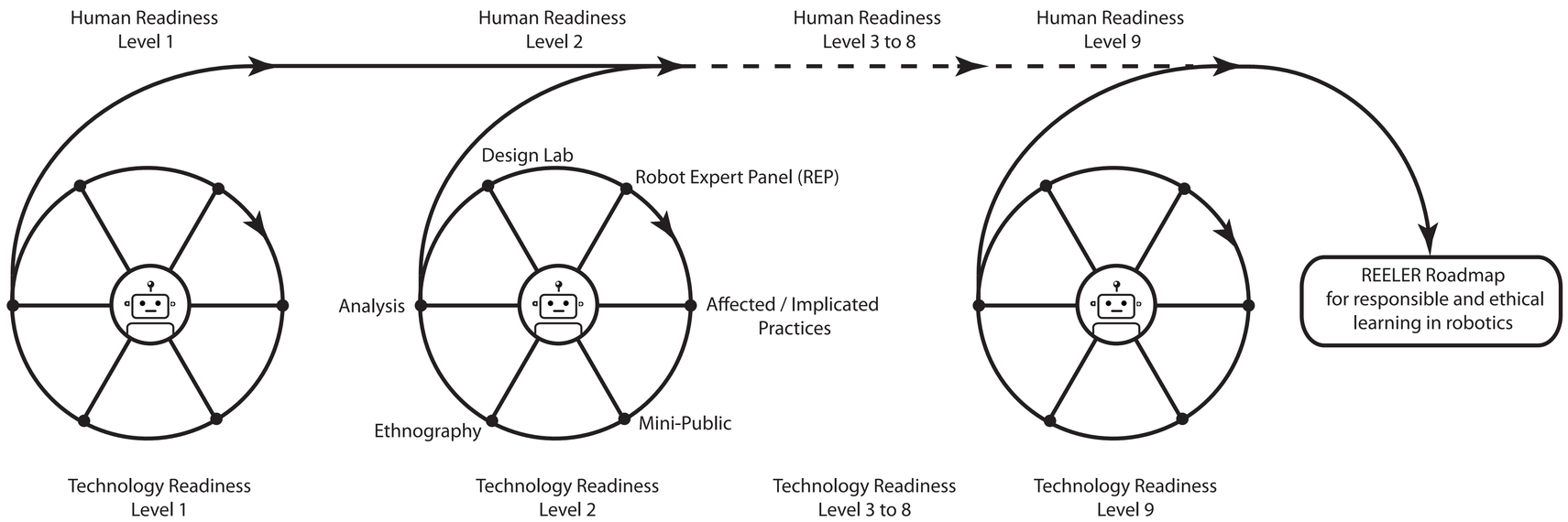
BACKGROUND

Robots are increasingly expected to co-exist with or replace humans. Yet, it is also well known that new technology is often rejected by users or experienced as lowering quality of life because of ineffective design or because it takes over work life. Roboticists' assumptions of the potentials of human users are often formed far from the relevant environments in which the robots are expected to work. It is important to be able to recognise actual underlying differences between humans and machines and build on these in creating proactive responsible and ethical guidelines for human-robot interaction in the future.

Following the Onlife Manifesto initiated by the Commission in 2013, we need a conception of 'distributed responsibility' taking the new human-robot relation into consideration. To enable ethical and responsible robot design, REELER will capitalise on the recent existing research on interdisciplinary collaborative learning as a means to close the gap between robot designers' assumptions of users and stakeholders and their actual situated practices.

APPROACH

Ethnographic fieldwork:
REELER will visit minimum 10 robot sites to observe and interview about processes of design, development and collaboration. In accordance with roboticists, we will present selected case material to directly and/or indirectly affected stakeholders and environment to hear about attitude to, envisaged use and implication of given robot.
REPs & Socio-Dramas:
With 3 Robot Expert Panel (REP) workshops and Socio-Dramas, REELER offers invited roboticists a chance to gain new perspectives on their own R&D on robot technology with colleagues.
Mini-Publics:
An increasingly used way of giving citizens a voice in the growing societal attention to robot-related developments and policy-making. With an annual Mini-Public, REELER seeks to bring closer promixity between the robot community, society and policy-making



OBJECTIVES

The main objective of REELER is to close the proximity gap in human-robot interaction design and
development to ensure a more responsible, ethical uptake of new robots by affecting the process of
robot design.

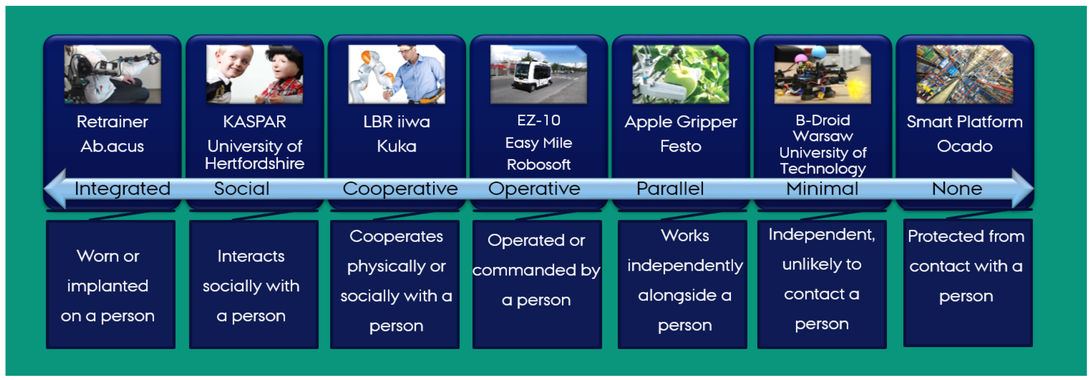
- Introduce collaborative learning as a pervasive concept into the field of Responsible Robotics (RR)
- Introduce 'proximity' as a novel addition to the concept of collaborative learning
- Study and unfold poss. assumptions in robot design about e.g. users, stakeholders, societal needs and concerns,
- Ensure a new simulation tool for addressing societal concerns and aid policy-making as use collaborative learning, as a core concept for developing best practice in SSH-RRI/ICT-Robotics collaboration building on common knowledge and relational agency.

IMPACT

Integrating the recommendations of the REELER Roadmap for responsible and ethical learning in robotics in future robot design processes to address human needs and societal concerns in the European community.

- Powerful instruments able to foster networking and exploit potentialities of future robotics projects.
- Setup of a more robust design process, proactively including implicated practices
- Awareness of new tools for more effective user involvement in prototyping
- Increase awareness of ethics and learning in the robotics (and SSH) community and well as society
- Early clearance of potential ethical issues
- Clear identification of issues specifically related to different Technological Readiness Levels

HUMAN PROXIMITY SPECTRUM



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