

Questions?

- Project declaration due today
- HW #3 due Thursday
- Hall of Fame/Shame
 - Self-create groups of 2
 - Email your group members to Tak by Thursday's class
 - I will assign slots - presentations start next week

 - Analyze one feature of an application or site
 - Show one powerpoint slide, one webpage, or one picture
 - Explain what is great or terrible – try to avoid uninteresting
 - Send me the thing to show before class

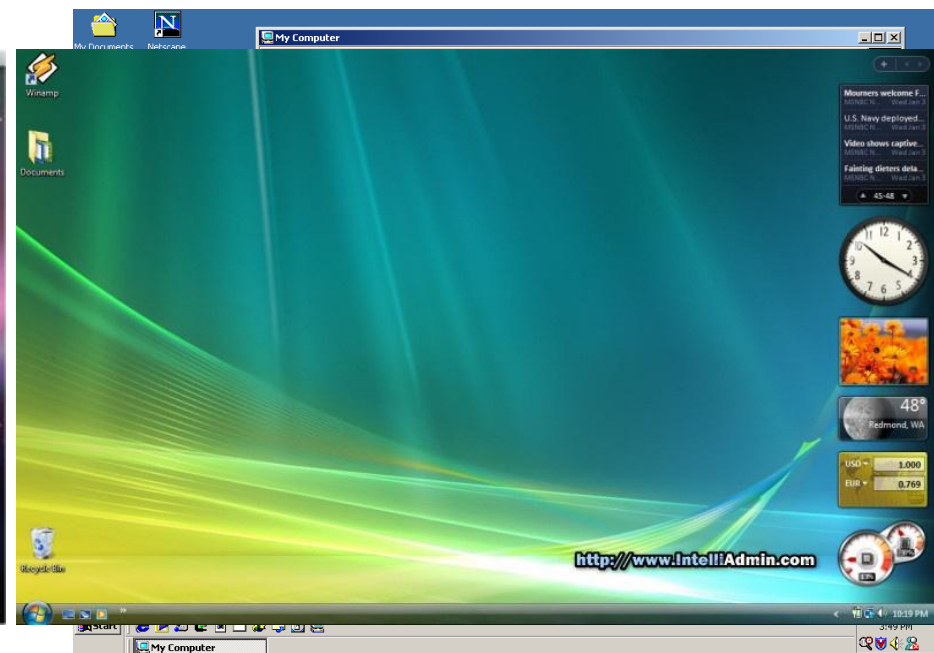
Nielsen Questions

- What is "data ink" and "chart junk"?
- Look at Analytics for browser, screen size, etc.
- What did Robert Miller in 1968 say about human response to waiting?
- How long did popular/corporate websites take to load in 1999?
- Does Nielsen recommend have links that say "click here"? If not, why not?
- Why does Nielsen think that frames are a bad idea?
- What do you disagree with since this chapter was written about 10 years ago?

Graphic design

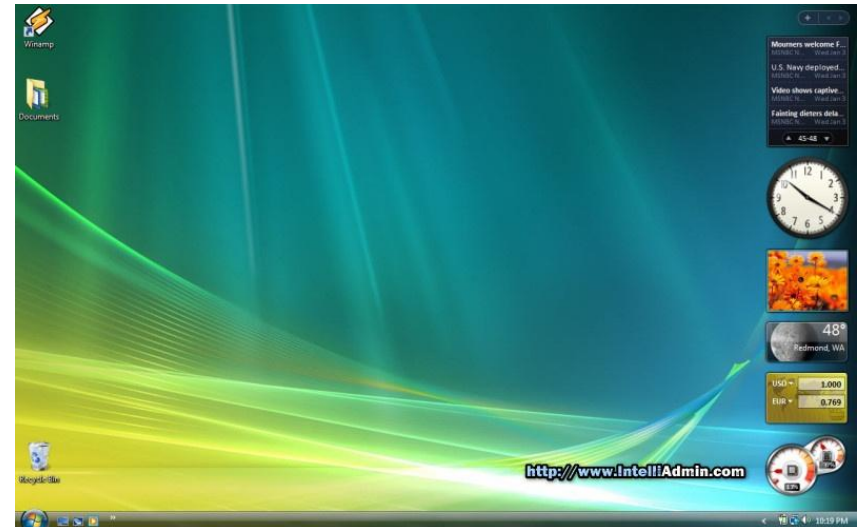
“Designing Visual Interfaces” Mullet and Sano

- Help users find their ways
 - Correct interaction sequencing
 - Correct mental model: organization of data, functions, and tasks
 - Consistency
 - Efficient and accurate search and understanding
- Provide a distinctive look (and feel)



Components of the visual language

- Layout
 - How the content is structured on the display
- Typography
 - Typefaces & typesetting
- Imagery
 - Visual identity, icons...
- Sequencing
 - How interactions unfold



US National Park Service

Yosemite



Vicksburg

Vicksburg National Military Park
Mississippi
National Park Service
U.S. Department of the Interior

About Your Visit

Visiting National Military Park is a special experience for all. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War.

