

INF03 User Experience Design

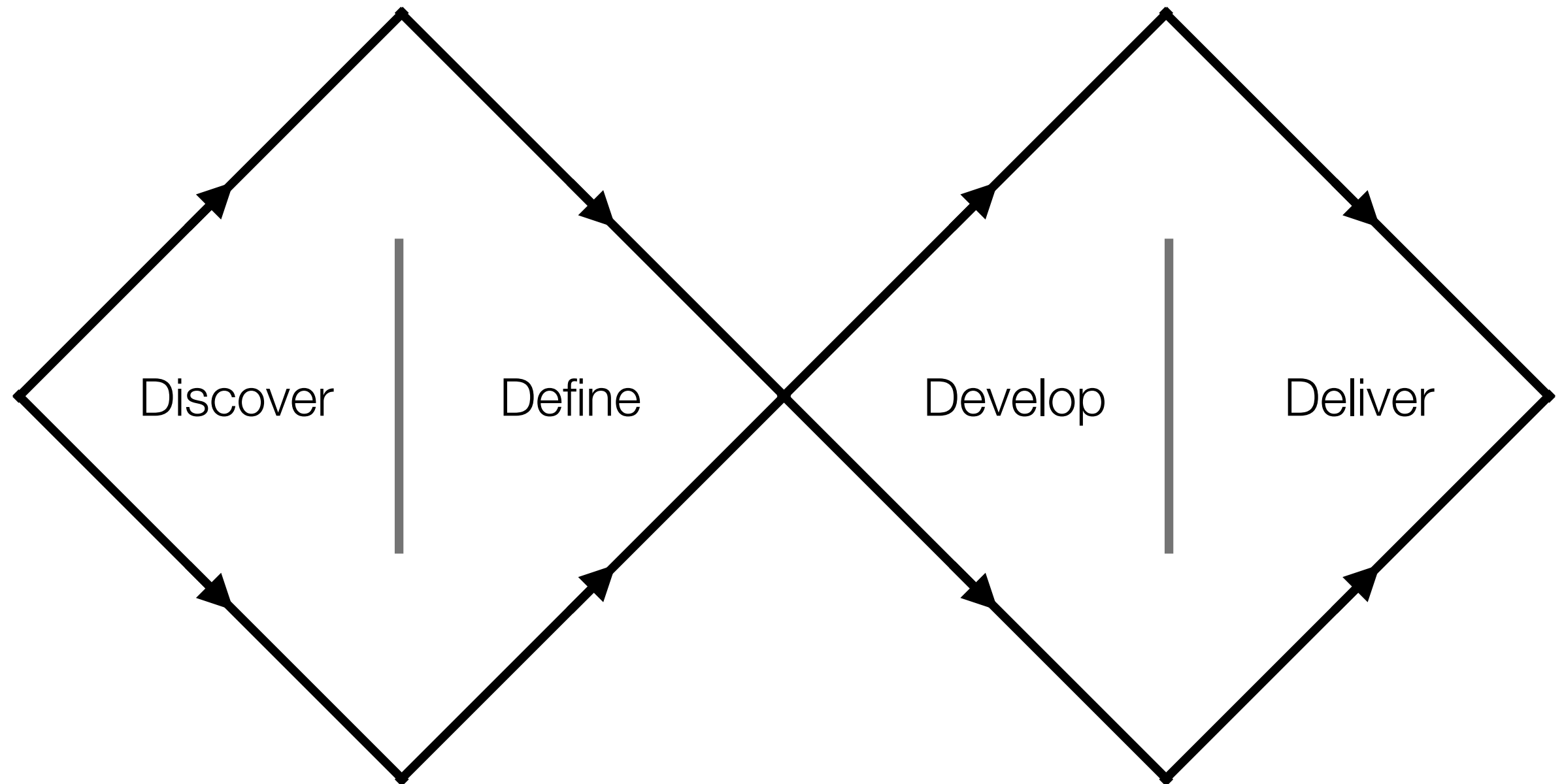
3. Approaches to UX

Aurélien Tabard

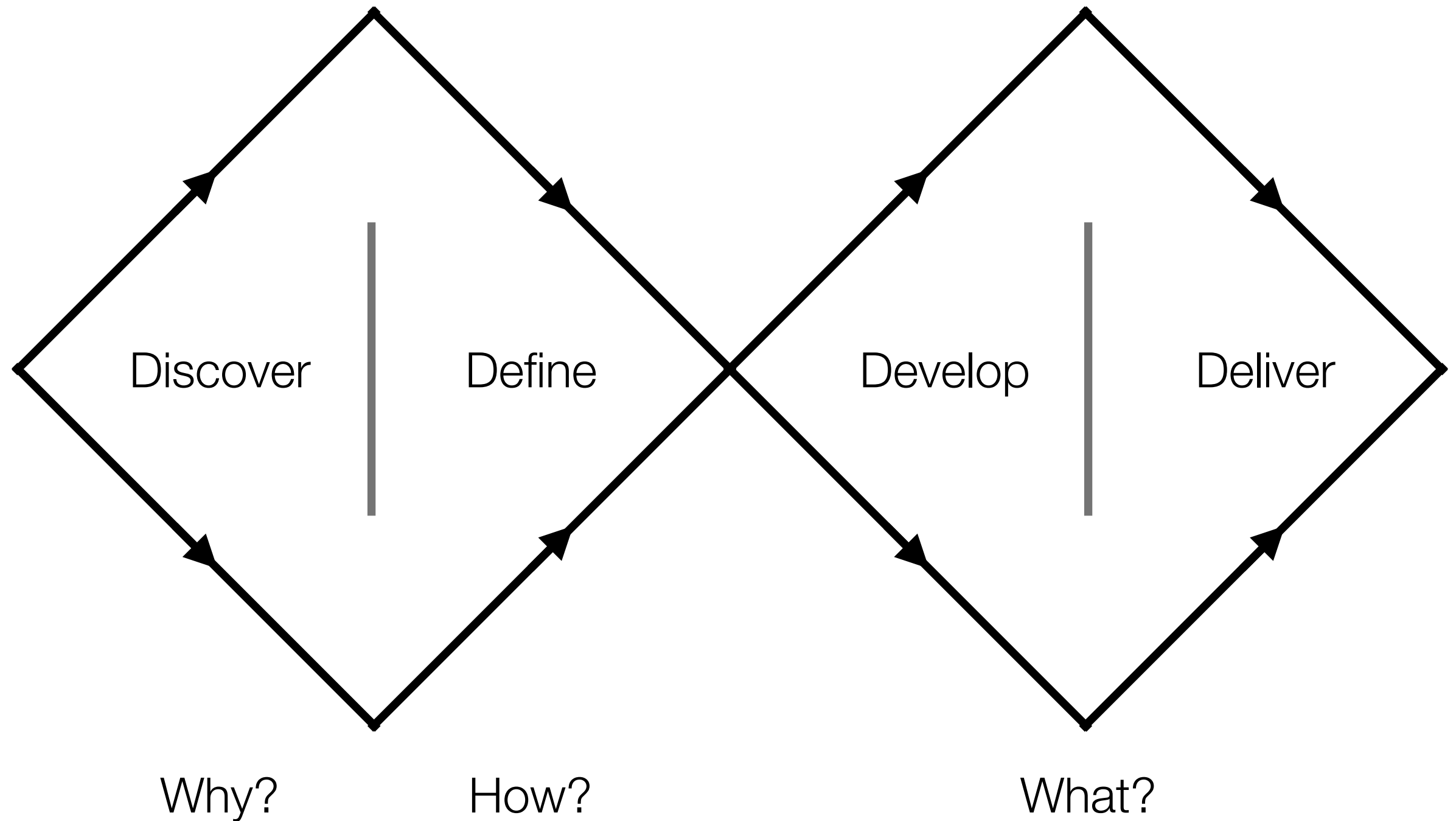
