«Design for Dasein»

How can we understand and study experience?

UIO, Jan 20th/Jan27th, 2022

Introduction

Today’s lecture

- About the course, course contents, assignments and assessments
- About us
- We are studying technology design, what do we need phenomenology for?
- About phenomenology
- Frameworks
- Dourish
- Reading for next week

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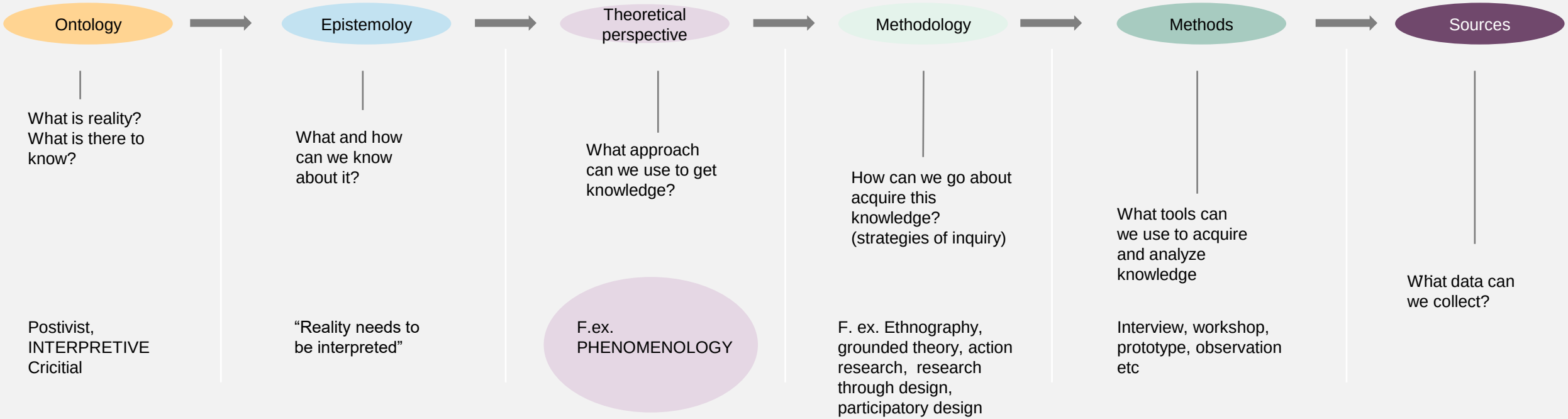
‘”The only way to experience an experience is to experience it.”

-Bill Moggridge

Phenomenology seeks to understand the world as it is interpreted by and through human consciousness.

It’s an attempt to understand the way that human existence is part of the larger world around it.

Paradigms, methodologies and methods



Course outline

This course introduces phenomenology as an approach to understanding our experiences with technology. Phenomenology as a branch of philosophy studies subjective experiences, that is how we experience ourselves in our surroundings, how we experience our relations with other people, how we experience our relations with technology and so on. In trying to understand human experience, phenomenology puts emphasizes on the role of embodiment in human perception and cognition. For designers, phenomenology is useful as the artifacts and tools we make, affect the way people experience themselves and their surroundings. Phenomenology gives us a way to understand, describe and represent our experiences with technology as designers and users.

Relations

People as beings in the world, what does this mean for us as designers of technology, how does our physical and social environments, including the things and technology in such environments matter for experience?

Familiarity

How do we relate to and recognize things, interaction and situations? How can we as designers make use of skills and knowledge people already have?

Mobility and movement

Mobility and movement - how do we relate to and move in relation to the things around us? How do we understand movement, and what does a movement "mean"? How do we incorporate technology as extensions of our bodies?

Mediation

Mediation - what does it mean and how can we make use of the fact that the world, and therefore our experience, is mediated through technology?

Learning outcomes

After having attended this course, you will

- be able to **understand**, **articulate** and **discuss** how phenomenology is relevant for technology design
- have further **developed your empathy as a designer** by sharpening your ability to understand users' as well as your own experience with technology (and you should be able to reflect on how this makes you a better designer)
- be able to **use theoretical frameworks** to **evaluate** existing design and **inform** your own design work
- **name current research topics** in the areas embodied interaction, movement-based interaction, tangible interaction etc, and discuss applications to a field of designs, (f. ex., art, dance, health applications, contemplative interaction, affective, aesthetic, work applications, design practice and so on), and **demonstrate your understanding in academic writing**

Teaching

- 2 hours of lectures and discussion every week.
  Teaching is based on a mixture of lectures, active discussions, and experiential tasks in a workshop format. The students are expected to have read the assigned readings, prepare notes and discussion questions.

