

## Designing User Interfaces

- User Interface:  
People's perception of **"The Product"**
- Good UIs have two **well-integrated** conceptual parts:
  - Form / Visual Design
  - Functionality / Navigation
- Implementing good UIs requires **harmony** between them

## Visual Design is about

- Information **"Resolution"**
  - How much you try to tell in a screenshot
  - Especially if you convey quantitative information
- **"Interaction"** between Design Elements
  - It draws your attention, then what?
- **Color** Issues -- Support or interfere with UI?
- **Typographical** Issues -- Support or interfere with UI?
- Overall Design **"Quality"**

## The Problem

Intelligent human



Powerful machine

One screenshot < 10% of one printed page

## Map page to screen?

- **Scrolling** requires users to rely on **visual memory** (a weak skill)
- **Multiple screens per page** make it difficult
  - to make a comparison, a choice
  - to keep track of context ("Where am I?")
- **Multiple screens management** adds lots of administrative debris (buttons, menus, navigational images, etc.)
- **Design needs to increase "signal" & reduce "noise"**

## Principles of design

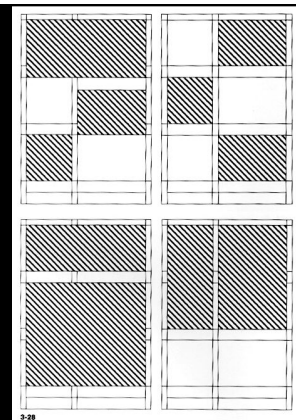
Alignment  
Contrast  
Proximity  
Repetition

ways to achieve unity

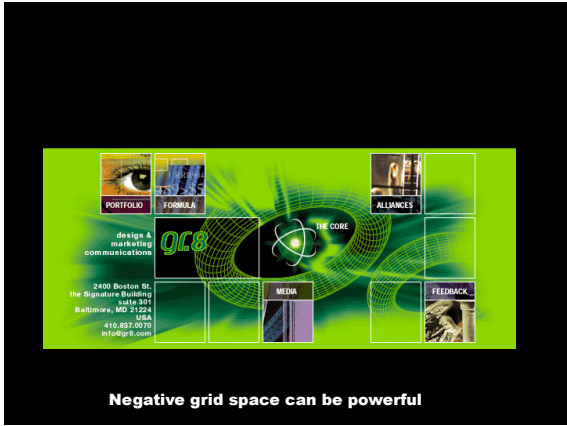
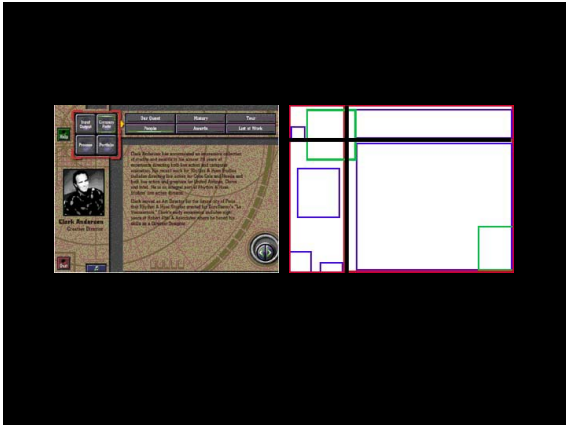
Robin Williams' cheatsheet: <http://www.urlinternetcafe.com/classroom/features/featuresgood.html>

