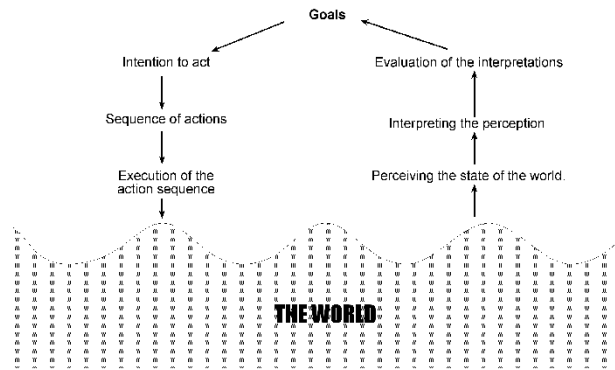


Scenario design

Media design research seminar
University of Art and Design
Helsinki, Media Lab
Prof. Lily Díaz
12.10.2010

7 stages of action

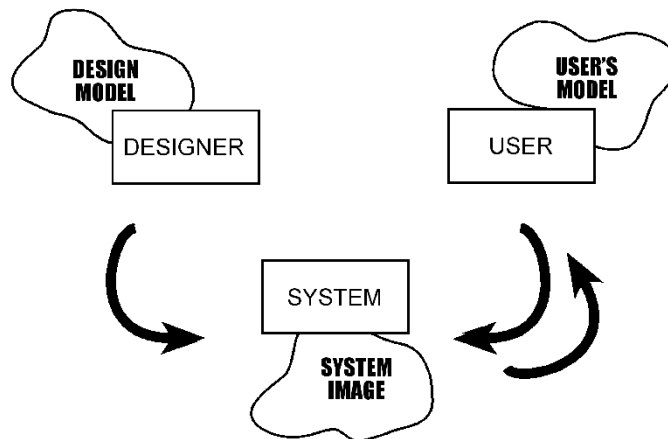


Adapted from Donald Norman's The Psychology of Everyday Things

There is a fundamental tension between thinking and doing: thinking impedes progress in doing, and doing obstructs thinking.

Sometimes this conflict is quite sharp, as when one must stop and think before taking another step.

Conceptual models



Adapted from Donald Norman's The Psychology of Everyday Things

”The design model is the designer’s conceptual model. The user’s model is the mental model developed through interaction with a system. The system image results from the physical structure that has been built (including documentation, instructions, labels). The designer expects the user’s model to be identical to the design model. But the designer does not talk directly with the user--all communication takes place through the system image. If the system image does not make the design model clear and consistent, then the user will end up with the wrong mental model.” *The Psychology of Everyday Things*, p. 16.

Scenario design

- ...is a research method that seeks to exploit the complexity and fluidity of the problem domain of design.

It is a creative, qualitative, method

Scenario design

- Tries to see the *usage situation* in many different ways, from multiple perspectives, and considering many purposes.
- Tries to *interact intimately* with the concrete elements of the situation that in many cases does not even exist yet.

1. Scenarios can be written at multiple levels and from many perspectives:
Design moves have many effects!
2. Scenarios concretely fix an interpretation and solution but are open ended:
design problem fluidity.

Reaching for the tacit knowledge

- Scenarios anchor discussion in work, supporting participation among stakeholders and appropriate design outcomes.
- Impel the designer to integrate the consideration of system requirements while considering motivational and cognitive issues.