- The course requires 80% attendance in class, and production of reading notes and discussion questions (bring these to class) for 80% of the articles in the curriculum.

- The first lecture will have important information about the course.

	Date	Theme
1	20.1.	Introduction
2	27.1.	Relations
3	3.2.	Relations
4	10.2.	Relations
5	**17.2.**	***Presentation oblig 1****
6	24.2.	Winter break
7	3.3.	Familiarity
8	10.3.	Familiarity
9	17.3.	Familiarity
10	24.3.	*Presentation of oblig 2***
11	31.3.	Mobility and movement
12	7.4.	Mobility and movement
13	14.4.	Easter
14	21.4.	Mobility and movement
15	**28.4.**	**Mediation, *submission oblig 3 ******
16	5.5.	Mediation
17	12.5.	Mediation
18	19.5.	*Review, exam out*
19	**26.5.**	**Kristi Himmelfart/ Ascension Day**
20	2.6.	*Exam submission*

Examination

The course grade is based on the following:

- Completion of 3 obligatory submissions (Feb 17th, Mar 24th, April 28th)
- All mandatory assignments must be completed and approved prior to the exam.

The final exam (100%), an individual written piece of work on a self-chosen topic decided in collaboration with the instructor. (Exam period May 19th - submission June 2nd)

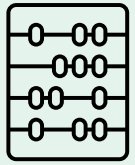
All parts of the exam and the attendance must be passed, and passed in the same semester, to pass the course.

Pass/ Fail

Course expectations

Tittel

Using frameworks
Oblig 1, 17.2



Use frameworks gram works

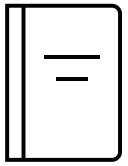
Journal
Oblig 2, 24.3

Journal on familiarity
See 100 days of
design for inspirasjon
https://designobserver.com/feature/five-years-of-100-days/24678

Position paper, ACM
Oblig 3, 28.4

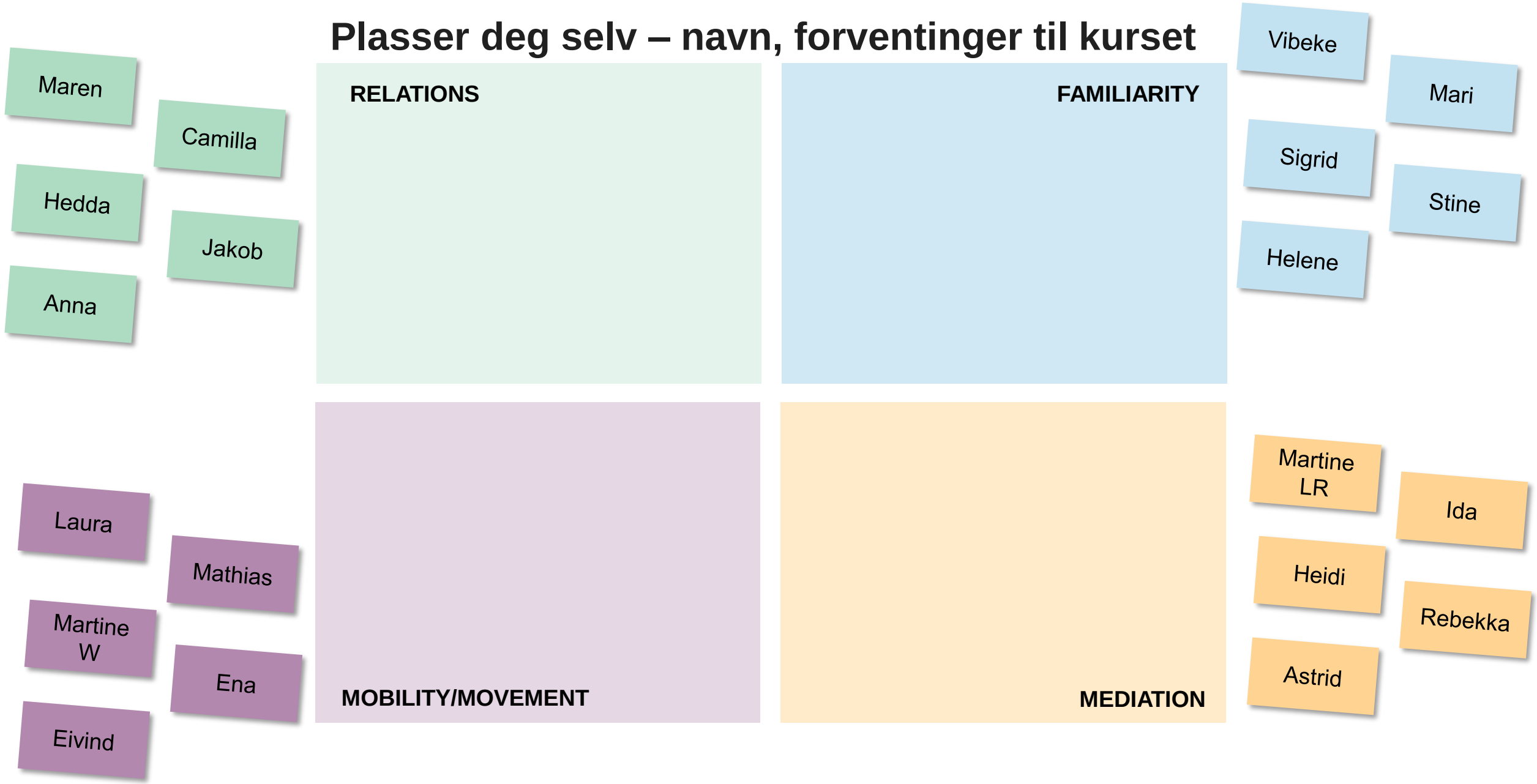
Argument/ position for your theory chapter