**Alignment**  
is central  
to understanding

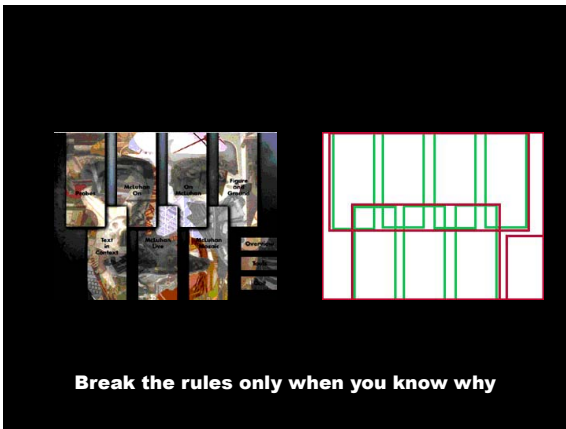
Lay out the page  
with grids



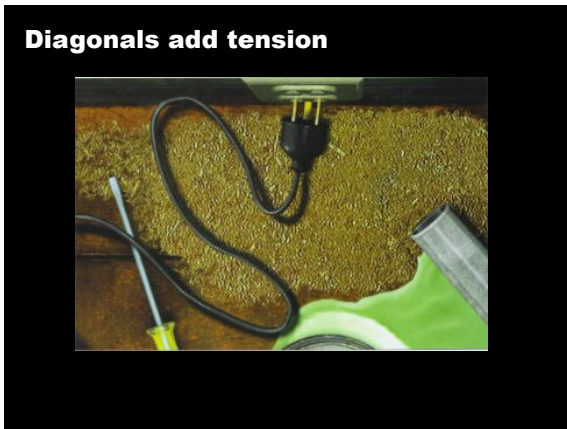
3-28



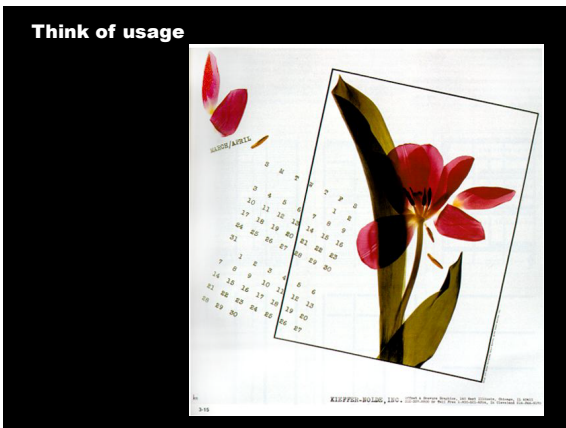
Negative grid space can be powerful



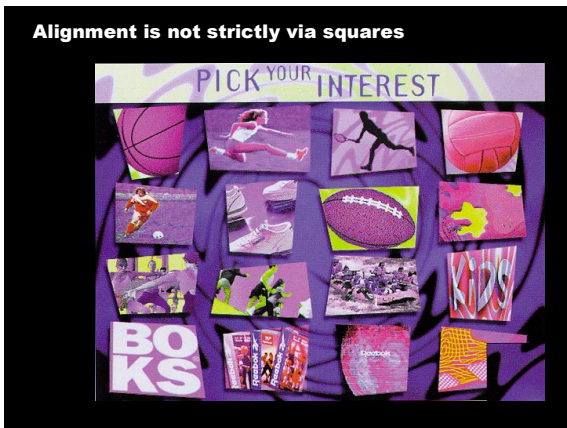
Break the rules only when you know why



Diagonals add tension



Think of usage



Alignment is not strictly via squares

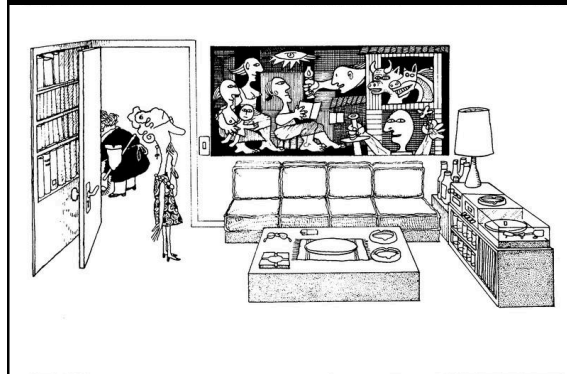
Alignment is not strictly straight lines



