

# **Graphic Design and Gestalt Principles**

CS160: User Interfaces  
John Canny

# Assignments

Update

# Due next week

- **Interactive Prototype (due Nov 5th)**
  - Redesign interface based on low-fidelity feedback
  - Create first working implementation
    - Can include Wizard of Oz parts
    - Can include pre-coded functionality
- **In class Presentations (Nov 5th & 7th)**
  - 5 min presentation (short! be careful about timing)
  - Focus on showing prototype (live may not be best idea)
  - Feedback from class (you will need to provide feedback on each presentation on the wiki)

# Presentation Schedule: 11/5/2012

Group 3

Group 5

Group 6

Group 7

Group 8

Group 11

Group 14

Group 16

Group 17

Group 19

# Presentation Schedule: 11/7/2012

Group 1

Group 2

Group 4

Group 9

Group 10

Group 12

Group 13

Group 15

Group 18

# Presentation tips

Time is extremely short

- Use your slides as cues, but **don't talk at them**
- Make sure you **know what you will say**
- Share the work, **don't try to talk and demo at same time**
- **Stand up**, talk to the people at the back of the room
- Don't try to fit everything into your talk. Make sure the important points are there, and that you cover them thoroughly

# Technology tips

- **Technology: Test your setup on a projector!**
- Don't assume the projector can handle your default resolution.
- Don't assume anyone else has the dongle you need.
- Don't assume Powerpoint slides, videos, demos etc. will appear on the right screen. Your computer will probably default to two-screen mode, and you need to send everything to the projector screen.
- Have at least **one backup computer** ready to go.
- There is no time for you to figure this out during your presentation.
- Projectors will be available **in GSI office hours** this Thursday.

# Answering Questions

1. Every question is **good**, even if it doesn't make sense – always be polite to the questioner
2. Act like you **enjoy** answering questions, it suggests that you know your stuff, and your product is good
3. Questions are an opportunity to **persuade** interactively
4. Make a **best effort** answer at every question – if you can't answer exactly, give some information that's relevant
5. If you think you know what's coming you can prepare **extra slides**
6. Give plenty of detail, but stop to allow more questions



# Topics

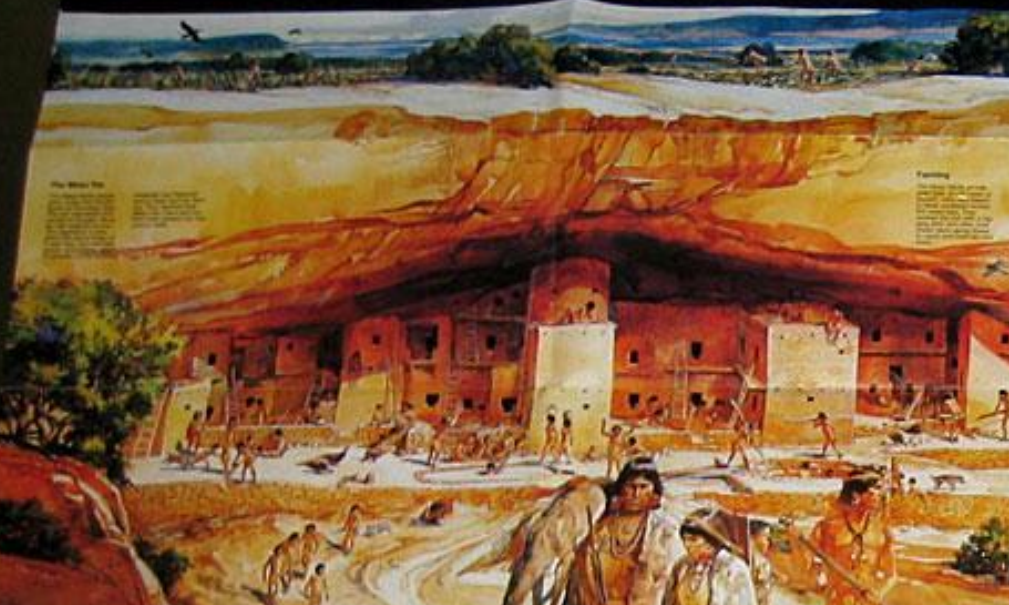
1. Brief History of Graphic & Product Design
2. Simplicity and Elegance
3. Color
4. Gestalt Principles
5. Typography
6. Composition



# Graphic Design is about Communication

## Mesa Verde

National Park Service  
U.S. Department of the Interior



### The World of the Mesa Verde People

**Architecture**  
The cliff dwellers built their homes in natural rock overhangs and caves. They used mud and plaster to create smooth, rounded walls. The dwellings were built on a level floor, often with a central courtyard. The people used a variety of tools and weapons, including bows, arrows, spears, and knives. They also used pottery and woven baskets.