Approaches to UX

1. General approach
2. User centered design (UCD)
3. System Design
4. “Genius” design

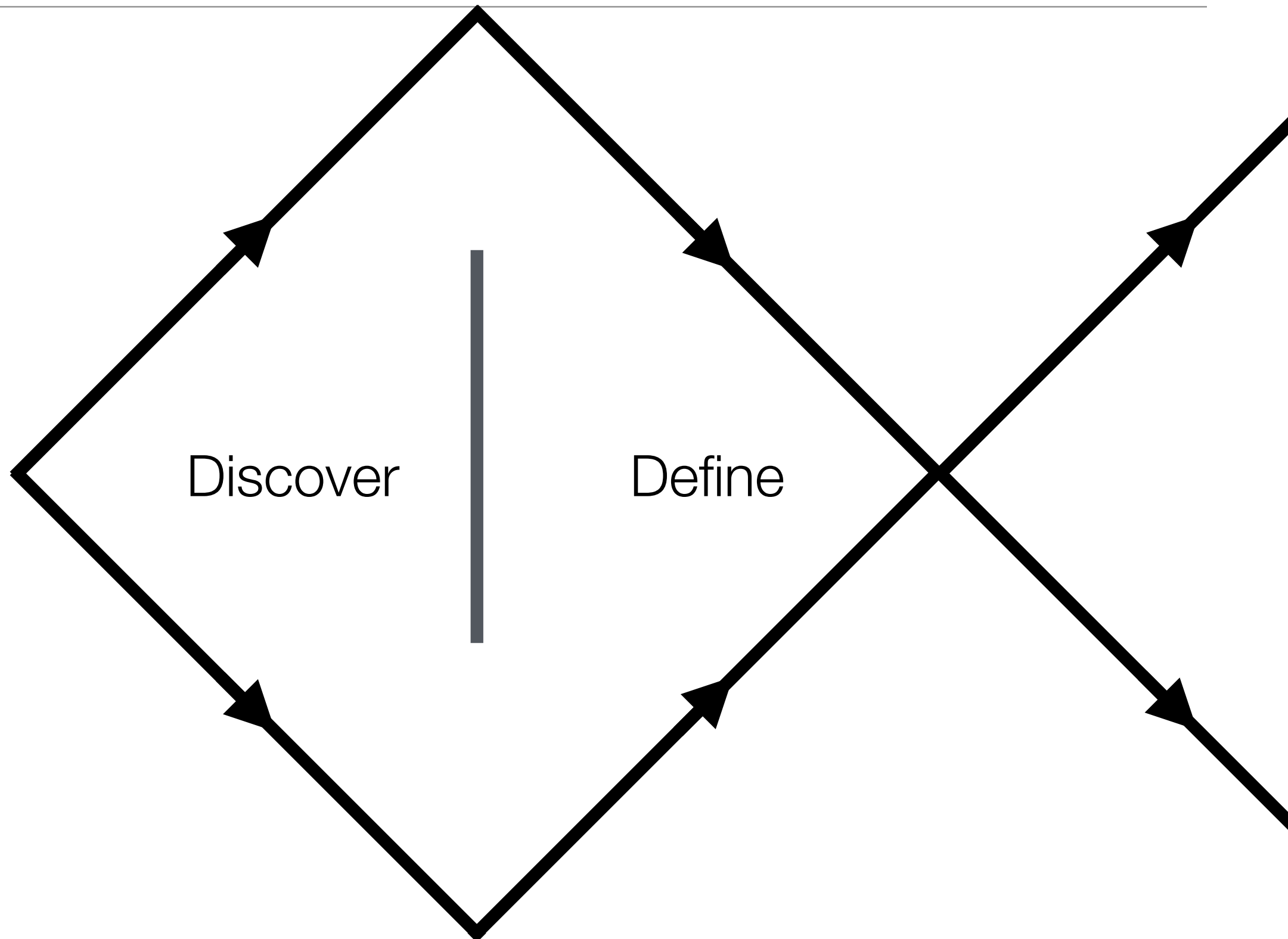
Double diamond



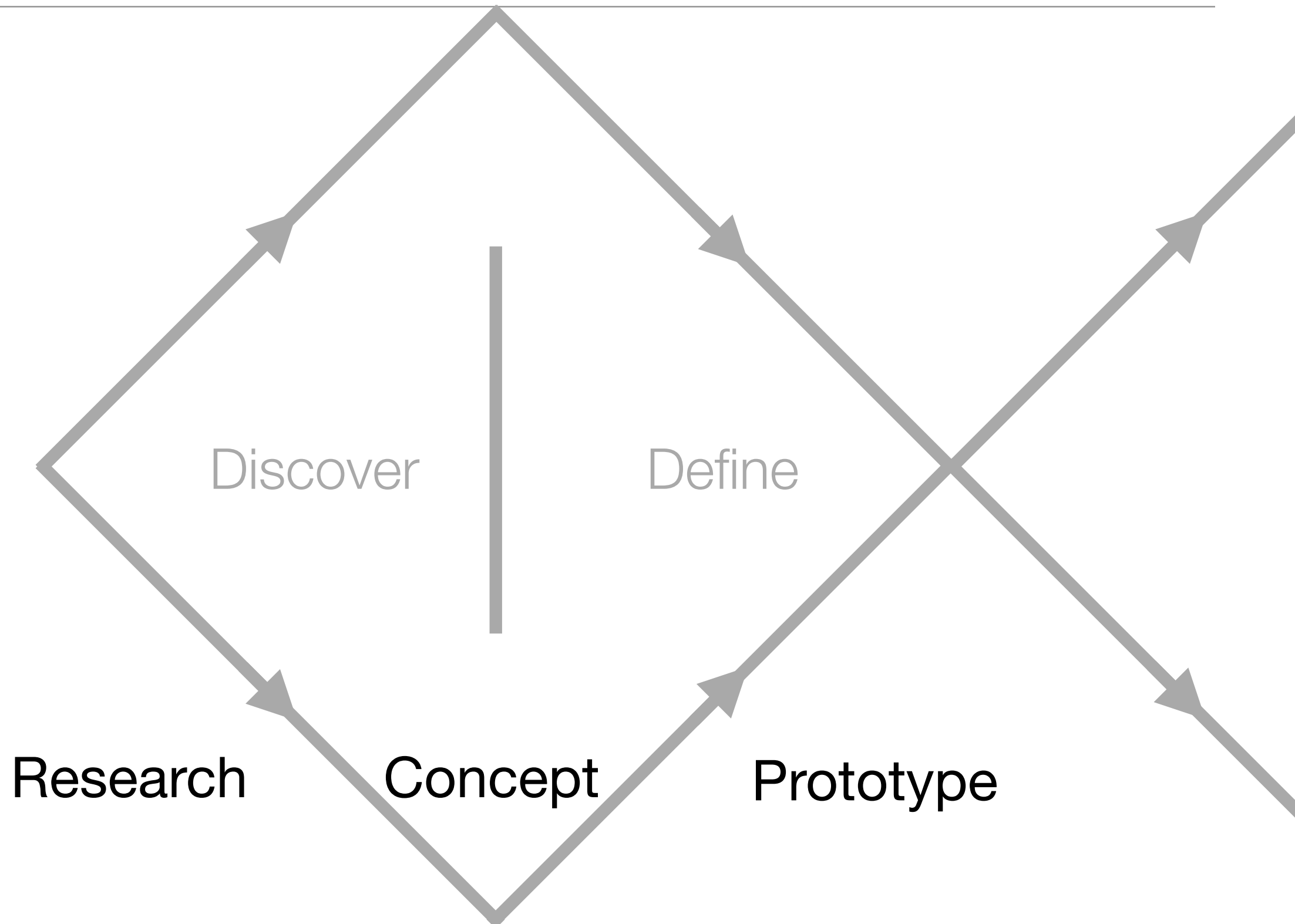
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Double diamond



Questions influencing the approach

What are designers' goals?

- ▶ Practice or research

What is the role of designers?

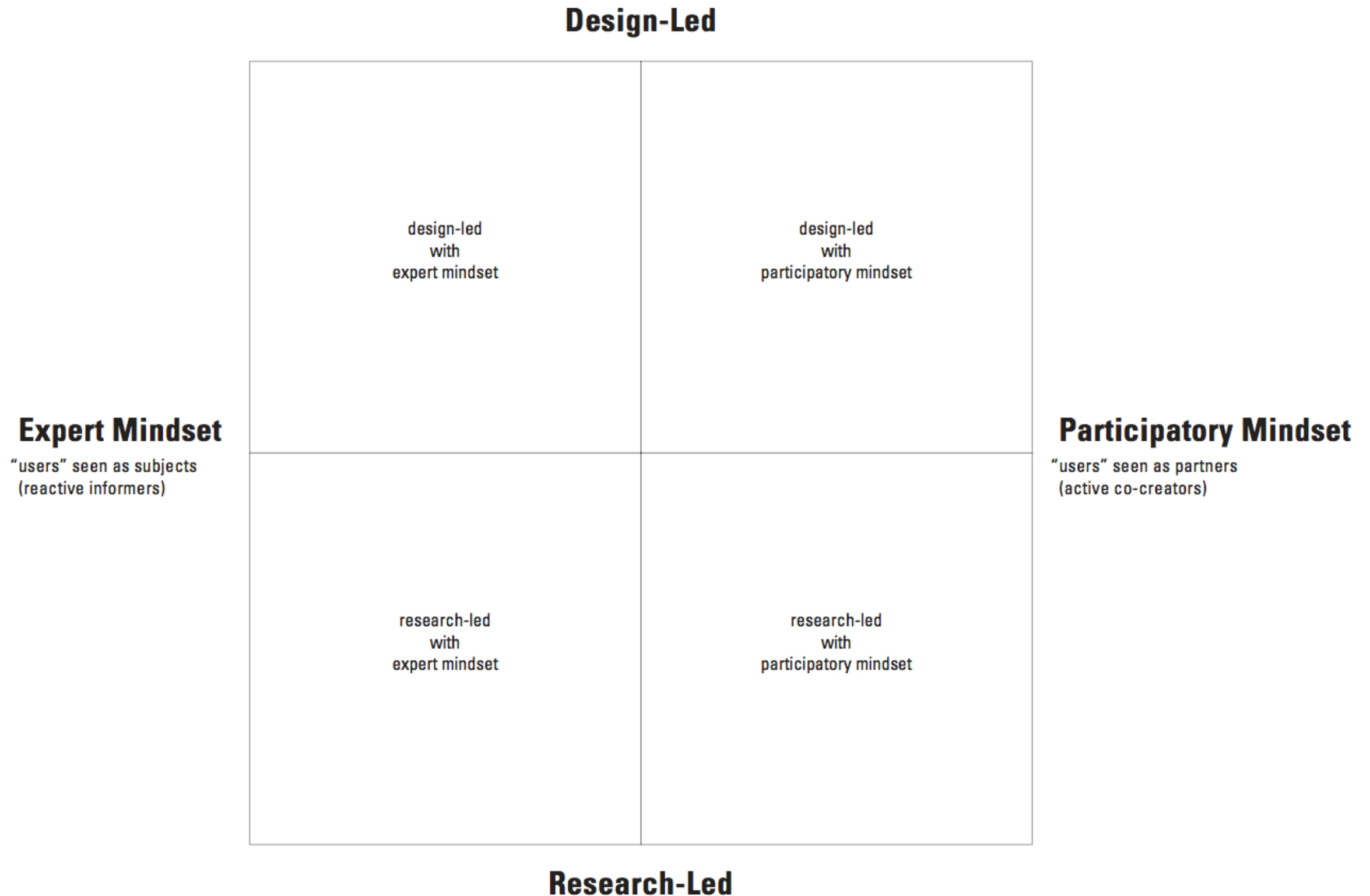
- ▶ expert or facilitator

What is the role of users?

