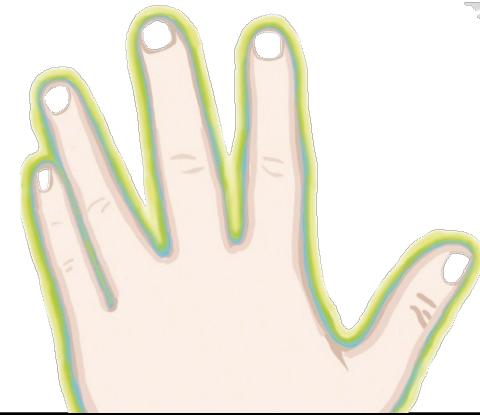


Welcome to

Interaction

Design 2



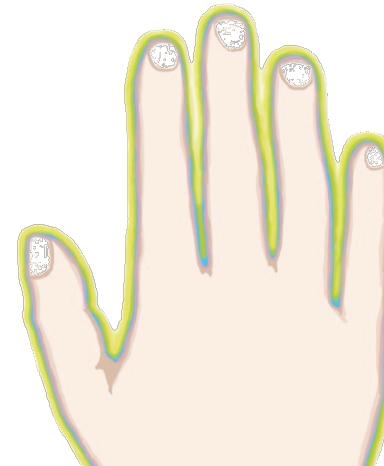
4



Ylva Fernaeus
Mobile Life and KTH, Stockholm

Today

- Morning
 - Who am I? Other teachers? Who are you?
 - Overview of course structure
 - Some general advise for the course
- Afternoon
 - Intro to your first design task



Who am I??

A photograph of a young girl with dark hair, wearing a white t-shirt and a red skirt, interacting with a wall-mounted interactive display system. She is leaning over a black metal frame table, looking at a screen that shows a cityscape. Another screen on the wall to her right shows a different scene. The system is connected to a computer monitor on the table and various cables. The background is a plain wall.

Techno Craft
ສລ່າເທິກໂນ

Previous work / research

- Interactive museum exhibitions
- Technology aimed at children (PhD)
- End-user programming
- Art installations
- Affective Interaction
- Mobile interaction
- Tangible interaction
- Human-Robot Interaction
- Soft hardware
- Interaction design theory
- Teaching...

Anders Lundström



Vasiliki Tsaknaki



Who are you???

- Your name? Study program?
- Why are you taking this course?
- What would be your dream job/career?



Course objectives

- Discuss and analyze the qualities of interactive artifacts in relation to commercial, responsible, experimental and discursive design.
- Select and apply known methods for the development of interactive systems: exploration, conceptual design, prototyping and evaluation.
- Discuss current research problems in the area of interaction design in terms of contemporary commercial products and international research projects.
- In academic writing reflect on completed projects, with reference to relevant literature.
- Show proof of practical experience of interaction design projects through a portfolio.

Basic course info

- No exam ?
 - You will have to be active during *the whole course*. Focus on *skill*. Preparing for *life*. You decide what is important for you.
- No grades ?
 - Learning to actually *learn*. You will need a *portfolio* – more valid, representative, more *you*. Grades alone will *never* be enough.
- 15 credits ?
 - ≈ 20 hours/week, 20 weeks. *Learn to use your time*. Sloppy, last minute work will result in extra tasks (or failed course).
- Prerequisites: MDI intro & IxD1 ?
 - You are expected to *already know* about some HCI research, methods, that you should involve users, do parallel design, etc.

Discuss

- Difference between
 - *interaction design* | graphic & physical design
 - *design* | tech innovation
 - *quality design* | poor design
 - designing here, *in school* | professionally, at work

Interaction and interactive systems

- When people and things affect one another
- Everywhere, always! But with a focus on *computers*



Themes and groups

- 4 theme projects á 4 weeks, plus revised portfolio
- For each theme you will
 - Work in a new group/pair
 - Conduct a design project (the main activity)
 - Document project online
 - Title
 - Pictures and brief description (+ video/prototype/paper)
 - Lessons learned from the project
 - Links to related work (similar designs + research)
 - Review the work of another group
 - There will also be some reading seminars, workshops, study visits and guest lectures as part of the themes