**Tools and Weapons**  
The cliff dwellers used a variety of tools and weapons, including bows, arrows, spears, and knives. They also used pottery and woven baskets.

**Food**  
The cliff dwellers were hunters and gatherers. They hunted deer, bison, and other animals. They also gathered wild fruits, nuts, and seeds. They used a variety of tools to hunt and gather, including bows, arrows, spears, and knives.

**Transportation**  
The cliff dwellers used pack animals, such as horses and mules, to transport goods and supplies. They also used pack trains to move goods and supplies over long distances.

**Art**  
The cliff dwellers were skilled artists. They painted and etched designs on the walls of their dwellings. These designs included geometric shapes, animals, and human figures. They also used natural pigments to create vibrant colors.

**Religion**  
The cliff dwellers had a complex belief system. They believed in a supreme being and practiced various rituals and ceremonies. They also believed in the afterlife and practiced burials in special chambers.

**Language**  
The cliff dwellers spoke a language that is now extinct. They used a variety of words and phrases to communicate with each other. They also used body language and gestures to convey meaning.

**Family**  
The cliff dwellers lived in family groups. They had a clear hierarchy and division of labor. Men were responsible for hunting and gathering, while women were responsible for cooking and child-rearing. They also had a strong sense of community and shared resources.

**Living Fast**  
The cliff dwellers lived a fast-paced life. They had to be constantly on the move, searching for food and shelter. They also had to be able to defend themselves from predators and other threats. This lifestyle required a high level of physical fitness and agility.

**Environment**  
The cliff dwellers lived in a semi-arid environment. They had to be able to survive in a dry climate with limited water resources. They also had to be able to adapt to changing weather conditions and seasonal variations.

## Death Valley

National Park Service  
U.S. Department of the Interior



### Land of Great Extremes

Death Valley is a land of extremes, where temperatures can reach over 130 degrees Fahrenheit in the summer and drop below freezing in the winter. The valley is also a land of great beauty, with stunning views of the surrounding mountains and a unique desert landscape. The valley is home to a variety of plants and animals that have adapted to these harsh conditions.

### Desert Adaptations: To Survive and Thrive

**Desert Holly**  
This shrubby plant has thick, waxy leaves that store water. It can survive for long periods without water and has small, red flowers.

**Kangaroo Rat**  
This small rodent has large, powerful hind legs that allow it to hop long distances. It has a long, thin tail that helps it maintain balance. It is a nocturnal animal that feeds on seeds and insects.

**Chuckwalla**  
This large lizard has a thick, scaly skin that helps it retain moisture. It is a slow-moving animal that can survive for long periods without food. It is a herbivorous animal that feeds on plants and insects.

### Landscape Contrasts Create More Niches for Life

**High and Low**  
The valley floor is a flat, dry lake bed, while the surrounding mountains are covered in dense forests. This creates a variety of habitats and niches for different plants and animals.

**Wet and Dry**  
The valley floor is a dry lake bed, while the surrounding mountains are covered in dense forests. This creates a variety of habitats and niches for different plants and animals.

**Hot and Cold**  
The valley floor is a hot, dry lake bed, while the surrounding mountains are covered in dense forests. This creates a variety of habitats and niches for different plants and animals.