Exam/final paper
Submission June 2nd



Written work… a section of the theory or background chapter

Plasser deg selv – navn, forventinger til kurset



Frameworks

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Frameworks (oblig 1)

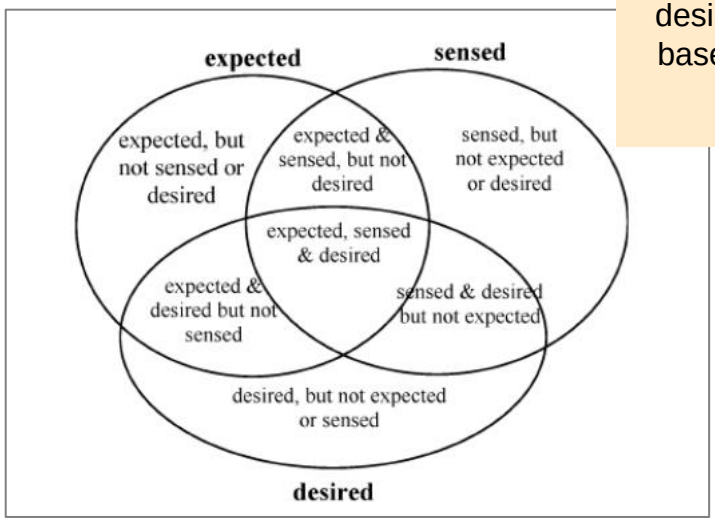
- **Belotti et al** «Making sense of sensing systems»
- **Benford et al** «Expected, sensed, and desired: A framework for designing sensing-based interaction»
- **Hummels**, **et al** “Seven Principles to Design for Embodied Sensemaking”
- **Pijnappel**, “Four design themes for skateboarding”
- **Hornecker** “Tangible interaction framework”
- etc

Belotti et al
«Making sense of sensing systems»

When I address a system, how does it know I am addressing it?

- When I ask a system to do something how do I know it is attending?
- When I issue a command (such as save, execute or delete), how does the system know what it relates to?
- How do I know the system understands my command and is correctly executing my intended action?
- How do I recover from mistakes?

