What do people expect from a robot?

Person constructs expectations based on observation. Constructed expectations may not match real capabilities.

How can we describe this expectation discrepancy?

Emission of Potential Capability
- **Life-like** – Inspired by life. Static human, animal or insect-like features. Dynamic interactions (e.g. waving, telling a joke).
- **Consequential** - Specific elements relating to functional requirements (e.g. visible sensors, large wheels, stable form).
- **Exposition** – How the robot is introduced, including proposed usage, tasks, media influence, specific keywords (remote controlled, autonomous, etc.). Robot also can self-introduce.

**Future research questions:**
- How can we avoid issues of disappointment, misplaced trust or negative affects on robot acceptance?
- How can we leverage social interaction techniques while controlling the resulting expectations?

Construction of Expectations
- **Physical Ability** – Expected movement ability, noises, sensing, advanced tasks like writing with a pen, robustness / fragility.
- **Computational Ability** – Can save and retrieve data, perform calculations, logical decisions, using the internet.
- **Non-Social Cognition** – E.g. an autonomously acting robot, may be able to learn and engage with its environment.
- **Emotional System** – Synthetic emotions and ability to express them (smile, frown,..).
- **Social Interaction Ability** – Talking, sign language, gestures, eye gaze in social situations.
- **Pseudo-Consciousness** – Impressions of the robot having own intentions, goals, self-awareness, creativity.

→ Build useful tools and measurements to further explore and analyze expectation discrepancy