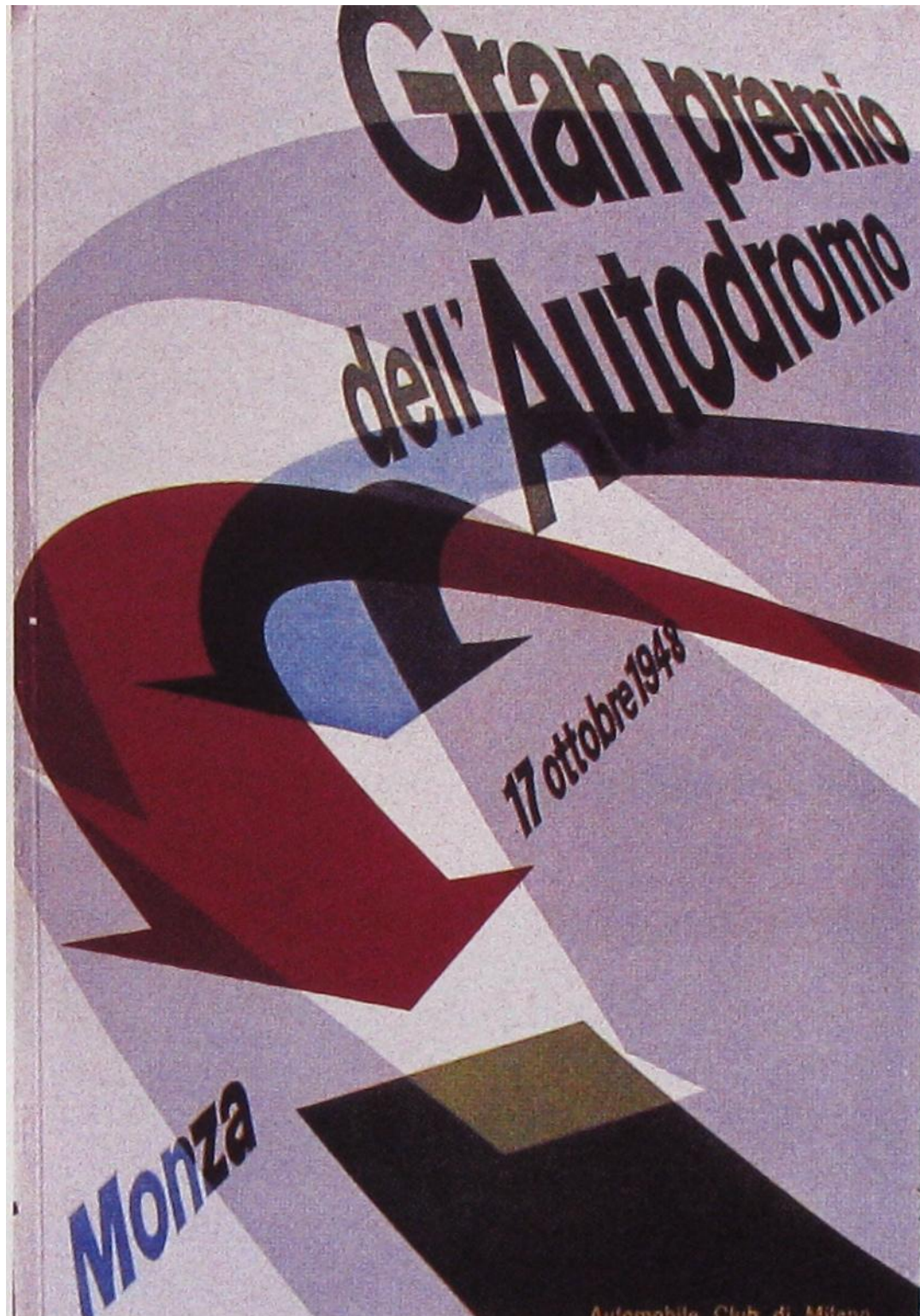
**High and Low**  
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# Graphic Design is also about Interpretation