Consider the fact that this park is a living museum of the American Civil War. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War.

With its rich and varied history, the park is a living museum of the American Civil War. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War.

The best time to visit is during the summer months. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War. The park is a living museum of the American Civil War.



A Tour of the Battlefield

1. **General Sherman's Headquarters** (1862-63) - The site of General Sherman's headquarters during the Vicksburg Campaign.
2. **General Grant's Headquarters** (1862-63) - The site of General Grant's headquarters during the Vicksburg Campaign.
3. **General Sherman's Headquarters** (1862-63) - The site of General Sherman's headquarters during the Vicksburg Campaign.
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29. **General Sherman's Headquarters** (1862-63) - The site of General Sherman's headquarters during the Vicksburg Campaign.
30. **General Grant's Headquarters** (1862-63) - The site of General Grant's headquarters during the Vicksburg Campaign.

Redwood

Official Map and Guide



Redwood National Park
California
National Park Service
U.S. Department of the Interior

Padre Island

Official Map and Guide



Restoration and rehabilitation to the site. Visit today.

For visitors, Padre Island has been a great treasure for many years. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War.

Restoration and rehabilitation to the site. Visit today. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War.

Point Reyes

Official Map and Guide



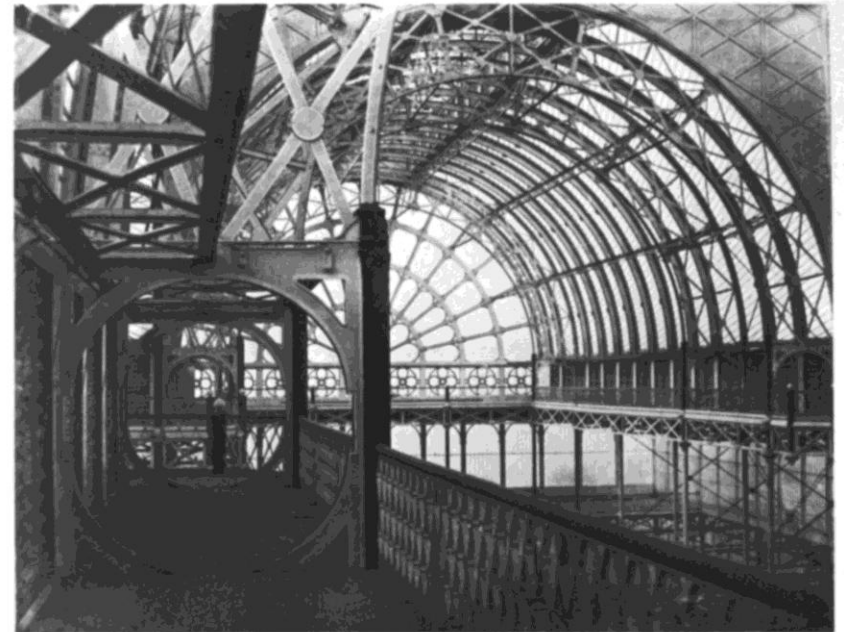
Restoration and rehabilitation to the site. Visit today.

Restoration and rehabilitation to the site. Visit today. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War. The island is a living museum of the American Civil War.