- ▶ client or participant

Dimensions

Sanders, E. An Evolving Map of Design Practice and Design Research. In ACM Interactions 15,6 2008



Approaches to UX

- ▶ Can be used in a wide variety of settings: health systems, Web sites, système de santé, site Web, électroménager...
- ▶ Switch approach depending on context
- ▶ Combine approches when needed
- ▶ Complex situations can be improved by leveraging various approaches

Approaches to UX

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The Microsoft Mouse



Paul Bradley

- ▶ Design the “Microsoft Mouse”
- ▶ Follows a user-centered process
- ▶ Helps designers develop prototypes at IDEO

User centered design

Philosophy : Users know best.

- ▶ People using products know their needs, goals and preferences better.
- ▶ **Designers are not users**
- ▶ User involvement in every phase of the design process
- ▶ Roots in industrial design and human factors
see H. Dreyfuss book “Designing for People” (1955)

User centered design

- ▶ Long ignored in computer-related design
- ▶ Slowly gains importance with the development of personal computers.

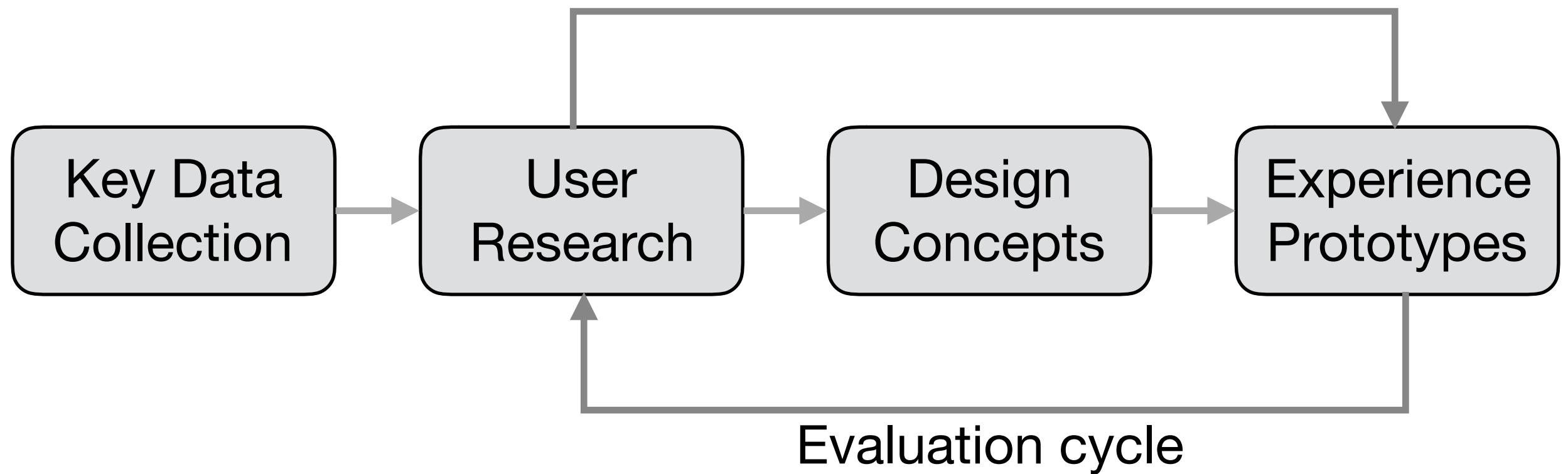
Basic principles

Initial focus on users and their tasks: cognitive and behavioral aspects, social ones...

Empirical approach: observe and analysis of users' reactions and performances with scenarios or prototypes.

Iterative design: identify quickly problems to fix them early.