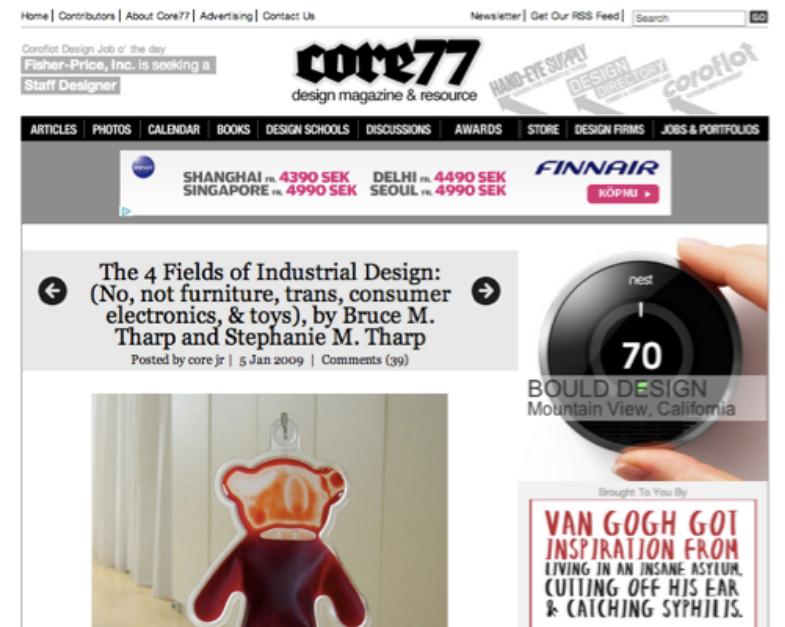
To pass you have to:

- Take part in all 4 theme projects and contribute to the group work, including reviewing works of peers
- Independently drive and plan your work, following basic HCI methods.
- Attend most design critique sessions. You are allowed to miss two sessions.
- By the end of the course present a publicly available online portfolio, containing samples from each of the four theme projects, and give feedback on the portfolios of your peers.
- Write a personal reflection (max 2 pages)

Different types of design

Based on *intentions*:

- Commercial design
 - Goal: to make money
- Responsible design
 - Objective: to help those in need
- Experimental design
 - Objective: to learn
- Discursive design
 - Goal: to explore alternatives, create discussion and debate



"The four fields of industrial design". Tharp & Tharp. 2009. [link](#)

Themes: Different types of design

Based on *intentions*:

- Commercial design
 - Goal: to make money
- Responsible design
 - Objective: to help those in need
- Experimental design
 - Objective: to learn
- ~~Discursive design~~ *Public/educational design*
 - Goal: to explore alternatives, create discussion and debate
 - inspire & educate*



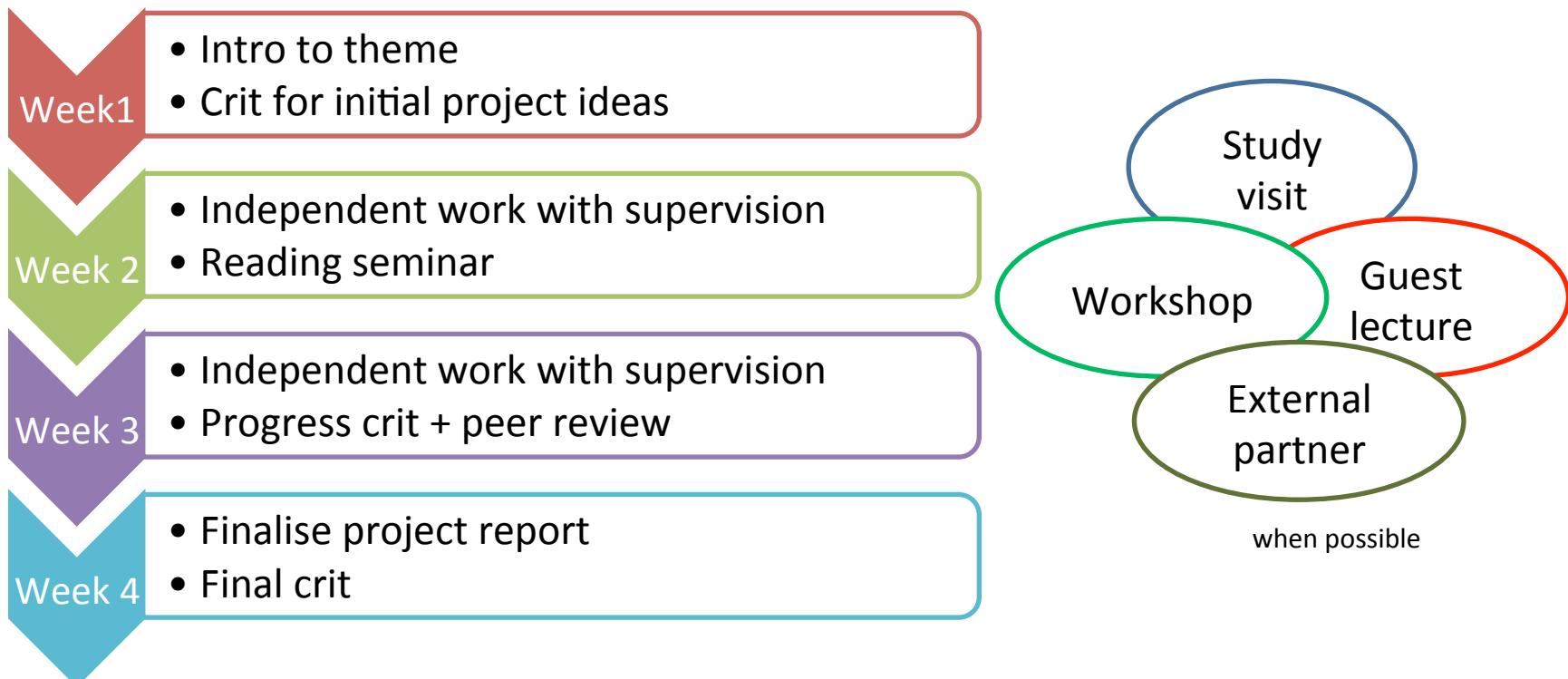
"The four fields of industrial design". Tharp & Tharp. 2009. [link](#)