Max Huber, Poster, 1948



Wes Wilson, Poster, 1966



# Great Design is about Emotion and Desire





# Modern Design: Bauhaus





# Bauhaus



Joost Schmidt, Exhibition Poster, 1923



Herbert Bayer, Exhibition Poster, 1926

Images from:  
P. Meggs, A History of Graphic Design, Wiley 1998



# Jan Tschichold



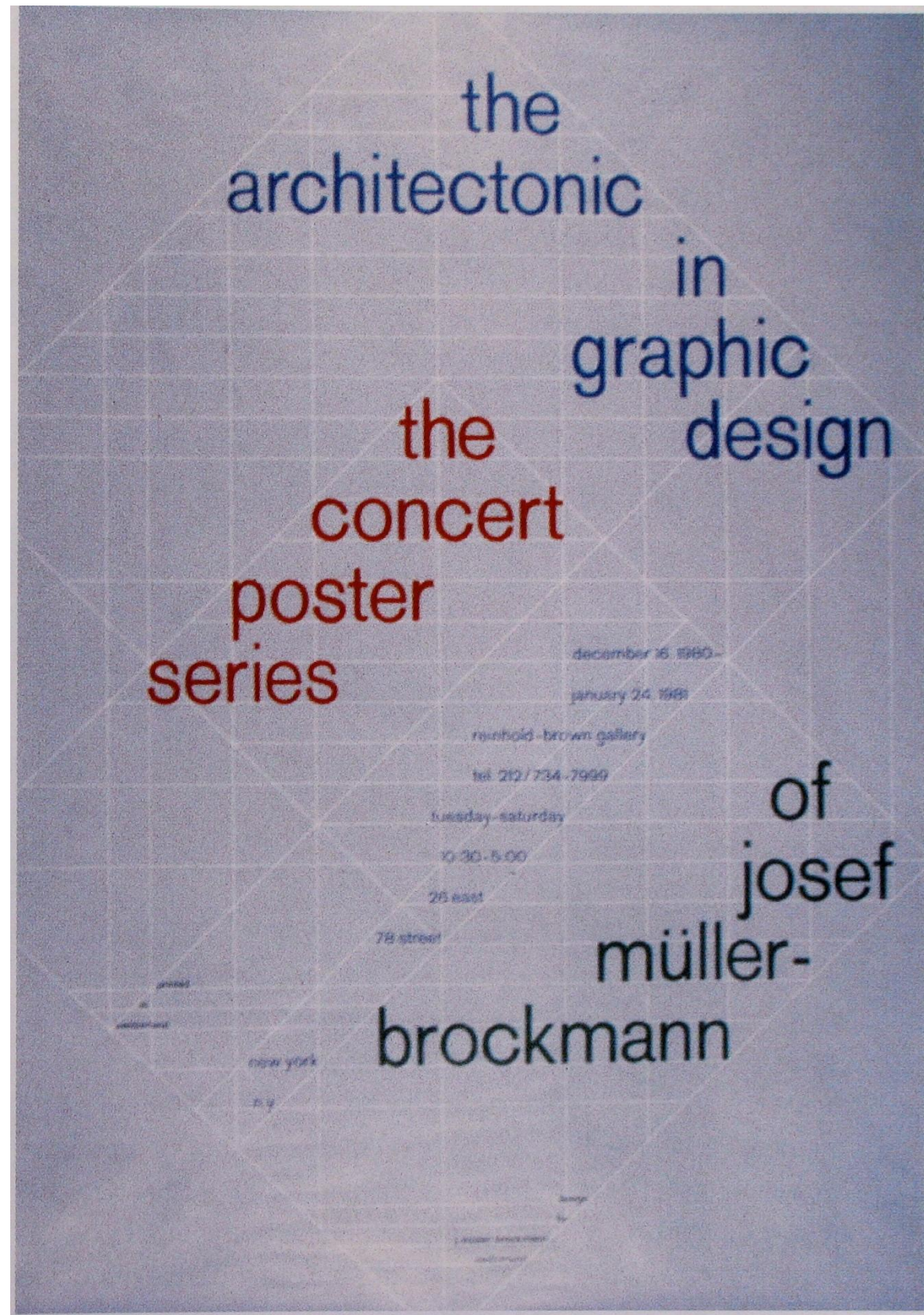
Before: Tschichold, Leipzig Trade Fair, 1922