3. External factors constraint design

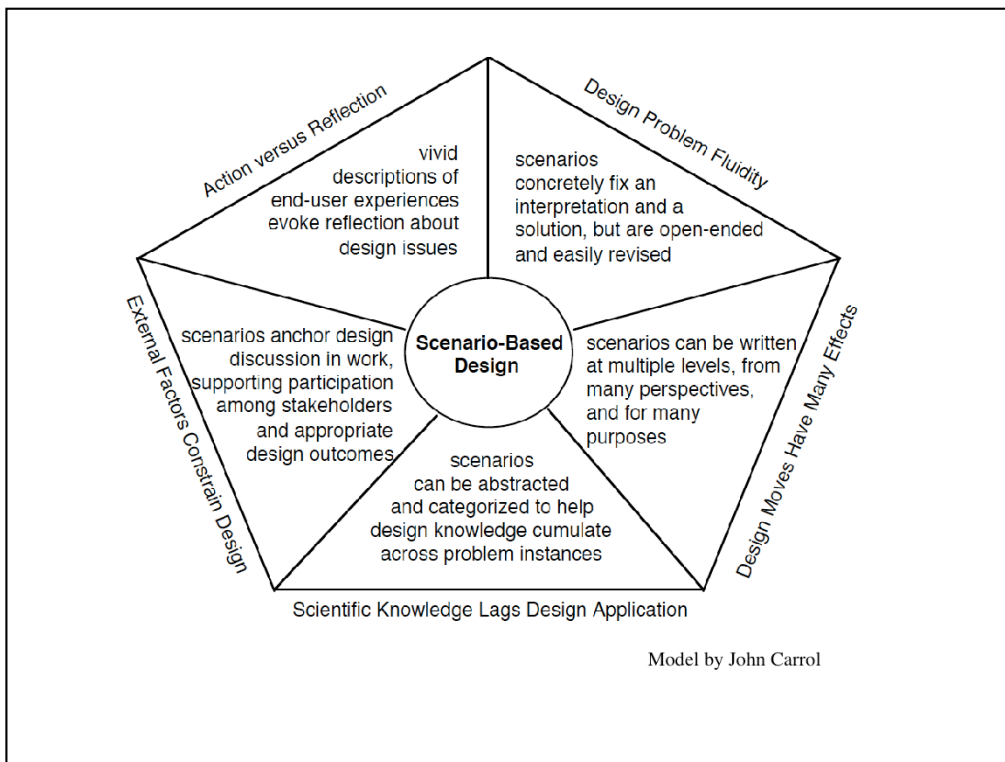
4. Action vs. reflection

Reaching for the tacit knowledge

- Scenario concretely *embody* a partial view of the design, and thereby exposes the design to critique.
- Allows designers to provisionally construct a space of user tasks despite the instability in requirements originating from the context of technology development.

5. Action vs. reflection.

6. Scientific knowledge lags design application.



Scenarios are...

- Stories...
- About people and their *activities*...

In scenario-based design, descriptions of how people accomplish tasks are used as a primary working *design representation*.

Tools for representation

- Scenarios can potentially represent
 - Material aspects
 - Details of Form
 - Functional characteristics
 - Context of use.

Diaz-Kommonen. Art, fact and artifact production, 2002

Scenario design can potentially represent the dimensions of: material, or what is the item made of; form how it is made; function, what it is used for and context, in what settings it is used.

What is a scenario?

- A *method* that enables us to *communicate* (talk) about how the system we are trying to design enables/constrains/transforms user activity.
- A *technique* used to explicitly envision and document typical and significant user activities early and continuingly in the development process

What is a scenario?

- A 'boundary object' that enables communication across a diversity of disciplines and communities.

Elements of scenarios

- A setting: or context of activity that includes artifacts/tools.
- Agent/actor that engages in activities; has goals (sub-goals) and objectives as well as performs task (operations).

Particular actions and events can facilitate, obstruct, or be irrelevant to given goals.

Elements of scenarios

- A plot: that includes sequences of actions and events, things that actors do, things that happen to them, changes in the circumstances of the setting...
- A title that clearly identifies the theme and elements in the scenario and indicates how these are to be interpreted.

See the work of Jacques Bertin on *The Semiology of Graphics* for more information about the importance of the title. For a good study on the influence that captions can have on artwork interpretation, see “Constructivism in Germany: Lizzitzky and Moholy-Nagy” in Victor Margolin’s *The Struggle for Utopia*, University of Chicago Press.

Representing the use of a system or application with a set of user interaction scenarios makes that use explicit, and in doing so orients design and analysis toward a broader view of computers.

Scenarios and reflection

- Constructing scenarios of use inescapably evokes reflection in the context of design:
 - What are the goals that the user may adopt and pursue?
 - How to depict the usage situation from multiple perspectives?

3 steps to scenario design

Inspired by Cathy Marshall's work on
personnaes

Cathy Marshall: <http://research.microsoft.com/en-us/people/cathymar/>

Step 1

- Establish a goal, context, or activity
 - What is needed to describe the scenario's settings?
 - Why is the agent/actor using the system?
 - What will make this interaction successful?
 - As you create the scenario, try to focus on storytelling, and don't aim to represent complete task analysis.

Step 2

- Describe the interaction.
 - Stay at a high level or avoid too detailed descriptions of the interface
 - Imagine the new design and how it will help to solve specific problems.
 - If you have done user research, try to include highlights, in order to make a more compelling story.

Step 3

- Illustrate and analyze the end results
 - What happens as a result of this interaction?
 - Was it a success or failure?
 - What factors might have contributed to the end result?

Scenarios

- Can be done using...
 - Textual accounts
 - Storyboards
 - Video
 - Performance
 - Other ideas?

An example...