Attractive Visualization

Hauptseminar “Information Visualization - Wintersemester 2008/2009"

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Overview

- 1. Introduction
- 2. Visualization in Attention-Limited Environments
  - 2.1. Peripheral Displays
  - 2.2. Attraction by Motion
- 3. Visualization in Public Spaces
  - 3.1. Public Displays and Ambient Visualization
  - 3.2. Interactive Displays
- 4. Interaction in Semi-Public Environments

Introduction

- Why „attractive“ visualization?
- Many displays in our everyday life
- Displays facilitate many tasks
- Displays in different environments

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Visualization in Attention-Limited Environments

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Peripheral Displays

- User is focused on a primary task
- Display in her periphery informs about important events
- Negative: Distraction from primary task
- Graphical vs. textual displays regarding distraction

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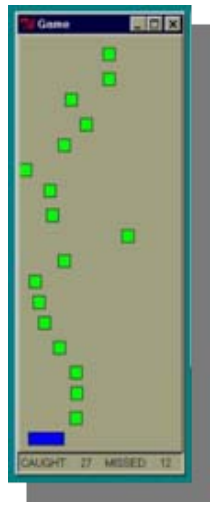
Peripheral Displays (cont.)

- Distraction in time critical situations
- Cognition speed depends on
  - Display presence time
  - Information density



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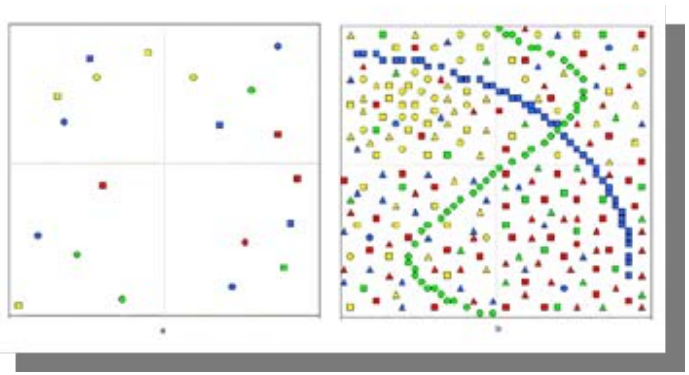

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Peripheral Displays (cont.)

- Field of application

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Peripheral Displays (cont.)

- Going over the top

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Visualization in Attention-Limited Environments

- Attraction by Motion
  - Encoding information in motion – moving icons
  - Cognition rate for motion does not decrease very much towards the periphery
  - Different motion types
    - Anchored
    - Travelling

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Visualization in Public Spaces

- Public Displays
  - When do people really look at public displays?
  - Display requirements
    - **Position** – at eye level, towards the people's flow, involves surroundings
    - Size – combination of small and large displays
    - Content – low information density, animated pictures or videos

Visualization in Public Spaces

Public Displays (cont.)

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Visualization in Public Spaces

Public Displays (cont.)

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Visualization in Public Spaces

- Public Displays (cont.)

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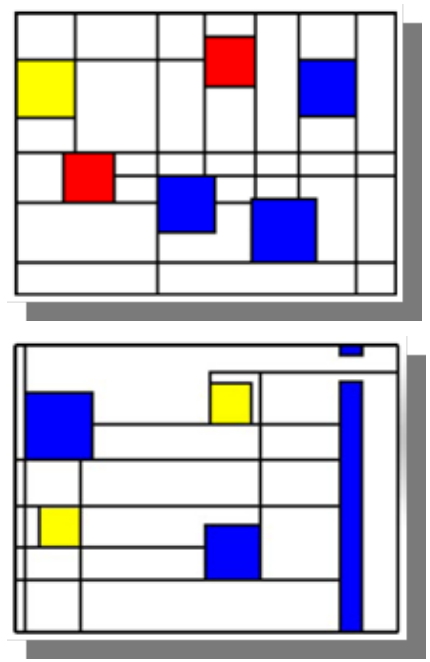
Visualization in Public Spaces

- Ambient Visualization
  - Combines aesthetic aspects with computer supported information presentation
  - Problems
    - Finding the right information type
    - Finding the appropriate template
    - Finding the right location