User-centered process



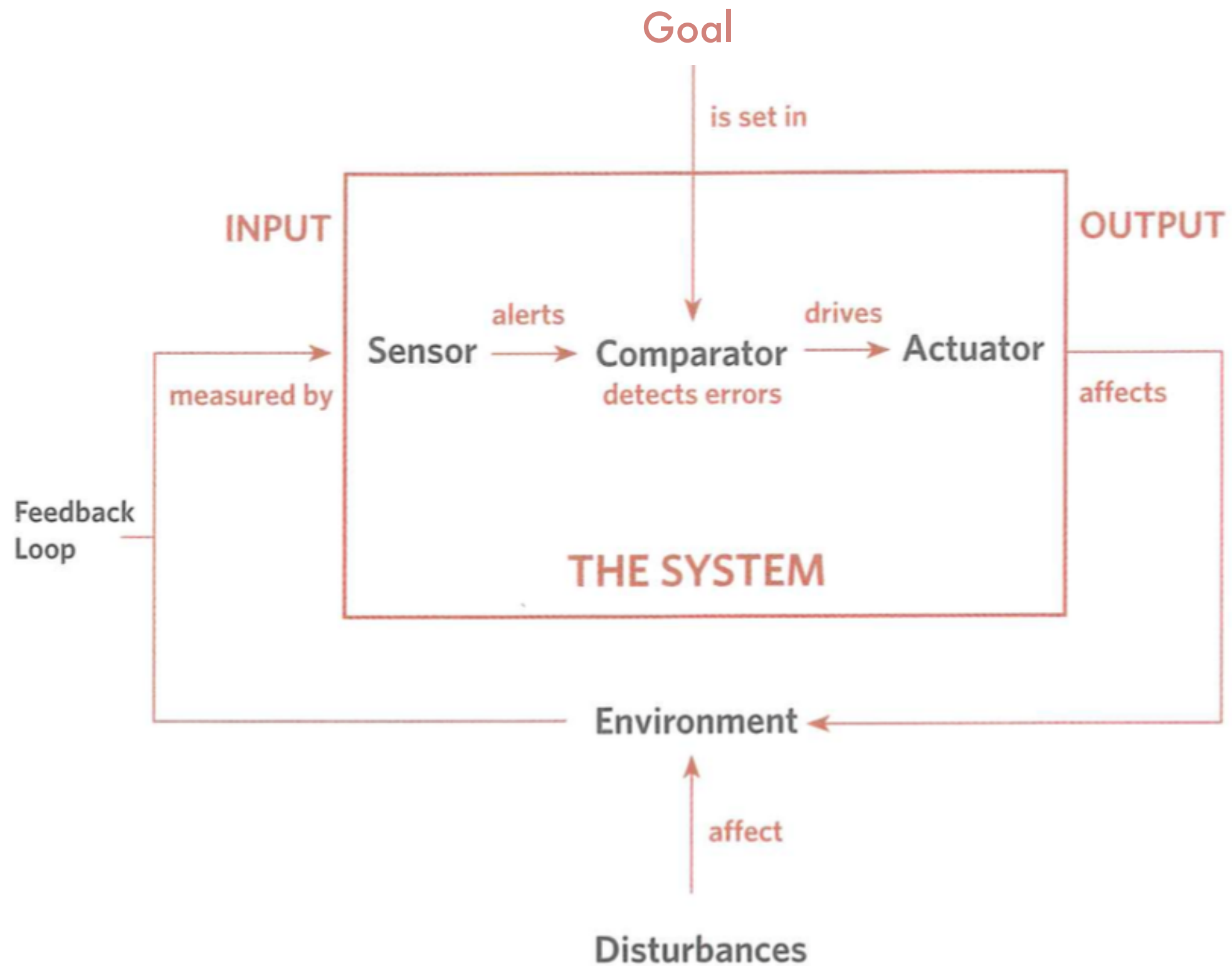
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System design

- ▶ Analytical approach
- ▶ The elements (humans and technical) interacting with each other are at the center of the design process.
- ▶ Systems can be simple, e.g., heating or complex, e.g. transportation network
- ▶ Especially useful on complex system involving a large number of actors.

Design systémique



Applications of system design

- ▶ Information architecture
- ▶ Service design

More broadly :

- ▶ Focusing on context of use and the interactions between various components (human or technical) enables designers to better understand the product or service being designed.

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“Genius” design

- ▶ Design relies almost solely on the wisdom and experience of the interaction designer making the design decisions.
- ▶ Probably best practiced by experienced designers who have encountered several types of problems and can draw solutions from previous design issues



http://upload.wikimedia.org/wikipedia/commons/1/11/iPod_family.png

Jonathan Ive



Other approaches

- ▶ Participatory design
- ▶ Critical design
- ▶ Task centered design
- ▶ Activity centric design
- ▶ ...