**Contrast** brings out the focal point



Contrast should be intentional



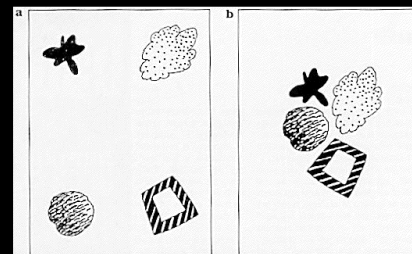
Visual weight

*Anything that is different from the rest*

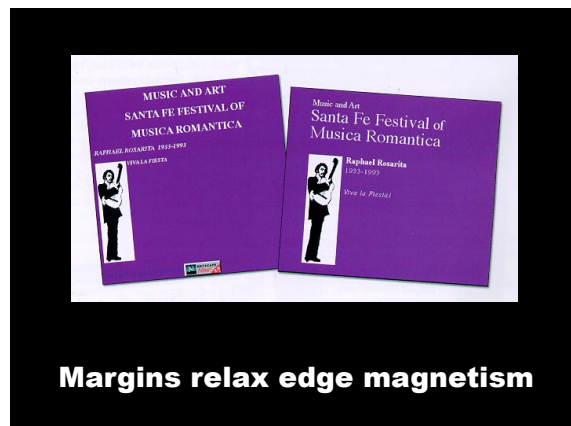
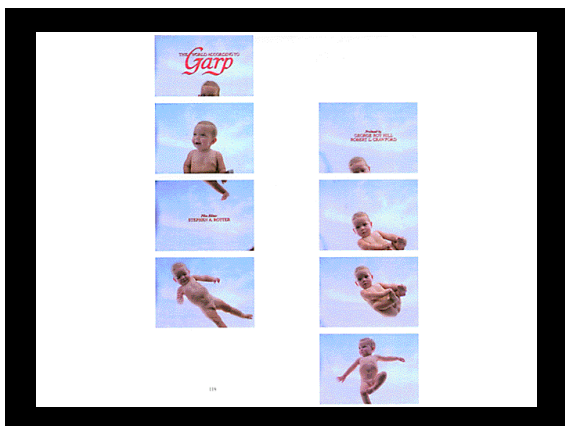
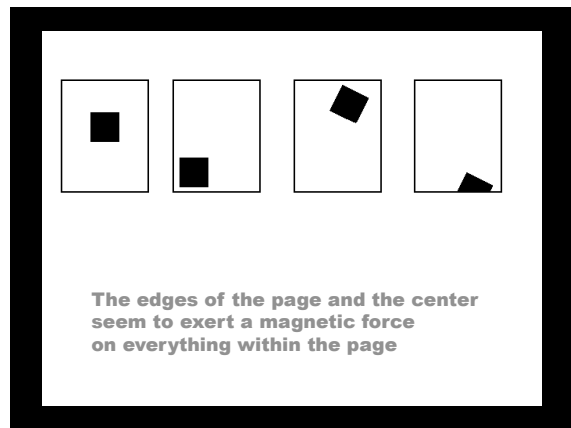
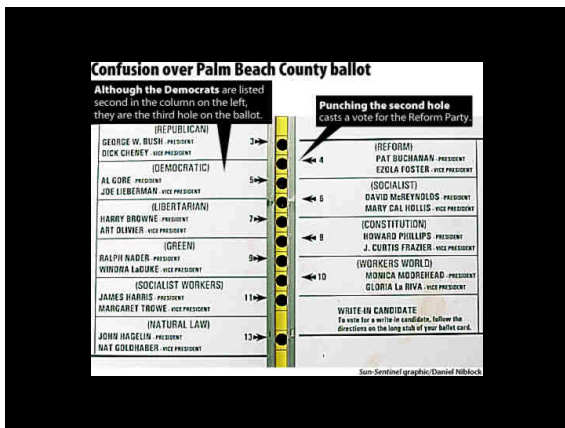
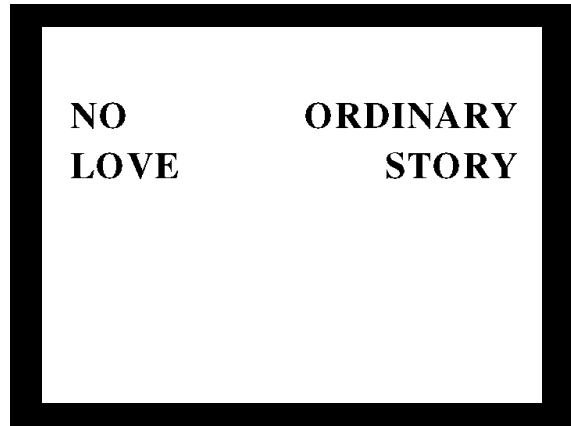
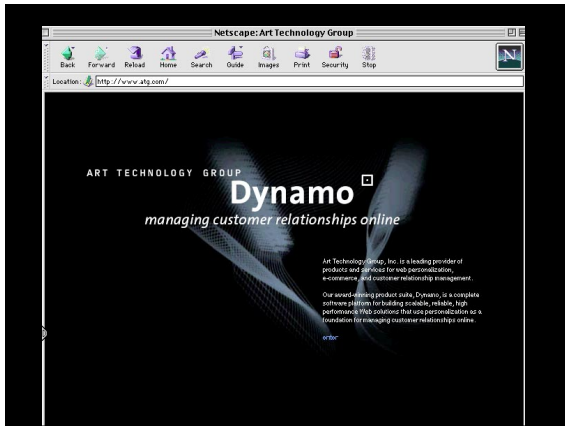
**Contrast in:** Color  
size  
shape  
photo v. drawing  
orientation  
font

