

Immediately familiar!
Psychological perspectives on "Intuitivity"

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## Immediately



Straightaway, instantly, at once, right away.

#### What does it mean?



There is no time to get bored or worry about what may or may not happen. No hesitation. Flow.

#### What does it not mean?



There is time to get bored or worry about what may or may not happen. There is no flow.

# And what means familiar?

"Familiar" is a familiar expression. It's a word simple enough for all of us to use;-)

Beware! Later on I'll dive more deeply into it. I don't explain what familiarity is. However, I'll give you an idea of how familiarity works (next year?).



# Why focus on familiarity?

In memory of Jef Raskin who brought down our workshop topic to a simple formula:

#### INTUITIVE EQUALS FAMILIAR

Jef Raskin



## Exactly what is my objective?



Bring the fruits of "Learning, Memory and Cognition" together with "Psychology of Time" to generate theories of how "Intuitive Use of User Interfaces" (IUUI) works.

#### IUUI EQUALS IFUUI

Working Hypothesis



#### Overview

- Intuition & Psychology
- Intuitivity & Usability
- Training & Design: Skill Transfer
- How Familiarity works (later on)

# Intuition & Psychology

Historically, psychologists have ignored the notion of intuition.

Also today, intuition is not used as technical term in the discourse of the scientific community.

Conceptual development thus remains poor and elusive.

## Why not intuition?

First of all, psychologists do not need this notion. They have other concepts to explain automatic, biased, rapid, and effortless processing.

No pains, no gains.

Psychologists don't deny, that sudden inspiration can happen. However, they are convinced that this can only be a result of preceding learning processes.

No "Aha"-experience without a period of incubation, no skill without training, no work without effort.

## Aha!

Using the notion intuition is suspected to neglect preparatory work.

Observation and prediction of the influence of preparatory work/previous experiences is part of basic research in the fields "Learning, Memory and Cognition", "Human Perception and Performance", "Motivation and Emotion" et al.

### Intuitive as compliment



One of the most common terms of praise for an interface is to say that it is "intuitive".

Jef Raskin



## Intuitivity as good usability

Good usability, or, "intuitivity", you might say. Ah, that wondrous neverland concept to which all operating systems and applications aspire, but which many fail to achieve. How does one define good usability?

Pages tagged with "intuition" on del.icio.us

## Intuitive usability



Today, "intuitive usability" is a pivotal customer requirement. Awkward services and functions must become simple enough for all customers to use.

**Deutsche Telekom Laboratories** 



#### Turn water into wine?



Awkward services and functions must become simple enough for all customers to use.

# Previous experiences as Inno-Blocker

Bringing the desktop experience to the web is a tricky problem. People aren't used to the web browser as capable of doing dragging and dropping, file management, or rich editing text. In fact, people are used to the simplicity of the point and click, and expect that behavior inside the browser.

Fred Oliveira





Try telling someone used to computers but who doesn't understand the concept of "Web 2.0" to drag and drop something to a shopping cart. When you see the "huh?" face, you'll know what I mean. This is the kind of reaction we need to get rid of.

Fred Oliveira



You must learn.





We can design.





#### Two set screws: Training and Design

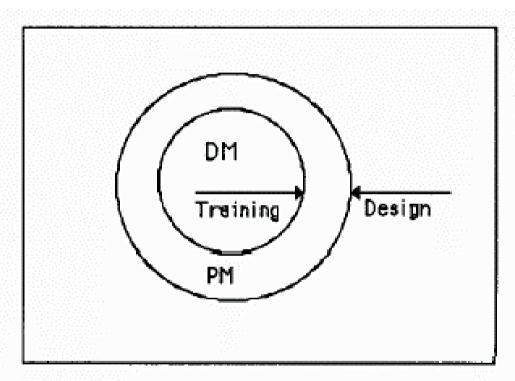


Figure 16: Training and Design

The gap between system demands and user capabilities are shown by the difference between the prescriptive model (PM) of the system and the descriptive model (DM) of the user. In the ideal system, PM=DM. The objective of training is to push the PM outwards.

The objective of design is to push the DM inwards.

Bill Buxton

Bye bye "ease of use"?

Let us stop talking about vague concepts like "ease of use" and "user friendly". A more productive formulation of what we are trying to do is accelerate the process whereby novices begin to perform like experts.



## Design around existing skills



Performance is the exhibition of skilled behavior. While skills are difficult to acquire, new users don't come to a system completely vacant in this regard.



#### New look on "know the User"



Analyzing the target population with respect to possible exploitable skills gives a whole new direction and bite to the oftenheard platitude, "know the user".



#### Howto: Skill Transfer



- Build upon the users' existing set of skills
- Keep the set of skills required by the system to a minimum
- Use the same skill wherever possible in similar circumstances
- Use feedback to reinforce similar contexts and distinguish ones that are dissimilar



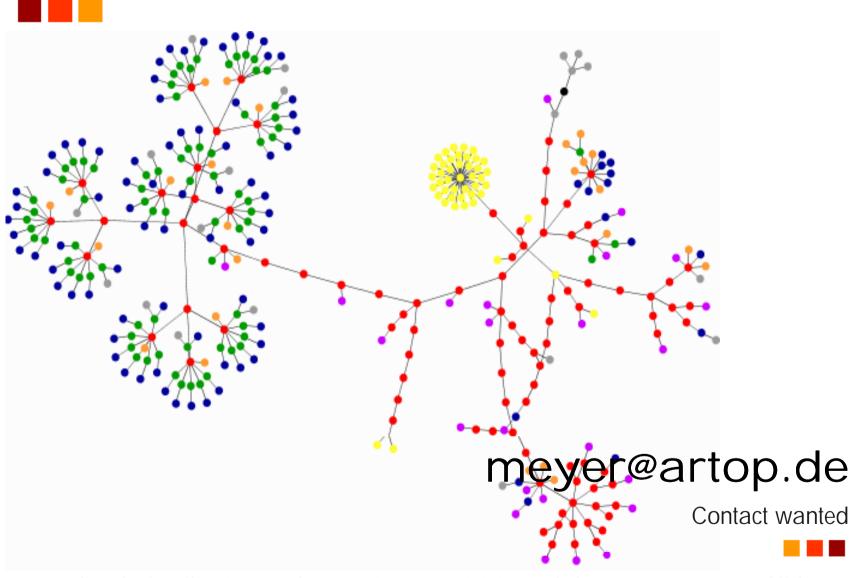
#### Psychology :-)



A desire to make systems easier to use is a good starting point, but we can't get very far without a theory of how to do so.



#### Thank you for your attentiveness!



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