Parsing visual input



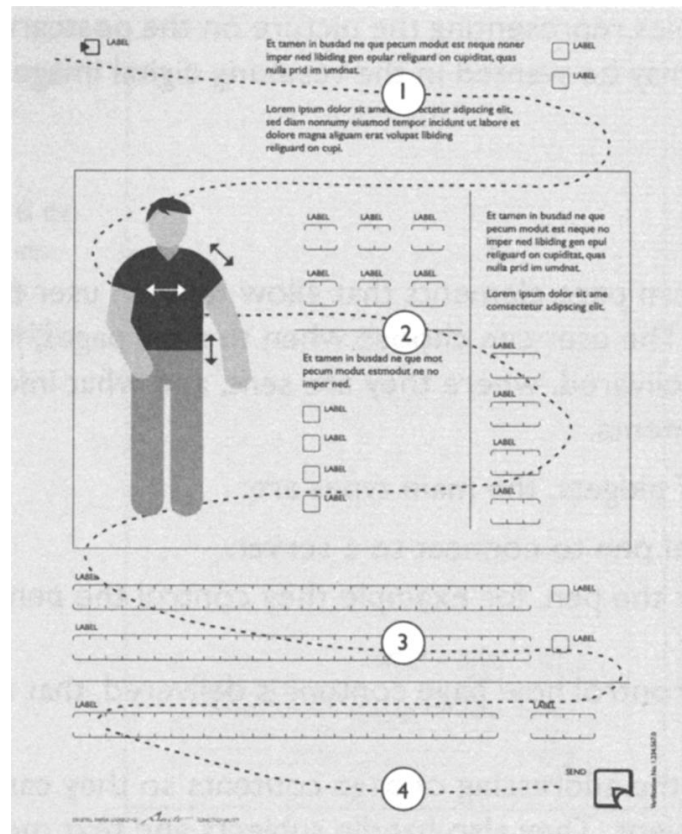
DOROTHEA LANGE. *Tracted Out, Childress County, Texas*. 1938. Gelatin-silver print. The Museum of Modern Art, New York.



PHILIP HENRY DELAMOTTE. *The Upper Gallery of the Crystal Palace, Sydenham, England*. ca. 1853. Salted paper print. Gernsheim Collection, Humanities Research Center, University of Texas, Austin.

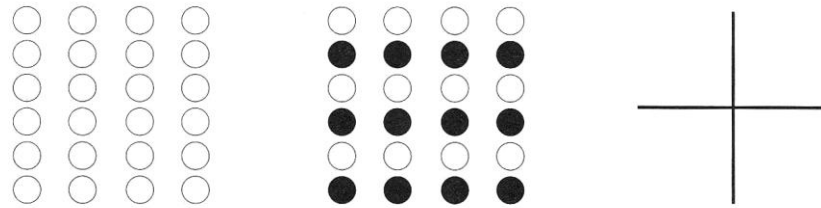
Document parsing

- Anoto design handbook
 - Design of paper based electronic forms

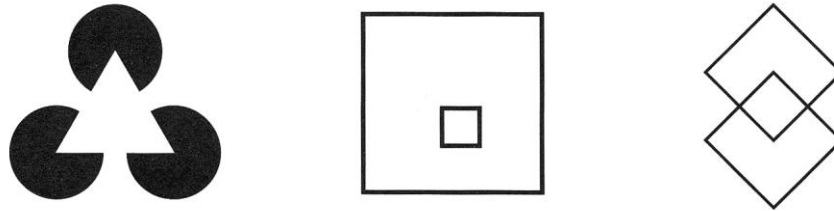


Gestalt principles

- Grouping
 - proximity, similarity, continuity

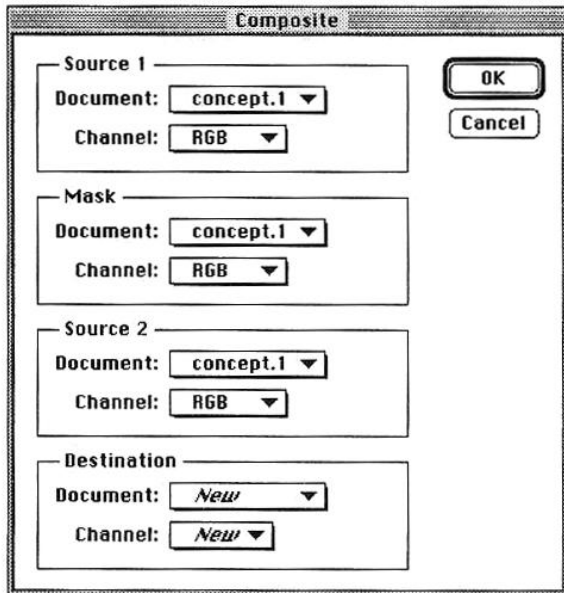


- Form perception
 - closure, area, symmetry

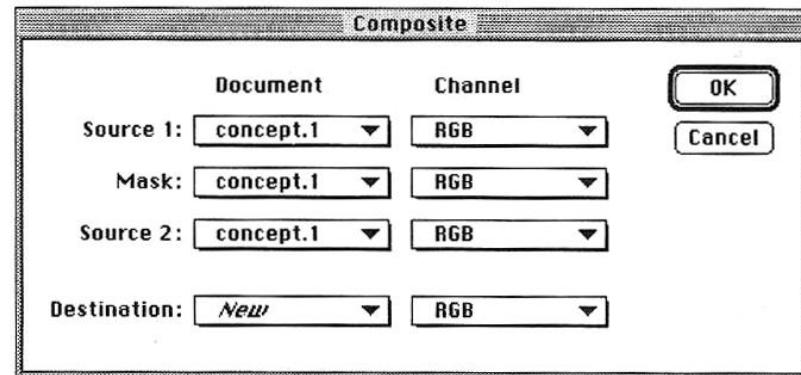


Relating structure: Grouping

- Help users parse the display into sub-units
 - Rely on Gestalt principles
 - Avoid explicit grouping