Overview

Week	Theme
35	<i>Public/educational designs:</i> - designs that educate and inspire
36	
37	
38	
39	<i>Commercial design:</i> - create a product with the potential to make money
40	
41	
42	
43	<i>Responsible Design:</i> - design based on ethical and political motives, helping those in need, etc
44	
45	
46	
47	<i>Experimental design:</i> - focusing on exploration, based on a selected technology
48	
49	
50	
51	Final project
52	Winter break
1	
2	Final project
3	
4	Final crit

Structure for each theme project

Main activity: Develop the design for an interactive system



Advice for **every** design project

- Ground in real/existing practices
- Ask people what they want to *do* – not what they want to *have*!
- Do parallel design!
- Sketch! Play! Get to know your materials!
- No "cargo cult design"!
- Get feedback early!
- Test it on yourself first - eat your own dog food!
- Develop your own design judgement!

Rooms etc

- 4618 (this room) is booked for you all scheduled course hours – code: 1213
- You can also use the long table in corridor, when free (dept meetings mondays at 9-10)
- A few project rooms also in opposite corridor – first come first serve
- Student coffee maker + microwave in opposite corridor (kitchen only for employees...)
- "Independent work" in schedule means teacher(s) will be available in or near 4618 for feedback
- "Academic quarter" → 10 = 10.15

Summary

- 4 projects + portfolio + short reflection
- All tasks will be performed in pairs or individually
- Come to the seminars
- All communication via KTH social
- Make it as fun & interesting as you can!

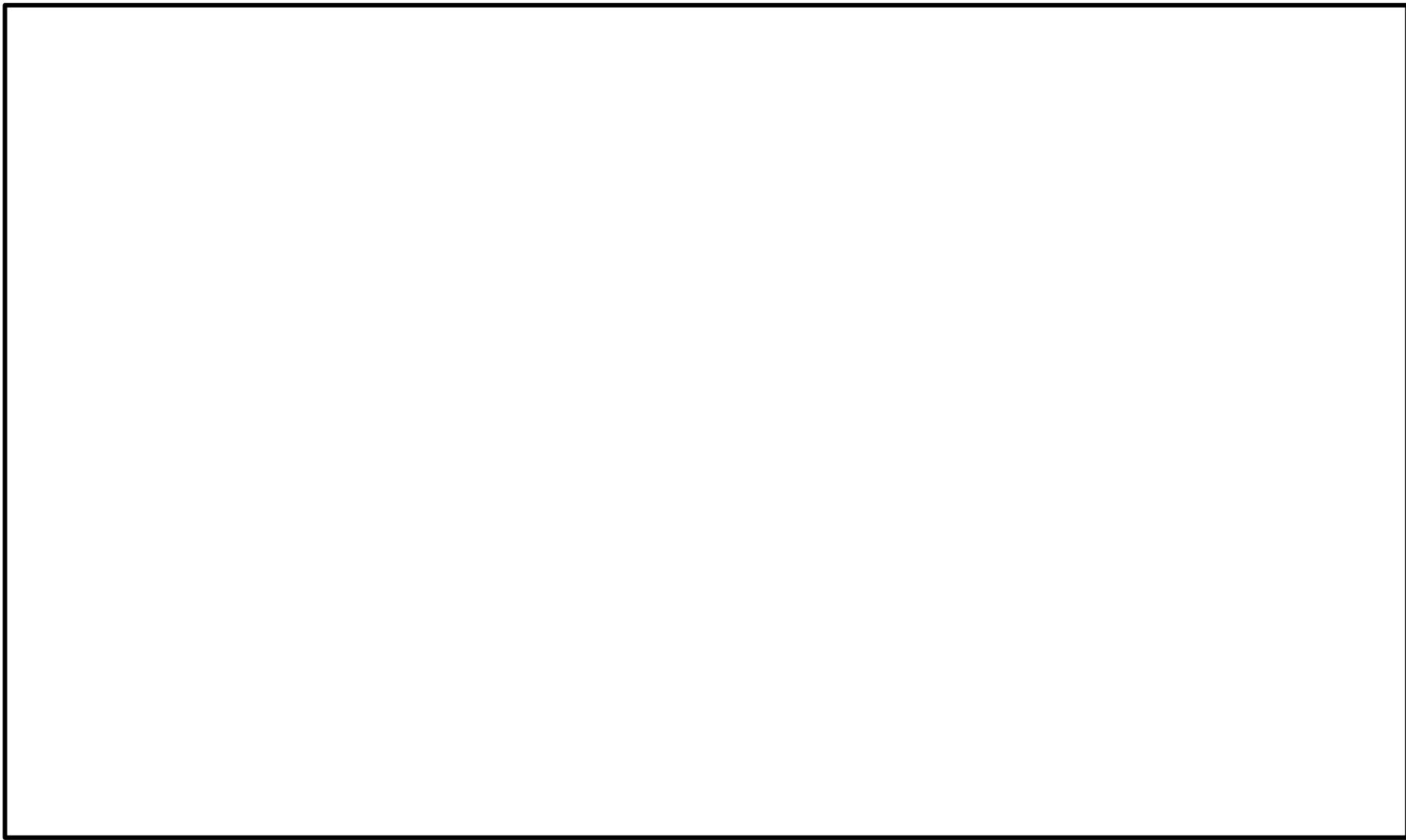
Experimental

Educational

Responsible

Commercial

Online portfolio

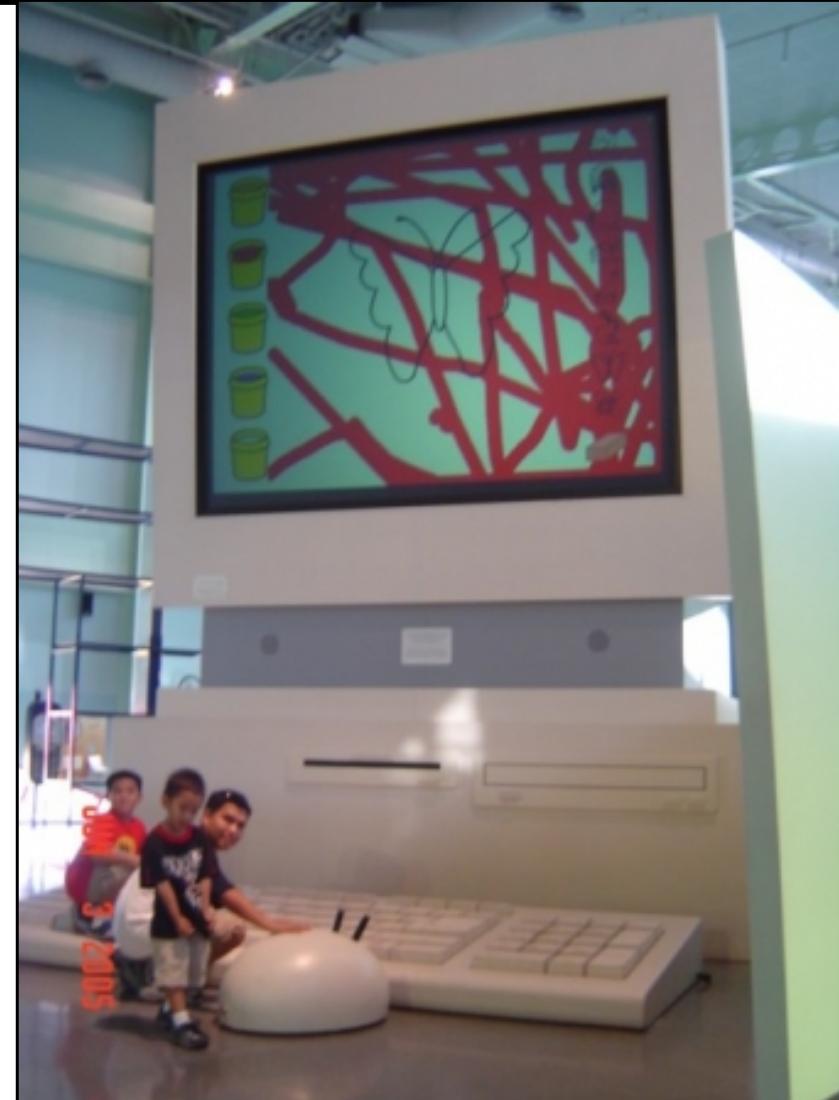


Working with museums



Some exhibits I worked on

- You are amazing.
Set of interactive exhibits about the human body, for Bristol Science Museum.
- Who are you?
Set of interactive exhibits about different aspects of identity, for the new welcome wing at London Science Museum.
- What a difference!
Several small interactive games about the invention of the Smethwick steam engine. The Think Tank, Birmingham.
- 5 games about immigrants shaping British culture: Saxons, Romans, Vikings, Normans & Dutch.
For the Forum, in Norwich.
- The pre-historical animal hunt.
Ilford, Redbridge, UK, 2001.
- Several educational exhibits at Waltham Abbey.
- Threads of life.
Sunderland Museum of Textile, 1999.
- The children's city museum. Dubai.
- Occupation game.
History museum in Jersey.