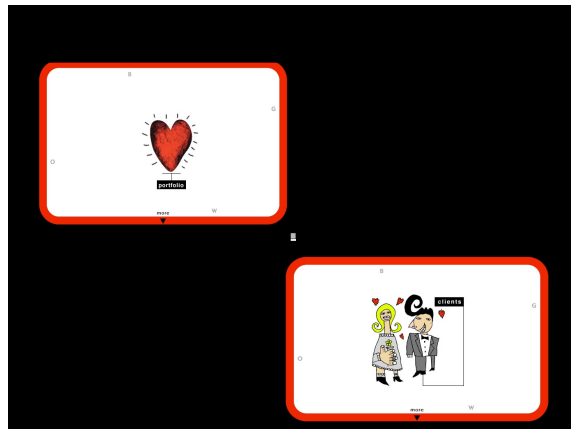
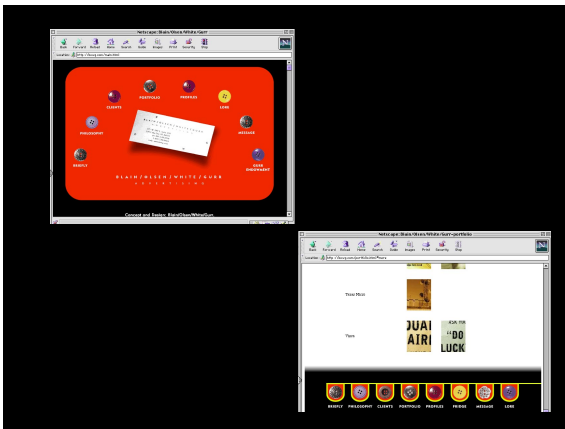
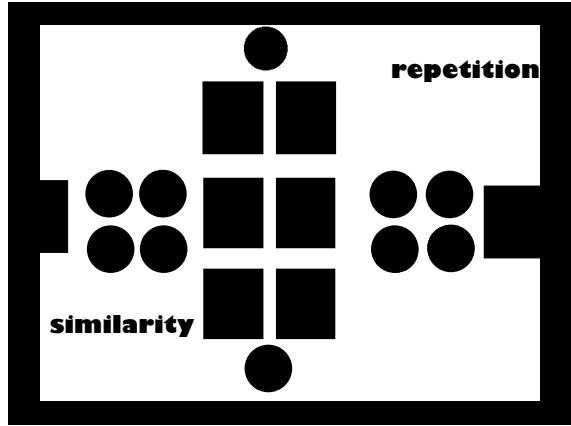
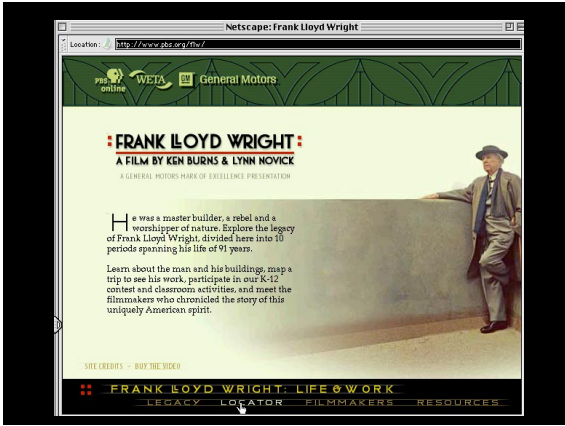
Where you place graphics or text creates or upsets

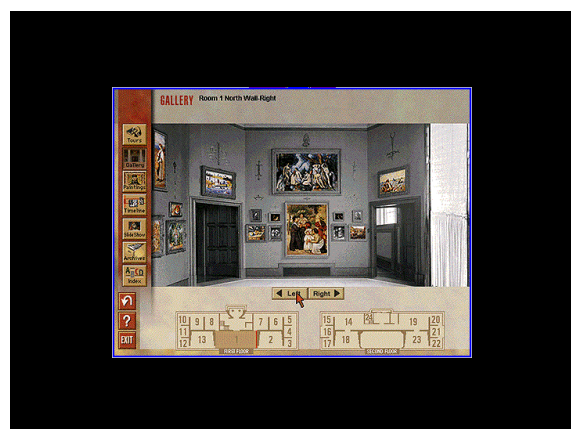
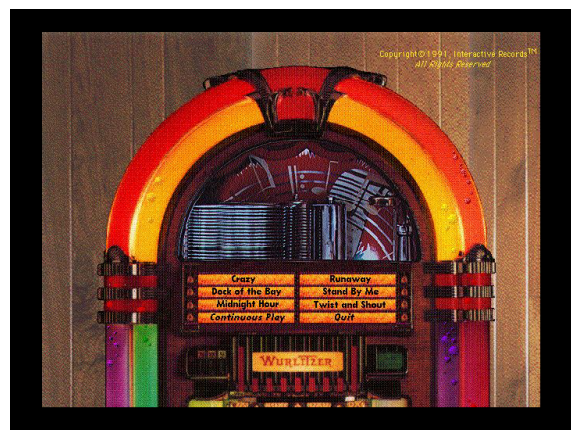
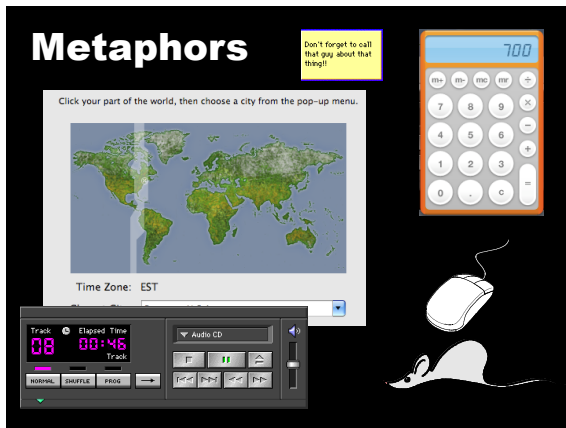
**balance**



**proximity**









**Map**  
physical or mental, is a very familiar metaphor.

THE  
LINCOLN-  
DOUGLAS  
DEBATES

MAIN CHAPTER 4 EXIT



**Historylines**  
very useful but tricky to compress tons of data in a small screen

**Timeline**

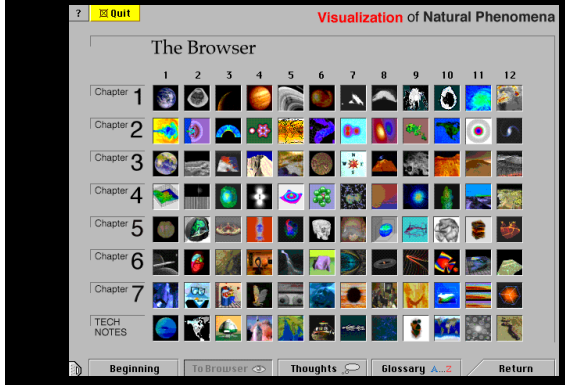
- The French School
- The Italian School
- The Northern School, Flanders
- The Northern School, Germany
- The Northern School, Holland
- The Spanish School
- The English School

Go back Summary

A good example of increasing information density

**Beware!**

# Form beats function



# Screen real estate sold cheap

