BEHAVIOUR
SOCIAL ROBOT CO-DESIGN CANVASES
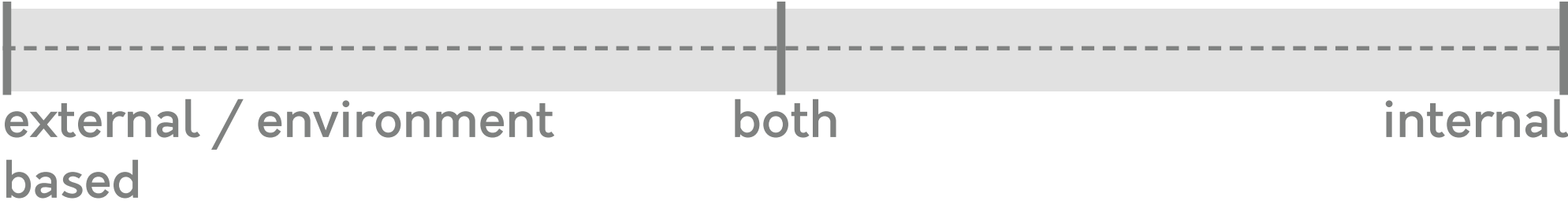
What factors guide the robot's behaviour?

Robot's role

Is the robot a friend? Teacher? Helper? Something else?

Motivation

How is the robot's behaviour motivated? Is it based on external data, internal models such as personality, or both?

external / environment based   both   internal

Personality

Does the robot have specific characteristics? Does it have emotional states, or needs?

⚖ TRADE-OFF:
More personality creates more emotional bond.

Mode of operation

Is the robot operating by itself, or is a human affecting behaviour? Is a human in full control?

⚖ TRADE-OFF:
A human-operated robot requires a good user interface, an autonomous robot requires a good control logic.
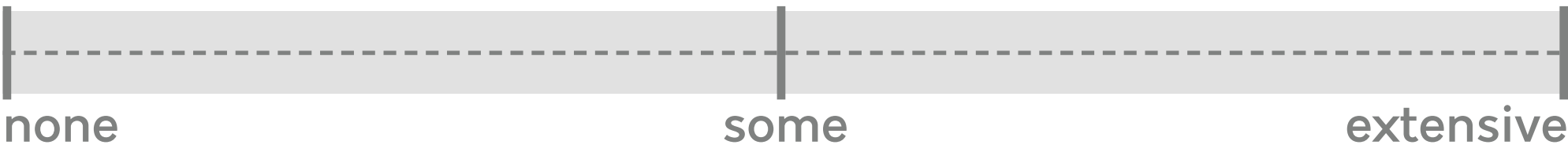
fully human-operated   partial human control   autonomous
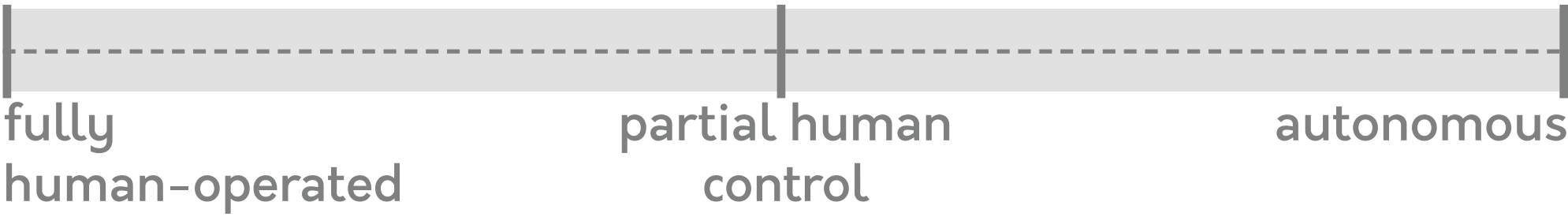
Social skills

How good are the robot's social skills: does it greet a new person and ask their name? Does it follow people with its gaze?

⚖ TRADE-OFF:
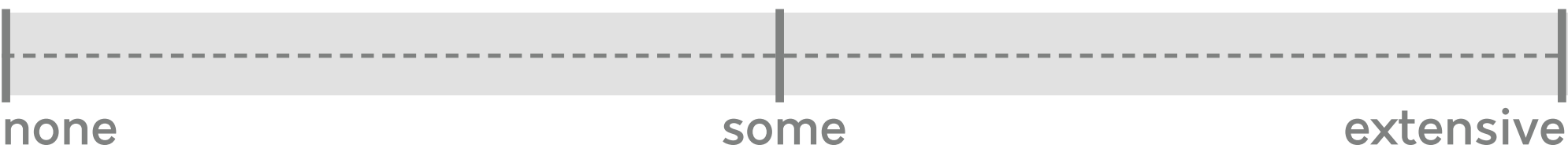Extensive social skills require a more sophisticated robot.

none   some   extensive

Social behaviours

What social behaviours does the robot exhibit?

Contextual adaptation

Does the robot's behaviour vary according to context, e.g. by weather or time of day?

⚖ TRADE-OFF:
More contextual adaptation requires a more sophisticated robot.

none   some   extensive

Context-based behaviour

What external and environmental factors affect behaviour? What data is used to adapt to context?

Personalization

Does the robot behave differently toward different people? Does it need to remember people, and store their data?

⚖ TRADE-OFF:
More personalization requires more personal data from the user.

THRI paper: