

robotics
by design

AI, Robots & Humans ?
Ecologies of living together



Manifesto

“Our goal is to imagine real life scenarios in which stakeholders, in their day-to-day life, get to interact with artefacts characterized by their autonomy and a life of their own. Observing these relationships and life experiences will allow us to build new ecologies of living together.”

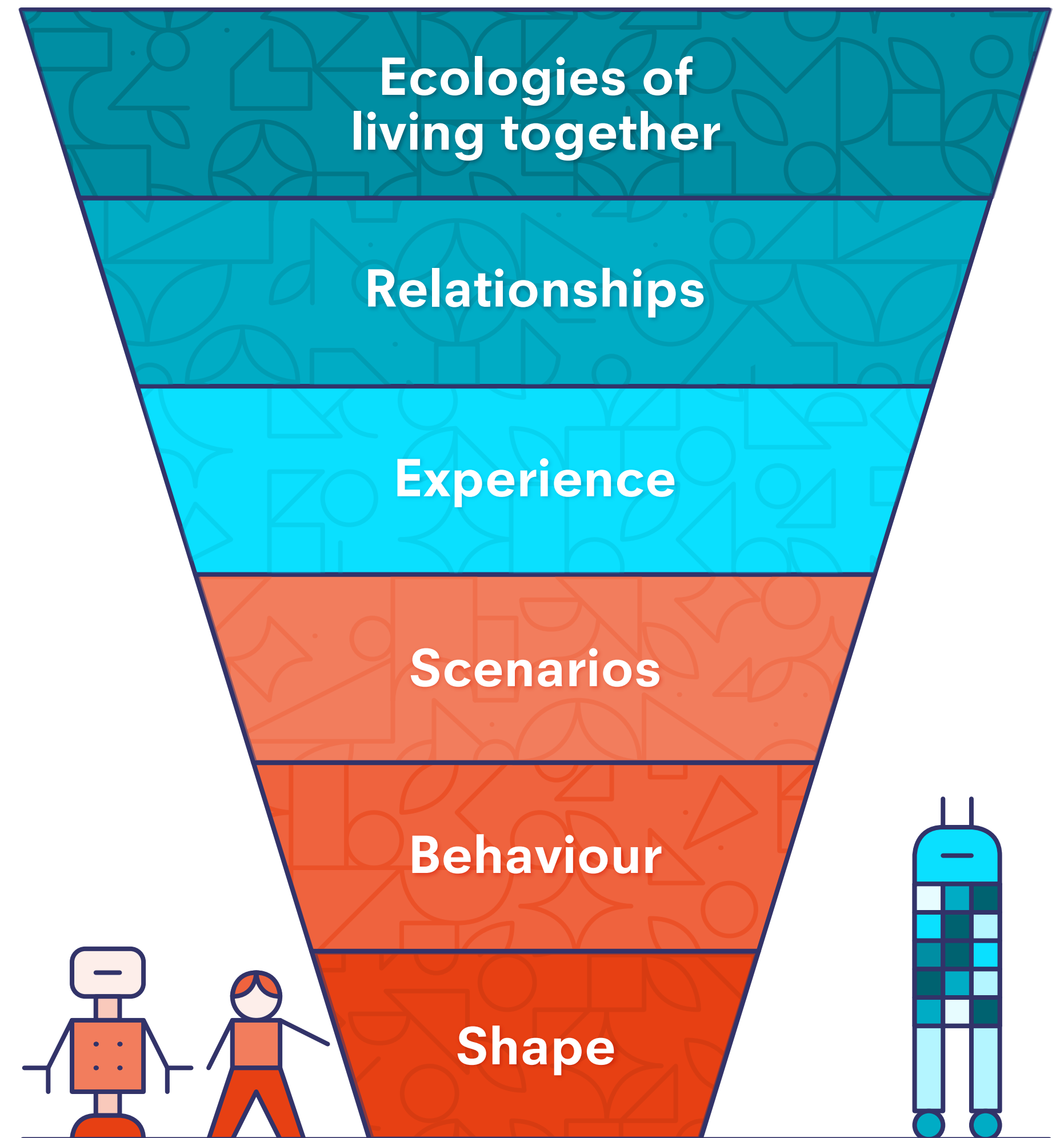
AI and robotics were scientifically born more than 60 years ago, but they are now a technological, economic and social reality. Today is a crucial moment in human history, as much scientifically as culturally. Beyond a techno-centered imaginary scenario or the perspective of living under the benevolent care of empathetic artefacts, we **urgently need to study and anticipate further paths for a world shared with robots.**

Design brings forward the user experience and becomes a **mediator between technological advances and**

human society search for meaning.

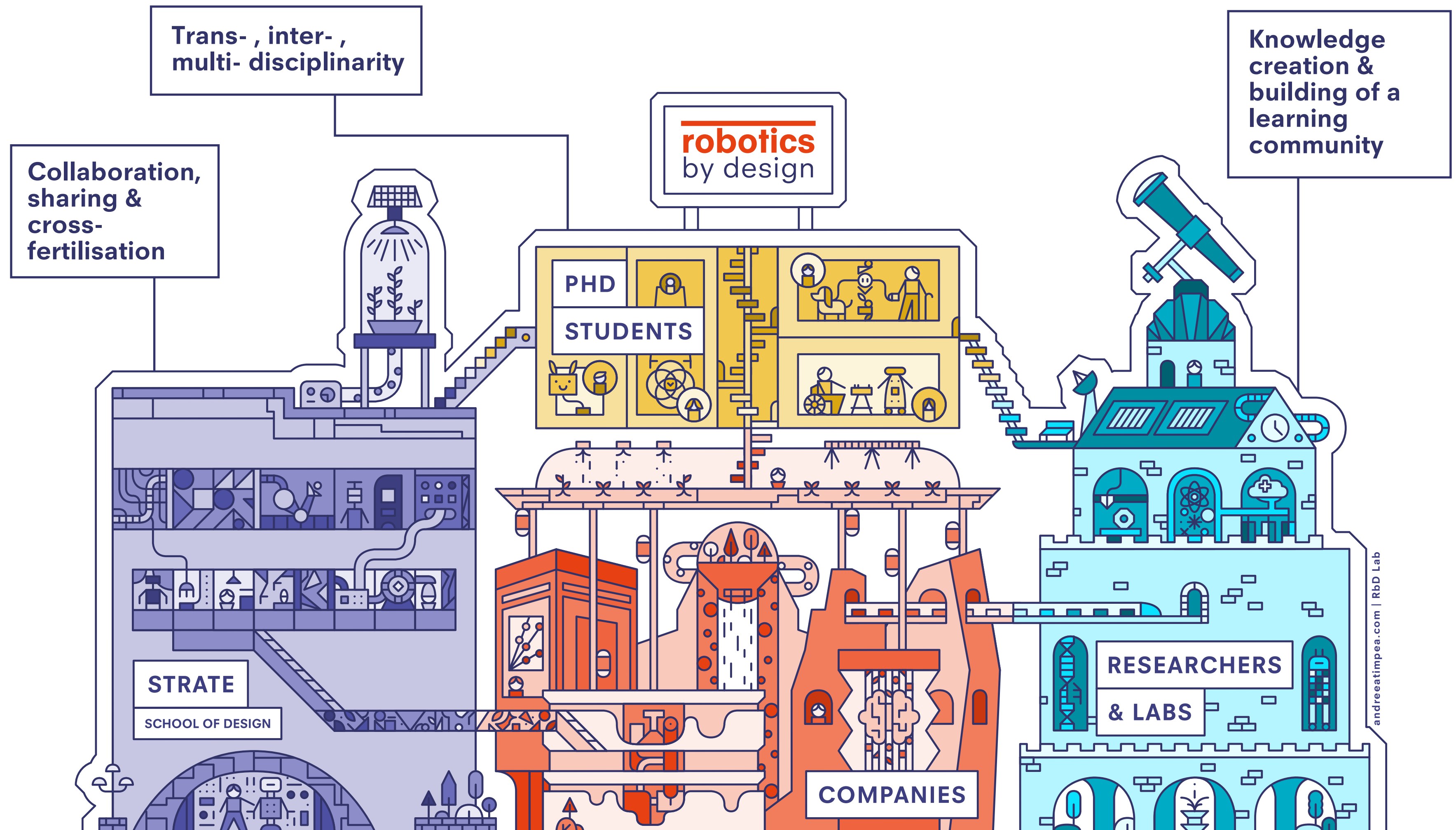
Thanks to its ability to use creativity to imagine new narratives, **Robotics by Design Lab (RbD Lab)** aims to **envision, create, experiment, and prototype concrete life situations featuring emerging technologies in the short, medium and long term.**

Through a **multidisciplinary approach**, RbD Lab asks fundamental questions about the **roles, interactions and relationships between humans and technologies, to invent a new ecology of living together.**



DESIGN + ROBOTICS + AI + SOCIAL SCIENCES

A common lab, shared knowledge



Active industrialists, hosting PhD students, trained and managed by Robotics by Design Lab partners, researchers and academic labs.

FOUNDER



PHD DIRECTION



DESIGN PARTNER

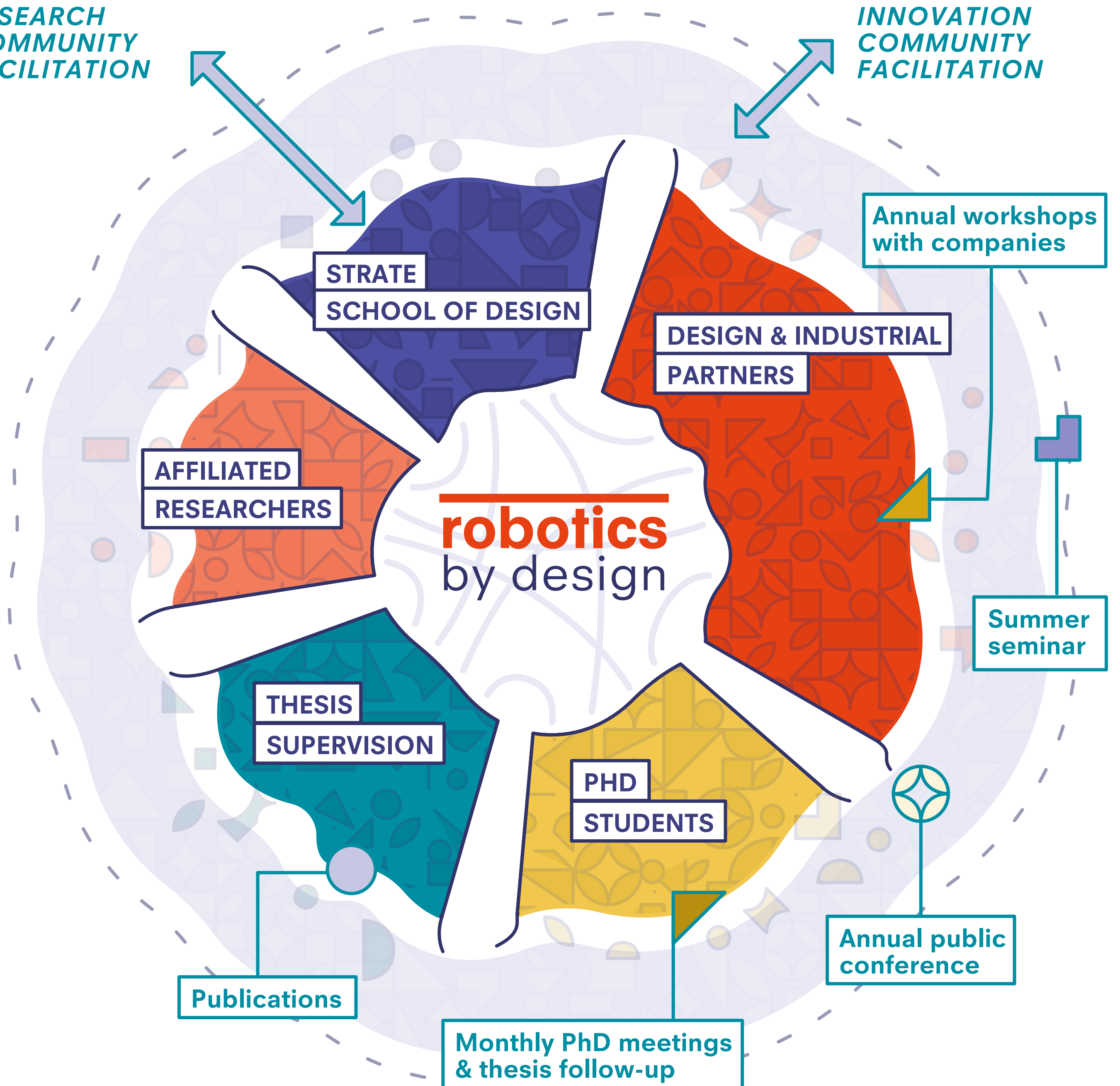


INDUSTRIAL PARTNERS



RESEARCH
COMMUNITY
FACILITATION

INNOVATION
COMMUNITY
FACILITATION



Operations & (inter-)actions

PhD projects

design & sociology

How can AI and robotics contribute to improve the quality of life in nursing homes?

psychology & design

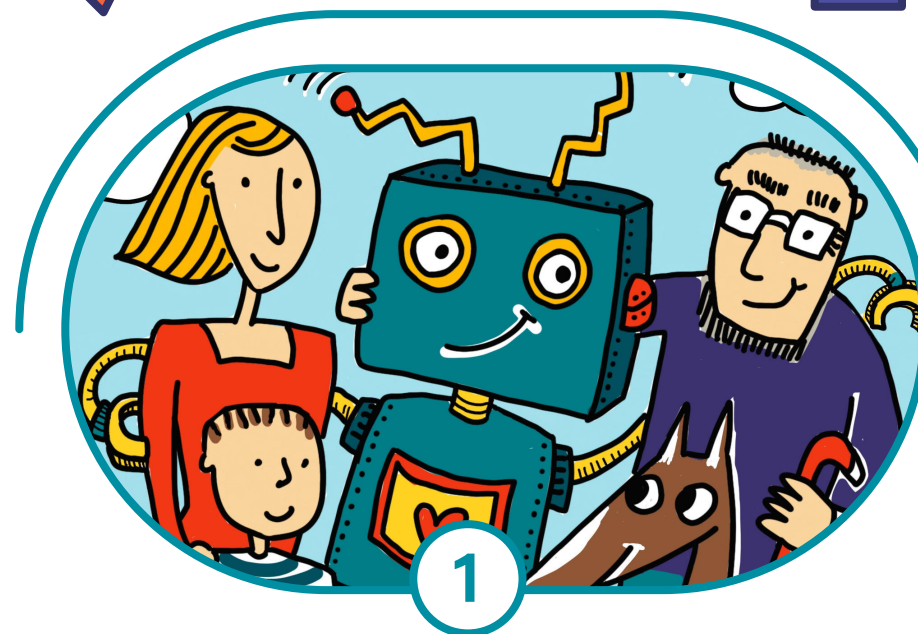
"Ikigai" robotics: A lever to increase workers' engagement and assure a high industrial performance.

robotics & design

Using AI and robots to preserve the pet-human relationship and support ageing well at home.

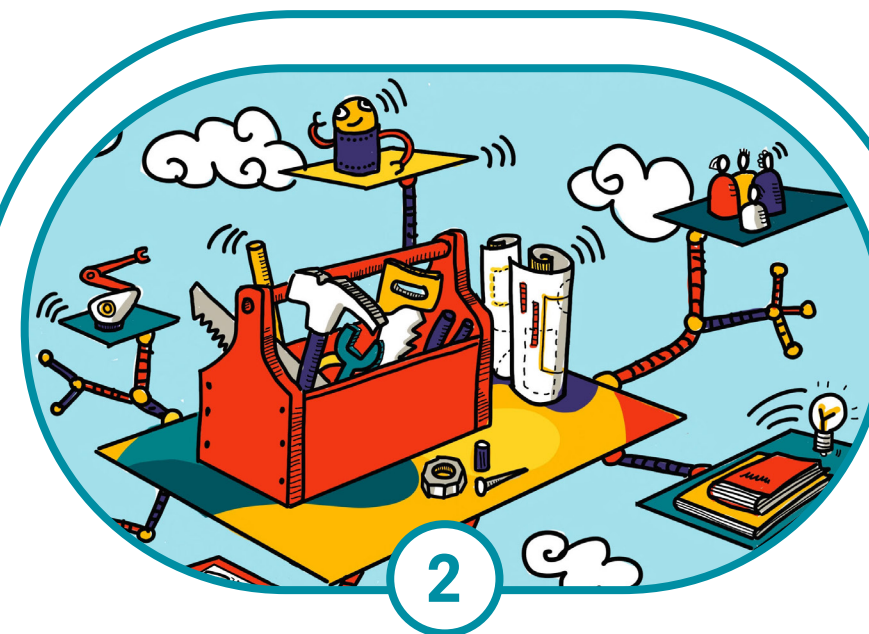
robotics & design

Behavioral development model for smart creatures in contextual, social and collective interactions.



