

Introduction
Philosophy of mind and design

Plates from Darwins *The expression of emotions in humans and animals* 1872

Plate I	Weeping and suffering
Plate II	Grief
Plate III	Joy
Plate IV	Sneering and defiance
Plate V	Contempt
Plate VI	Pride and helplessness
Plate VII	Fear

We are *social* animals

- Specialized in faces
- Mirror emotions of others
- Social from the very beginning
- Isolation is a punishment

But how are we in other aspects?

- Today: Intro to some basic facts about how humans function
- Then: Focus on the social aspects of our cognition (and lives)
 - How do we understand other social beings?
 - How are we as social beings?
 - How should we design for social needs?

What did you see?

- Information 'in the world'
 - Recognition rather than information gathering
- Limited attention
 - Looks only at a fraction of the shelf
- Fast decisions
 - Presumably based on little information

Attention is limited but steered by our expectations

I2
A B C
I4

Most adults (98%) think they are hearing "DA" - a so called "fused respons" - where the "D" is a result of an *audio-visual illusion*. In reality you are hearing the sound "BA", while you are seeing the lip movements "GA". The "McGurk effect" was first described by Harry McGurk and John MacDonald in "Hearing lips and seeing voices", *Nature* 264, 746-748 (1976).

Good design provides the user with the right expectations

Why do people press the icons instead of the buttons?

www.baddesigns.com

The world can structure people's actions

The structure of the world can reveal people's actions

And we can structure the world so that certain actions become easy ...

... or difficult

By which actions are made
easy...

Sign up to become an organ doner vs. sign
up to not become one

Johnson & Goldstein, 2003, Science

Visible ...

Get feedback

Provide good mappings

And a good conceptual model ...

Usability

- Easy to learn
- Easy to use
- Good user experience

- Understand how users function
- Include users in the design process

Components of interaction

The seven stages of action

Seven stages of action as design guidelines

Can almost be used on human beings as well ...

Steve is at the mall. He sees his friend from school. His friend looks happy and says "Hi". Steve says "Hi" as well.

Why is it easy to answer the following questions?

- Where is Steve?
- Does his friend see him?
- Does Steve believe the boy is happy to see him?
- How does he feel then?