After: Tschichold, Elemental Typography, 1925



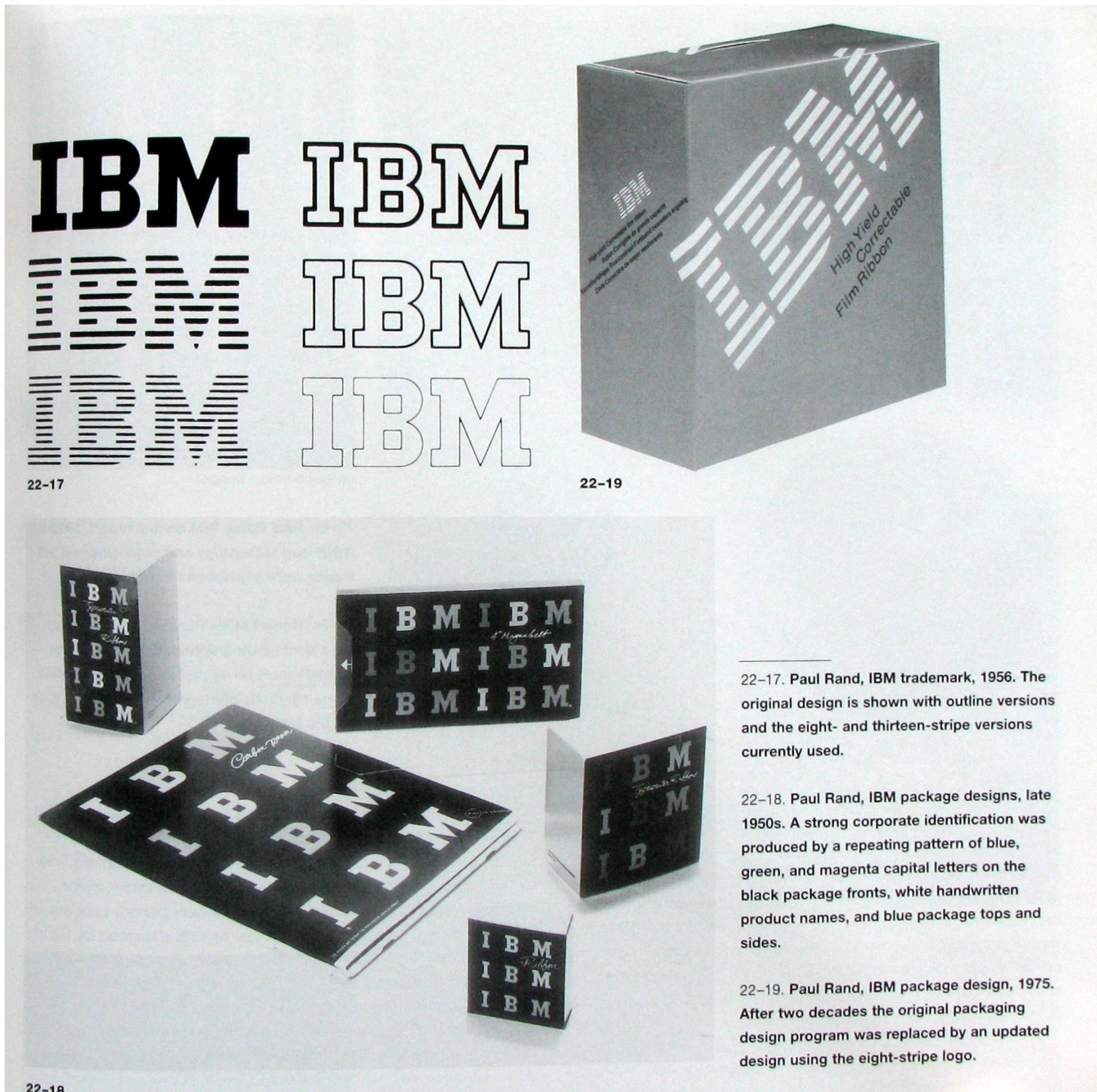
# Grid-Based Design



Josef Müller-Brockmann  
Exhibition Poster, 1980



# Design Systems: Corporate Identity



22-17

22-19

22-18

22-17. Paul Rand, IBM trademark, 1956. The original design is shown with outline versions and the eight- and thirteen-stripe versions currently used.

22-18. Paul Rand, IBM package designs, late 1950s. A strong corporate identification was produced by a repeating pattern of blue, green, and magenta capital letters on the black package fronts, white handwritten product names, and blue package tops and sides.

22-19. Paul Rand, IBM package design, 1975. After two decades the original packaging design program was replaced by an updated design using the eight-stripe logo.