Ethics by design

To represent and question the ecology of living together with new technologies (robots and AI): imbalance, new balance, organization models in a holistic approach.



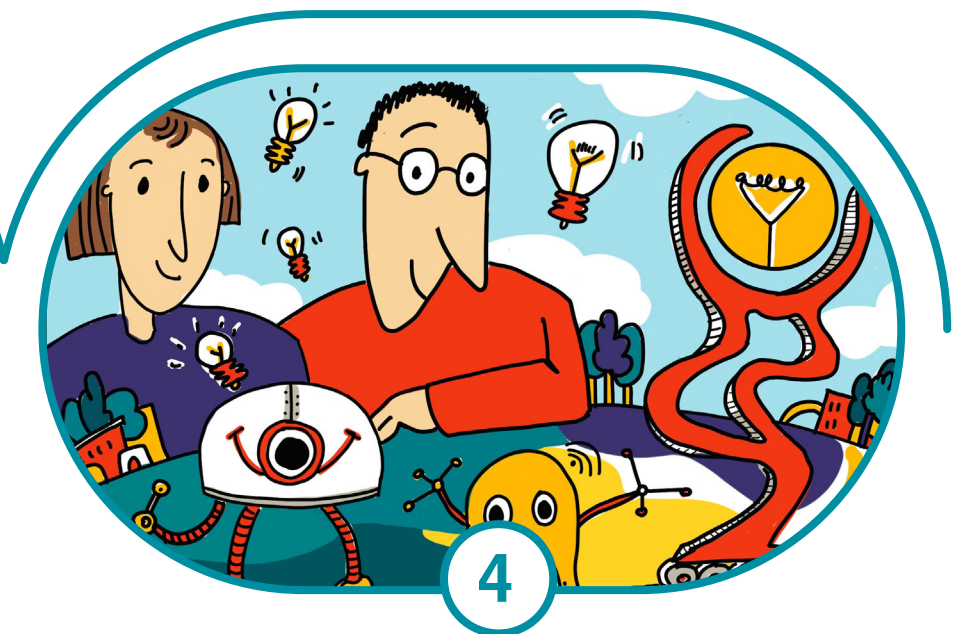
Design for robotics and robotics by design

A common experimentation platform to test and implement a new pedagogy, methodology, and tools for research projects and new jobs spanning both disciplines.



Modeling imaginary worlds

To confront the imaginary and technical realities of robotics to challenge and create valuable representations of what User-Centric Robotics could mean.



Embodiment of robots

Appearances, interactions, behaviors and roles: data and representations, from objects to systems and from systems to objects.

Research themes

Activities and benefits

Tangible benefits for the **RbD** partners:

-  **10 doctoral** meetings per year: joint working group of PhD students
-  **Thesis supervision.**
-  **1 dedicated annual workshop per lab partner** to help infuse innovation inside each company.
-  **1 Summer camp** to work on high-priority themes
-  **1 Annual public conference** to present the RbD lab work and outputs.
-  **4 transversal research themes** for all partners
-  **International recognition** in robotics thanks to **research publications**
-  **Business operational excellence** improvement
-  Expansion of **companies' customer base**
-  **Employee training** on **innovation by design**

Intangible benefits for the **RbD** partners:

-  Increase in the **company's knowledge of innovative topics** in robotics
-  Get the **latest academic and industrial knowledge** from renowned academic partners
-  **Share knowledge and best practices** with a group of experts
-  **Cross-fertilisation & open innovation** with actors in different sectors of activity
-  Share **testing grounds** for AI and robotic applications
-  Open new avenues for **industrial collaboration** between the lab partners
-  Change by **design through cultural integration** workshops
-  Contribute to **brand image**
-  Benefit from shared work with **public and international research labs**