The image shows a dialog box titled "Composite" with a structured layout. It features four distinct sections, each enclosed in a rounded rectangular frame. The sections are labeled "Source 1", "Mask", "Source 2", and "Destination". Each section contains two dropdown menus: "Document" and "Channel". In the "Source 1", "Mask", and "Source 2" sections, the "Document" dropdown is set to "concept.1" and the "Channel" dropdown is set to "RGB". In the "Destination" section, both the "Document" and "Channel" dropdowns are set to "New". To the right of these sections are two buttons: "OK" and "Cancel".



The image shows a dialog box titled "Composite" with a flat, ungrouped layout. The controls are arranged in a grid. At the top, there are two column headers: "Document" and "Channel". Below these, there are four rows of controls. The first row is labeled "Source 1:" and has "concept.1" in the "Document" dropdown and "RGB" in the "Channel" dropdown. The second row is labeled "Mask:" and has "concept.1" in the "Document" dropdown and "RGB" in the "Channel" dropdown. The third row is labeled "Source 2:" and has "concept.1" in the "Document" dropdown and "RGB" in the "Channel" dropdown. The fourth row is labeled "Destination:" and has "New" in the "Document" dropdown and "RGB" in the "Channel" dropdown. To the right of the grid are two buttons: "OK" and "Cancel".

Relating structure: Hierarchy

- Provide a context for each piece of information
 - Example: distinctive style for labels

The image shows a dialog box titled "Pizza: Pizza Pie Properties". It is organized into two main sections: "BOTTOM STUFF" and "TOPPING STUFF".

BOTTOM STUFF

Style: crust

Sauce:

TOPPING STUFF

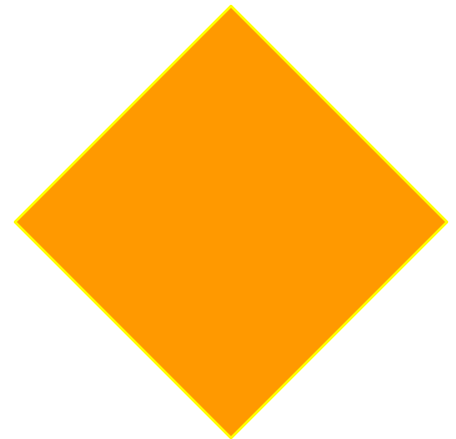
Toppings:

| Meat | Veggies | Other |
|--------------------------------------|-------------------------------------|--------------------------------------|
| <input type="text" value="Ham"/> | <input type="text" value="Olive"/> | <input type="text" value="Cheese"/> |
| <input type="text" value="Bacon"/> | <input type="text" value="Pepper"/> | <input type="text" value="Pesto"/> |
| <input type="text" value="Sausage"/> | <input type="text" value="Onion"/> | <input type="text" value="Anchovy"/> |

Options: Red Peppers
 Extra Cheese

Buttons:

Human Size Perception



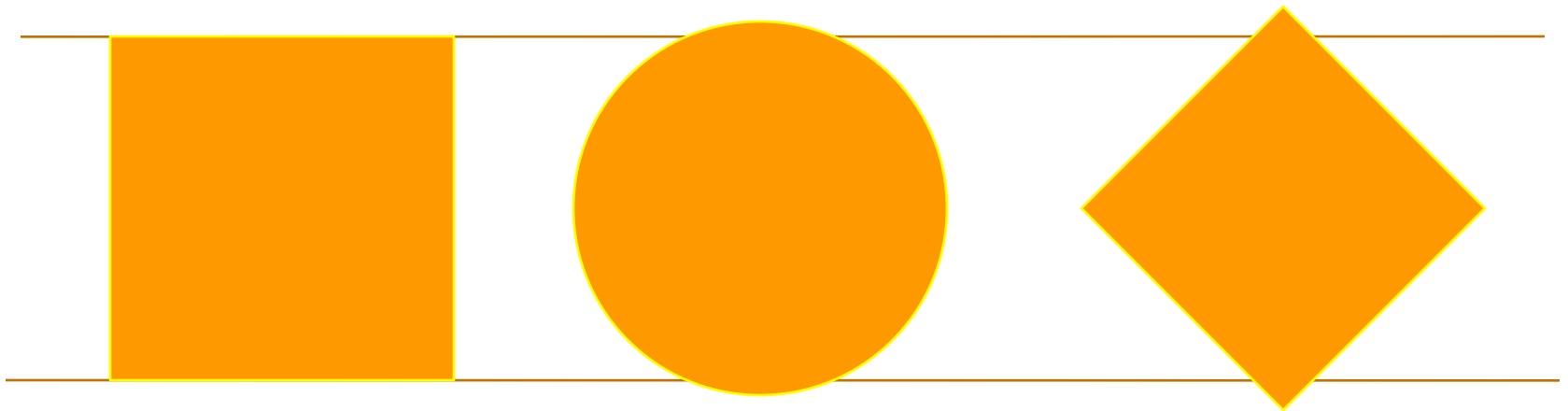
Human Size Perception

- Straight edges appear larger than curved edges
- Curved edges appear larger than sharp edges



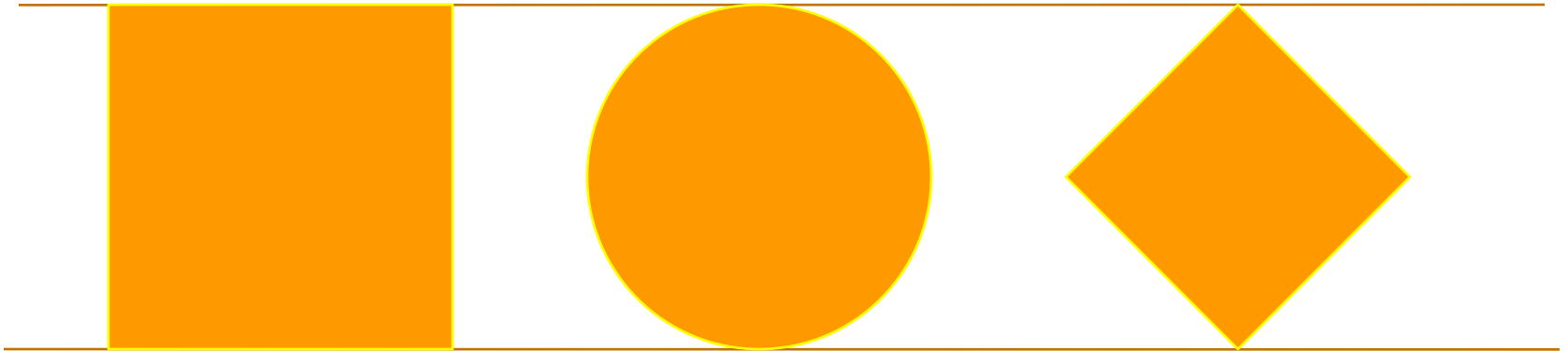
Human Size Perception

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- Curved edges appear larger than sharp edges



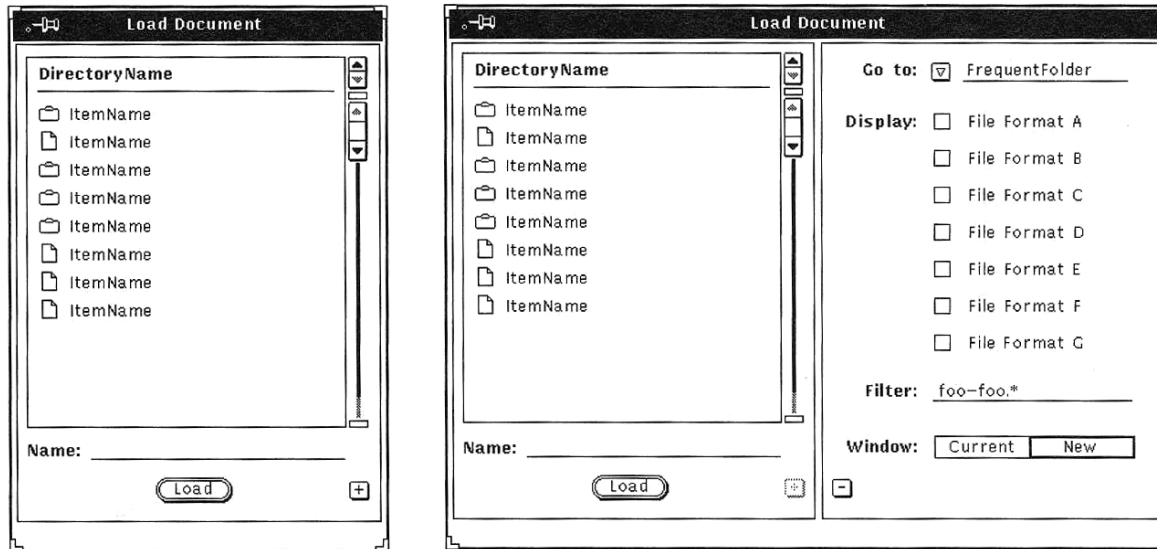
Human Size Perception

- Straight edges appear larger than curved edges
- Curved edges appear larger than sharp edges



Symmetry

- Center information around the axis of symmetry
 - Balance
 - Vertical axis more prevalent



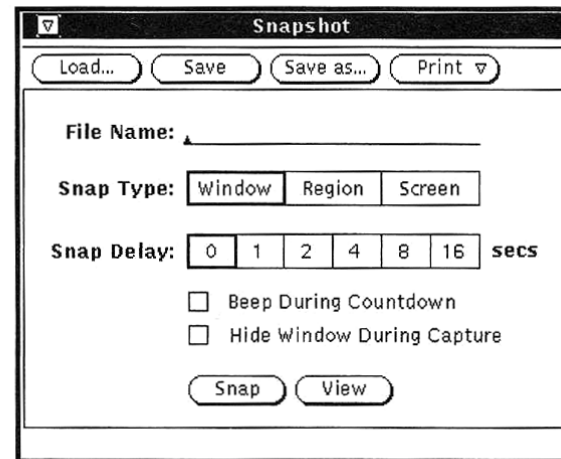
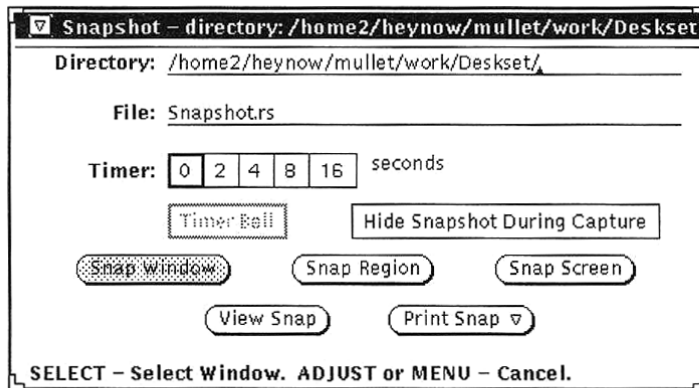
Symmetry

- But be careful about text

**You are cordially invited,
and strongly encouraged,
to not use
centered alignment
for long passages of text.
Save centering for
invitations and cards,
certificates,
some headlines,
and layouts with minimal text.**

Alignment

- Enhance boundaries and grouping
- Pay attention to false alignment
 - Almost but not quite aligned
 - Free standing objects
 - Be aware of optical adjustment