+ Add more to this page ?

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TOP NEWS STORY

## Moscow vows to avenge bomb blasts

Russia's leaders pledge to "destroy" those behind rush-hour suicide attacks on the Moscow Metro in which 38 people died.

>> More from BBC News

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One More Reason: Michael's Escape Hybrid

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### More Top Stories Edit x



US Treasury plans Citi share sale

S Korea ship 'may have hit mine'

Arrest over US consulate shooting

- Gaddafi wants more Nigeria splits
- EU row sours Merkel's Turkey trip
- US 'Christian militants' charged
- Falklands oil search disappoints
- Four Rio Tinto executives jailed

>> MORE TOP STORIES + -

- Gaddafi wants more Nigeria splits
- EU row sours Merkel's Turkey trip
- US 'Christian militants' charged

>> More from BBC News

### World Service Edit x

NEWS IN 32 LANGUAGES

- |         |        |        |
|---------|--------|--------|
| العربية | فارسی  | اردو   |
| 中文      | हिन्दी | Somali |

### Sport Edit x



Man City 3-0 Wigan

Zola vows to stay as Hammers boss

Pakistan batsman Yousuf retires

- Newcastle 2-0 Nottm Forest
- Rooney & Ferdinand boost Man Utd
- Lyon v Bordeaux
- Gascoigne on drink-drive charge
- Els hangs on for Bay Hill victory

### Travel Edit x

from lonely planet



### Spotlight x

>> CLICK



Click: The BBC's flagship technology programme

Your guide to the latest gadgets, websites, games and computer industry news.

- First look gadget reviews
- Webscape: The best of the web
- ClickBits: The week in tech in 3 minutes

### Business & Money Edit x

>> MARKET DATA MON, 29 MARCH 2010 22:44:31 BST

Dow Jones	10895.86	▲	45.5
Nasdaq	2404.36	▲	9.23
FTSE 100	5710.66	▲	7.64



# DRUDGE REPORT

CAIN TOPS PERRY -- IN TEXAS...

Says race isn't fueling surge...

'This many white people can't pretend they like me'...

TRANSPARENT: White House seeks to hide documents...



LIBERATE: Al Qaeda flag flies over Libya...

Palestinians win full membership on UN cultural agency...

US: Counterproductive...

Cuts funding...



DOW shaves 200...

Frustrated Sheriff Warns Citizens to Carry Concealed Weapons...

'Don't get mace. Get a firearm'...

'GPS shoes' would track Alzheimer's patients...

Homeless sex offenders rounded up for Halloween...

SPREAD THE WEALTH: CA Assemblywoman charged with felony grand theft...

Obama Campaigning 'Like It's 1936'...

UPDATE: White House scrubs fundraiser with ex-Enron trader...



CURL: 'THE VERY ANGRY FIRST LADY'...

REPORT: Chinese scientists make blood from rice...

100+ Halloween Revelers In Costume Brawl On Hollywood Street...

Woman hit in head by shopping cart pushed from rooftop; two 12 year olds arrested...

FBI video, documents on Russian spy ring

FCC Cracks Down on Religious Broadcasters...

Second Energy Department-backed company goes bankrupt...

Corzine's MF GLOBAL files Chapter 11...

Likely Among the 10 Biggest Bankruptcies Ever...



Angry librarians stand up to 'Godfather'...

Home prices heading for triple-dip...

Gas lines after snow storm...





# Product Design is about Form and Function



Philippe Starck, Juicer for Alessi



Oxo Angled Measuring Cup

# Bauhaus Again



Le Corbusier  
Grand Confort, 1928



Marcel Breuer  
Wassily Chair, 1925



# Form Follows Function



Centre Georges Pompidou, Paris  
All infrastructure (ducts, vents, stairs) on outside of building

