A Duel between Desktop and Web

Matthias Müller-Prove
Interaction Designer
Sun Microsystems
reboot 9.0, 2007
Desktop Metaphor
Hello guys in Copenhagen!
How's reboot 9?

Apple Lisa has been released 24 years ago in 1983.
Metaphor

• Office / Desktop
  > file, folder, desktop, trash can

• physical world metaphor
  > object oriented in the everyday sense of the word
  > Tools: paint brush, eraser
  > document
  > File menu
User’s mental state (Underlying Metaphor)

- Dealing with objects
  - that belong to me
  - represented as icons
- I move stuff around
- I stay where I am
- A closed world with strong boundaries
Dueling Interaction Models of Personal-Computing and Web-Computing

Matthias Müller-Prove, Frank Ludolph

Abstract
Today the user of personal computers is facing several inconsistencies which originate from an unresolved situation between two competing interaction models. The WIMP desktop model was developed nearly 30 years ago at Xerox Parc and Apple Computer. The web model became popular in the mid 1990s and has profoundly changed business and the perception of social relations. Contradictions between these two models have a severe negative impact on human-computer interaction.

1. Introduction
The interaction model of modern personal computing was established and standardized in the success of the Apple Macintosh. Although the system had a couple of commercial predecessors, Apple Lisa and Xerox Star – it is fair to say that the introduction of the Macintosh in 1984 marked the starting point of the desktop publishing revolution. Ever since, all systems follow the same interaction concepts: their graphical user interfaces use windows and icons to mimic an environment that closely resembles the physical desktop of the office worker 25 years ago. Documents are stored in a filing system much as real paper documents are filed in folders and cabinets and archives. Common commands are organized in a menu structure which is operated with a mouse; for practical reasons, and replaced the mouse with a trackpad. In general, all devices that move the cursor on screen to transmit clicks to the computer are called pointing devices. The term ‘cWIMP desktop’

- windows – icons – menus – pointing device + desktop metaphor
Dueling Interaction Models of Personal-Computing and Web-Computing

Matthias Müller-Prove, Frank Ludolph

Abstract
Today the user of personal computers is facing several inconsistencies which originate from an unresolved situation between two competing interaction models. The WIMP desktop model was developed nearly 30 years ago at Xerox Parc and Apple Computer. The web model became popular in the mid 1990s and has profoundly changed business and the perception of social relations. Contradictions between these two models have a severe negative impact on human-computer interaction.

1. Introduction
The interaction model of modern personal computing was established and standardized on the success of the Apple Macintosh. Although the system had a couple of commercial predecessors like Apple Lisa and Xerox Star – it is fair to say that the introduction of the Macintosh in 1984 was the starting point of the desktop publishing revolution. Ever since, all systems follow the same basic principles: their graphical user interfaces use windows and icons to mimic an environment familiar to the physical desktop of the office worker 25 years ago. Documents are stored in a folder system as real paper documents are filed in folders and cabinets and archives. Commonly organized in a menu structure which is operated with a mouse; for practical reasons the mouse has been replaced by a trackpad. In general, all devices that move the cursor on screen and transmit clicks to the computer are called pointing devices. The term "WIMP desktop"

• documents as objects – windows display the content of files
Web Metaphor
Metaphor

- Office / Desktop
  - file, folder, desktop, trash can
- Physical world metaphor
  - object oriented in the everyday sense of the word
  - Tools: paint brush, eraser
  - document
  - File menu

- Architecture
  - home (in browser), home page, landing page, web site, site map, portal, window, chat room, online forum, online shop, information highway, world wide web, cyberspace, community, domain
  - user moves in virtual space
    - surfing, browsing
    - forward, backward
  - e.g. google maps
    - virtual and real space connected
User’s mental state (Underlying Metaphor)

- Dealing with objects
  - that belong to me
  - represented as icons
- I move stuff around
- I stay where I am
- A closed world with strong boundaries

- Dealing with Information
  - that belongs to others
- I go somewhere else
- An open world with no boundaries
• The Web is a new GUI paradigm – unfolding on the desktop
different interaction model – information-oriented browsing
Something is wrong...
Pointing Device
Click
- select
- set cursor
- trigger hyper jump

Double Click
- trigger Open command
- n/a

Drag’n’Drop
- command with 2 parameters
- move objects
- n/a
Something is wrong because...

...the mode has to be considered in order to predict the effect of the next user action.

This causes problems because humans do not pay attention to the surrounding context once they are focused on their activity.

In many cases this is the reason for errors and sometimes even loss of data.
Some closing remarks

Marshall McLuhan
Thank You!

Matthias Müller-Prove
mprove@sun.com
www.mprove.de/script/07/reboot9/