Benford et al
«Expected, sensed, and desired: A framework for designing sensing-based interaction»



Introduction to phenomenology

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A phenomenological foundation

- Phenomenology, initially developed by Husserl, Heidegger, Merleau-Ponty and Sartre, is the philosophy of experience or lived experience (Husserl's term, *lifeworld* is also sometimes used). Phenomenological research is the study of the very nature of a phenomenon, or its *essence* (Merleau-Ponty 1962, p. vii); it is about what is actually experienced in our everyday lives. In phenomenological research, one tries to uncover and describe the various aspects of lived experience. As a method, phenomenology suggests how things should be approached, dealt with and understood. Working within a phenomenological tradition, studying kinaesthetic and proprioceptive experiences and human movement calls for empirical grounding in actual lived experience. For me, this means that what needs to be understood is the lived experience of people moving, using and designing technology.
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Husserl (early 20th century)

- Phenomenology as the science of consciousness, rigorous and systematic study of consciousness as experienced from the first-person point of view

- The central structure of an experience is its intentionality, its being directed toward something, as it is an experience of or about some object. An experience is directed toward an object by virtue of its content or meaning (which represents the object) together with appropriate enabling conditions.

Heidegger

- Phenomenology as an analysis of human existence as 'being-in-the-world’, as a pragmatic action-oriented way of being related to our environment…

- our primary stance towards the world is more like a pragmatic engagement with it than like a detached observation of it. We don't simply open our eyes and look at the objects around us; rather, we are more inclined to grab things and use them. Even if we are just looking, we look at things in terms of their relevance for our pragmatic use. Our intentionality is shaped by this orientation to action. From this perspective the things around us appear as "ready-to-hand" (Zuhanden).

- The hammer
  - “Ready-to-hand” – there to use
  - “Present-at-hand” – what I notice if it does work, it break down

Merleau-Ponty

- Added focus/emphasis on (not just perception but) embodiment and analysis of embodied perception by integrating psychology and neuroscience with phenomenology
- Merleau-Ponty understands perception to be an ongoing dialogue between one's lived body and the world which it perceives, in which perceivers passively and actively strive to express the perceived world in concert with others.
- Merleau-Ponty put greater emphasis on the role of the body than in either Husserl or Heidegger. Merleau-Ponty treats the body as the perceiver, the knower, the agent. Intentionality is primarily a motor intentionality. We make sense of the world through our bodily actions, namely, that our primary relation to the world, as pragmatic, and as ready-to-hand, is primarily an embodied relation where our hands and motor systems necessarily play an essential role
- The fact that an object appears in the reachable (peripersonal) part of the environment where I can reach it, for example, as opposed to an unreachable (extrapersonal) part of the environment has an influence on its relevance, its valence, and how I perceive it. This phenomenological insight has been confirmed by neuroscientific studies that show different activation patterns under these different conditions. Our pragmatic, action-oriented way of being-in-the-world is also reflected in the activation of certain neurons that are activated both when we reach out to grab a tool or object, and simply when we perceive that tool or object
- *We perceive the world in terms of the possibilities for action that it offers!*

Phenomenology in (interaction)design research

- Phenomenological research has direct relevance to design since the artifacts, tools, and technologies that we make affect the way that we experience our surroundings, and this is what phenomenology studies. Emphasizing the important role that embodiment plays in *perception* and *cognition*, it investigates, among other things, affective, aesthetic, and action-oriented experience as it is informed by environmental factors and by actual and potential bodily movement.

- Phenomenology explores the ways that our physical and social environments, including the things and instruments in such environments matter for experience, cognition, problem solving, and for shaping our intersubjective and social interactions.

- Perception is guided by what J. J. Gibson has called 'affordances'. For example, I see a chair as affording me the possibility of sitting. That clearly depends on the way it is designed and how that design is related to my body. An object that fails to provide a flat horizontal surface doesn't afford sitting; nor does a chair that is three inches tall. A well-designed chair is not a sitting-affordance at all for a lion or for an animal or robot that does not have flexible joints. Affordances depend on specific relations or negotiations between objective shape and the shape and flexibility of the agentive body.

Phenomenology in (interaction)design research

- Embodiment interactions
- Tangible interactions
- Movement-based interactions
- Design practice
- Art
- Dance
- Health applications
- Contemplative interaction
- Affective
- Aesthetic
- Work applications
- And so on

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Dourish

Paradigms, methodologies and methods

Relations

Questions?