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Visualization in Public Spaces

- Interactive Displays
  - Choice of information – of general interest
  - Enticing people to interact with a display
    - Instructor or easy to use
    - Honey-pot effect

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Displays in Semi-Public Environments

- Advantages compared to public spaces
  - Enhances the collaboration
  - Content is of general interest
  - No privacy issues
  - Good location for the display is available

Displays in Semi-Public Environments

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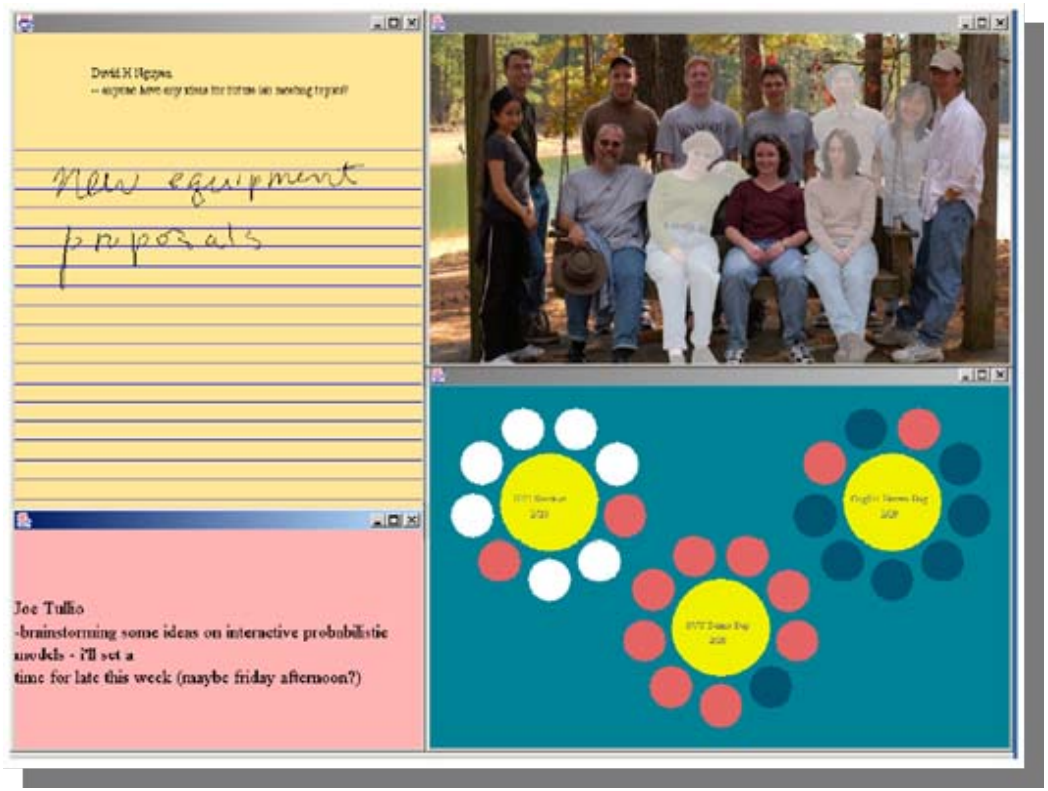
Example



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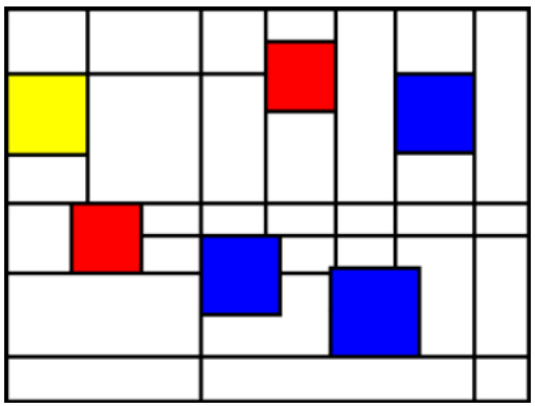
Questions?



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Thank You.

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