

# BEHAVIOUR

## DESIGNING A SOCIAL ROBOT

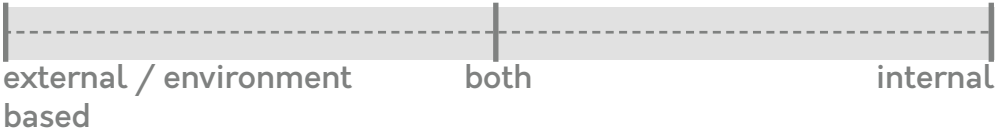
What factors guide the robot’s behaviour?

### 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?



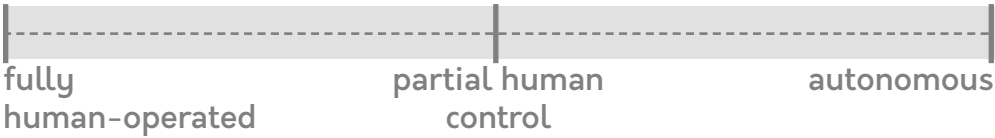
### Mode of operation

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.



### Personality

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



TRADE-OFF:

More personality creates more emotional bond.

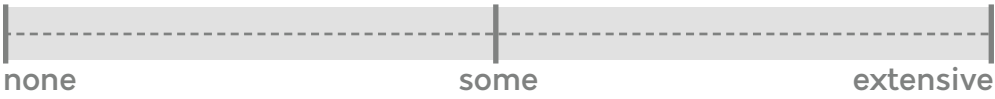
### Social skills

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.



### Social behaviours

What social behaviours does the robot exhibit?

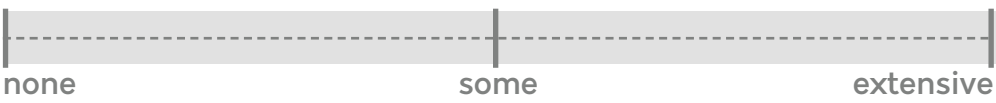
### Contextual adaptation

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.



### 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.