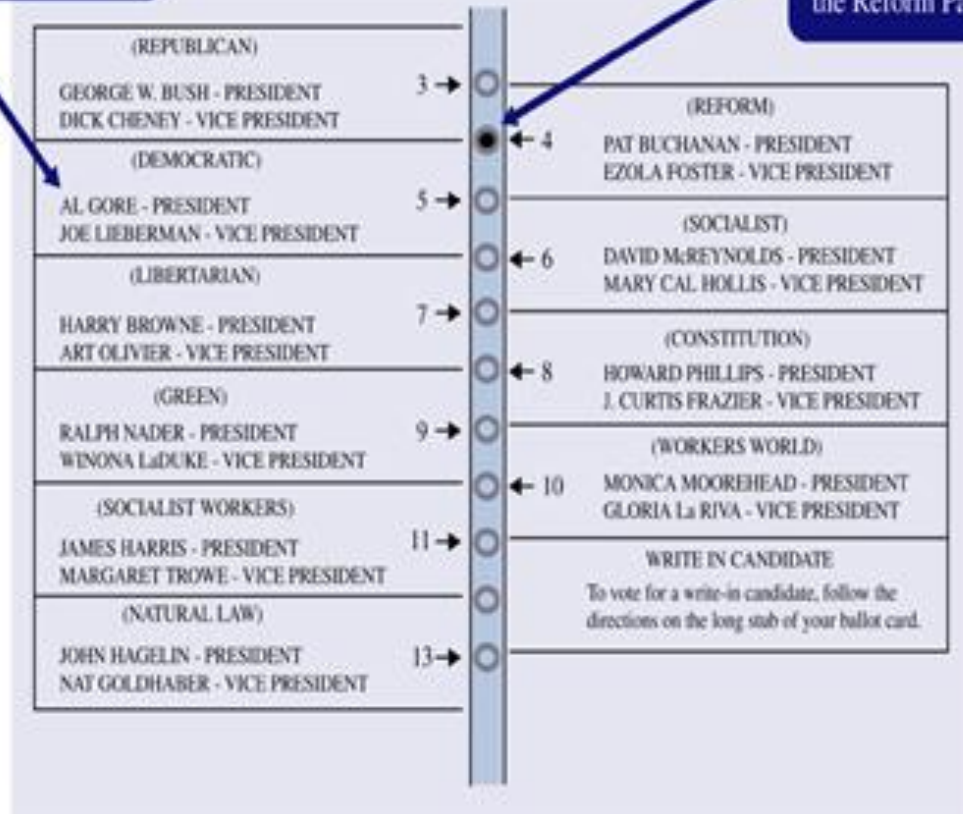
Alignment

Butterfly Ballot Florida 2000

Although the Democrats are listed second in the column on the left, they are the third hole on the ballot.

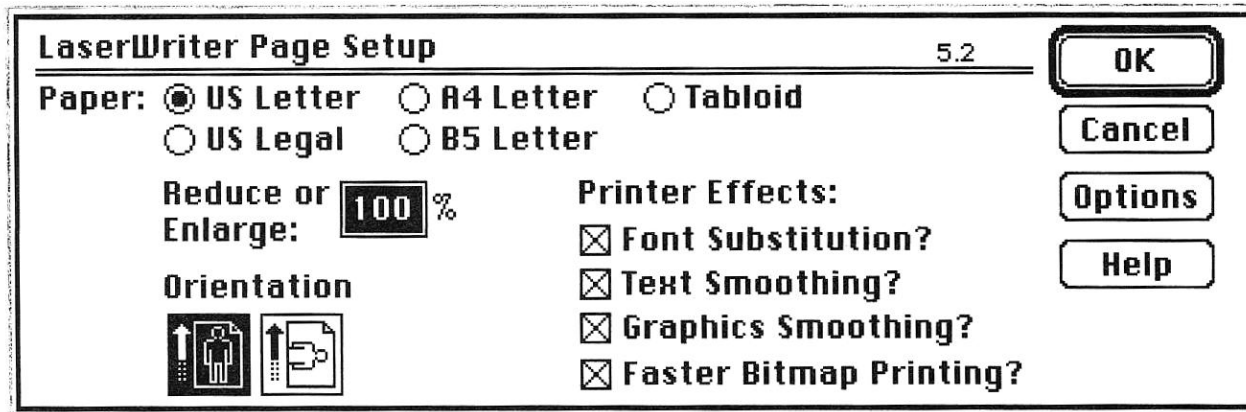
Confusion over Palm Beach County ballot

Punching the second hole casts a vote for the Reform Party.



Negative space

- The ground on which the design appears
- Enhance the structure of the display
 - Reduce the use of border



Consistency:

- Banner blindness
- Consistency
- 18,000 votes “lost”