Some general observations...

- Social and physical context (central to all interaction)
- Experiencing with our senses (also beyond the digital)
- Things get used in unintended ways (always)
- The shape of hardware shapes software (and interaction)



[MediaBlocks]



[Reactable]



[InTouch]



[GlowBots]

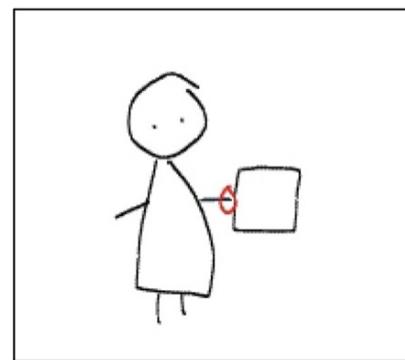
Interaction design

- Not just the design of an ‘interface’
- Also ‘inner’ properties (system architecture, database, etc)
- And the physical space, beyond the software
- And the purpose, business model, conceptual design
- And social rules for participation, manual & support...
- And the information content
- **Defines what people can *do***

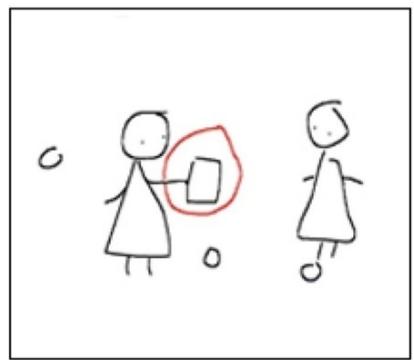
From Interfaces to Interaction



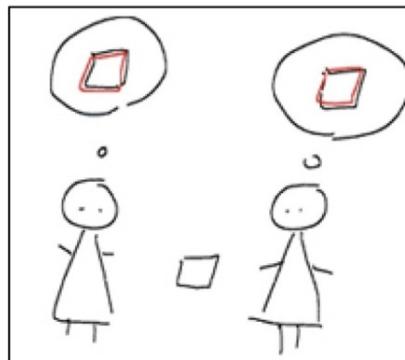
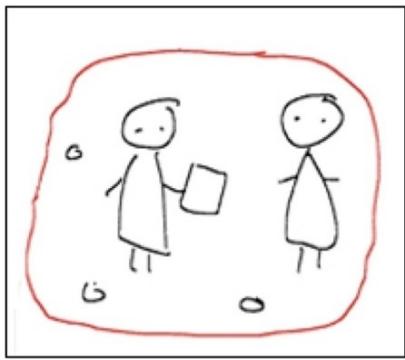
Information → Action



Individual → Shared



System → Activity



Objective → Subjective