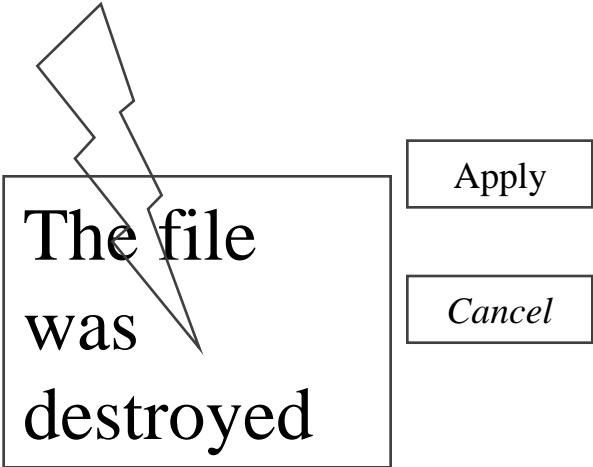
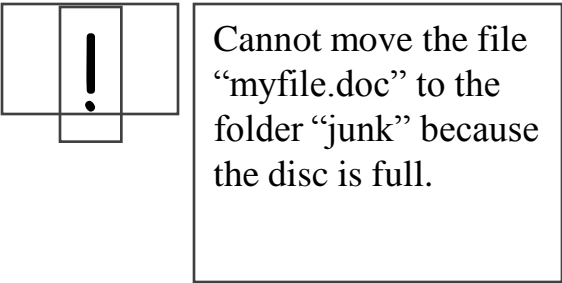
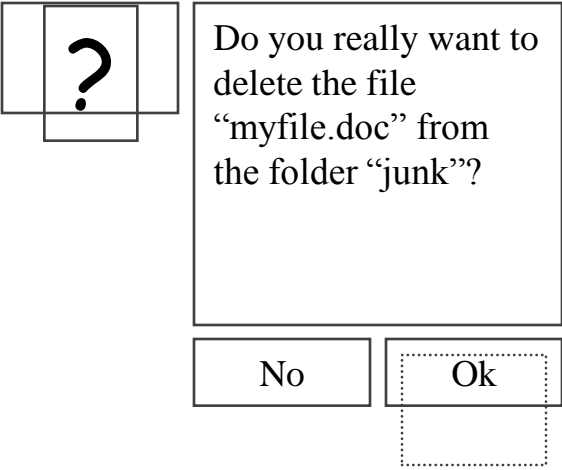
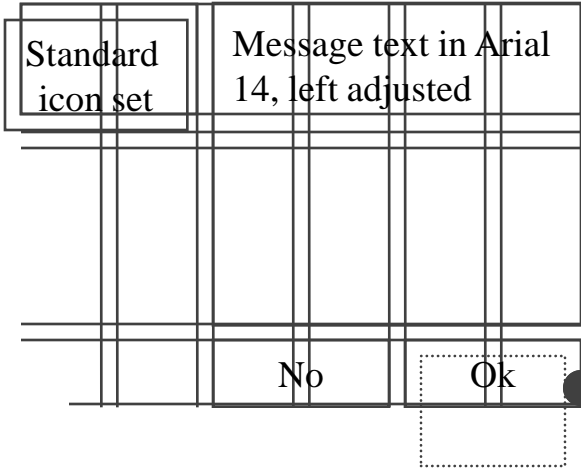
| U.S. REPRESENTATIVE IN CONGRESS 13TH CONGRESSIONAL DISTRICT (Vote for One) | | |
|--|-----|--------------------------|
| Vern Buchanan | REP | <input type="checkbox"/> |
| Christine Jennings | DEM | <input type="checkbox"/> |

| STATE GOVERNOR AND LIEUTENANT GOVERNOR (Vote for One) | | |
|--|-----|--------------------------|
| Charlie Crist | REP | <input type="checkbox"/> |
| Jeff Kottkamp | | |
| Jim Davis | DEM | <input type="checkbox"/> |
| Daryl L. Jones | | |
| Max Linn | REF | <input type="checkbox"/> |
| Tom Macklin | | |
| Richard Paul Dembinsky | NPA | <input type="checkbox"/> |
| Dr. Joe Smith | | |
| John Wayne Smith | NPA | <input type="checkbox"/> |
| James J. Kearney | | |
| Karl C.C. Behn | NPA | <input type="checkbox"/> |
| Carol Castagnero | | |
| Write-In | | <input type="checkbox"/> |

Previous Page Page 2 of 21 Next Page
Public Count: 0

[Sarasota 2006]

Grids



Another grid

Two-level Hierarchy
•indentation
•contrast

Logic of organizational flow

The screenshot shows a window titled "Grid for Form Type 1". It features a grid layout with two sections, each starting with a "Heading 1". The first section contains three labels: "Label", "Label", and "Label", each followed by a control: a "Text field", a "Combo1" dropdown, and a "Large multiline text field". The second section contains four "Check box" controls arranged in a 2x2 grid. At the bottom right are "Apply" and "Cancel" buttons.

The screenshot shows a window titled "Note Sender". It has a "Send to" section with "Name" (Saul Greenberg) and "Email" (saul@cpsc.ucalgary.ca) fields. Below is a "Message" text area containing "Hi Saul", "Lets get together for lunch,", "Perhaps tomorrow?", and "Judy". The "Instructions" section has a "Type" dropdown (Normal mail), a checked "Include attachments" checkbox, and an unchecked "Carbon copy" checkbox. "Apply" and "Cancel" buttons are at the bottom right.

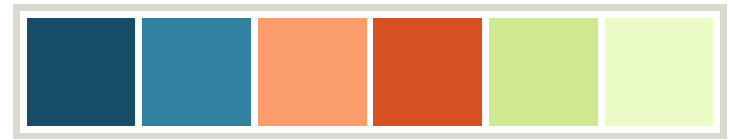


Alignment connects visual elements in a sequence

Grouping by white space

Color

- Much bigger topic than we can cover here
- Technology: RGBA
- Components specified in [0-1], [0-255], [0-0xff]
- Requirements:
 - Contrast (luminance difference)
 - Avoid color-blindness problems
 - Attractive (avoid fully saturated colors)
- Advice: Use existing color palettes
 - www.colorcombos.com
 - www.colourlovers.com
 - www.degraeve.com/color-palette/



Exercise

Redesign
this
dialog