# Form Follows Function

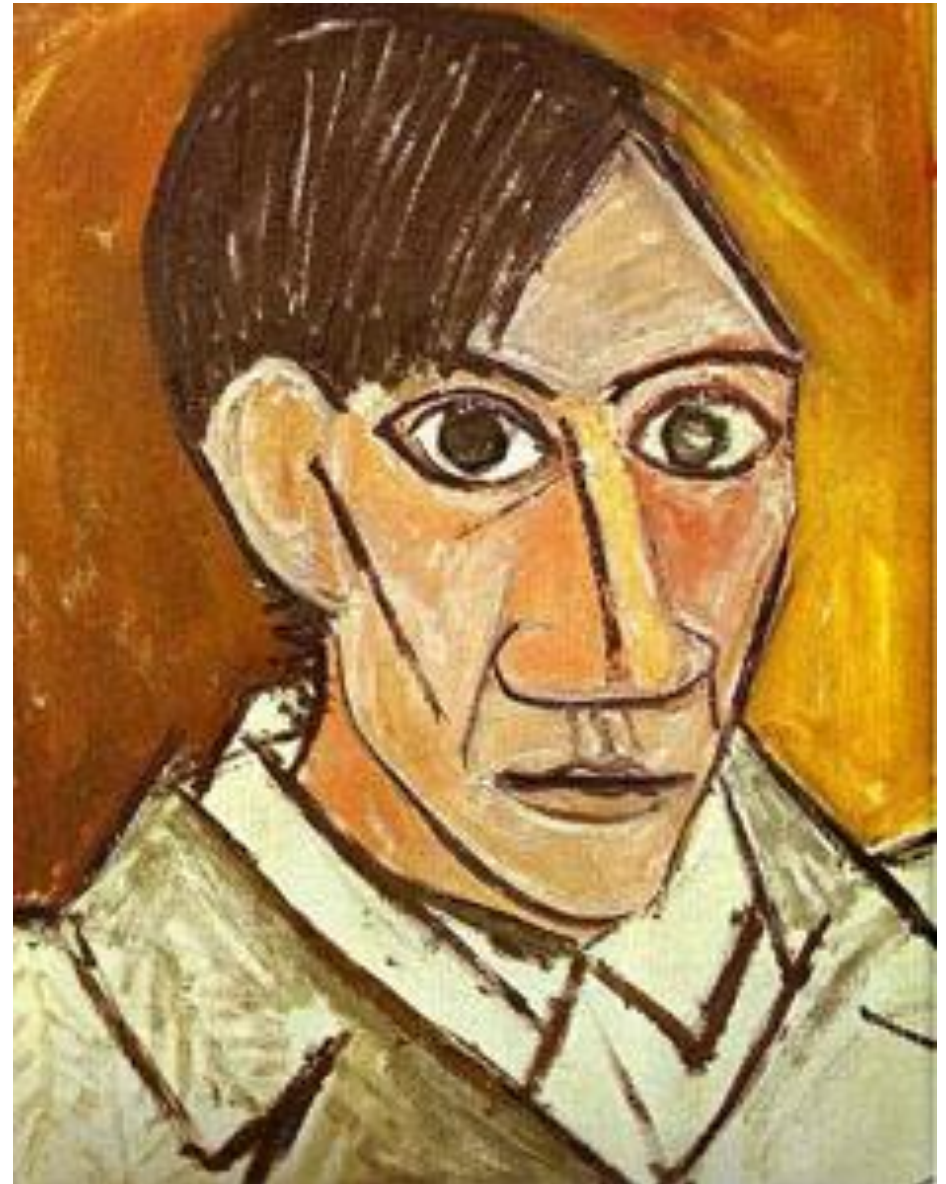
It is the pervading law of all things organic and  
inorganic,  
Of all things physical and metaphysical,  
Of all things human and all things super-human,  
Of all true manifestations of the head,  
Of the heart, of the soul,  
That the life is recognizable in its expression,  
**That form ever follows function.** This is the law.

*- Louis Sullivan*



# Steal Good Design Ideas

- “Good artists borrow (from other artists), but great artists steal !” - Pablo Picasso
- Compelling visual design takes practice and experience – a natural part of which is study and critique of other’s work





# **Simplicity and Elegance**

# Simplicity

- Simple, minimalist, designs are often most effective



# Elegance

- Reduction: Only include essential elements
- Regularization: Use one set of shapes, colors, forms etc.
- Leverage: Use elements in multiple roles
  - scrollbar allows scrolling and indicates position in document



# Benefit: Approachability



- Visual elements rapidly understood - invite further exploration

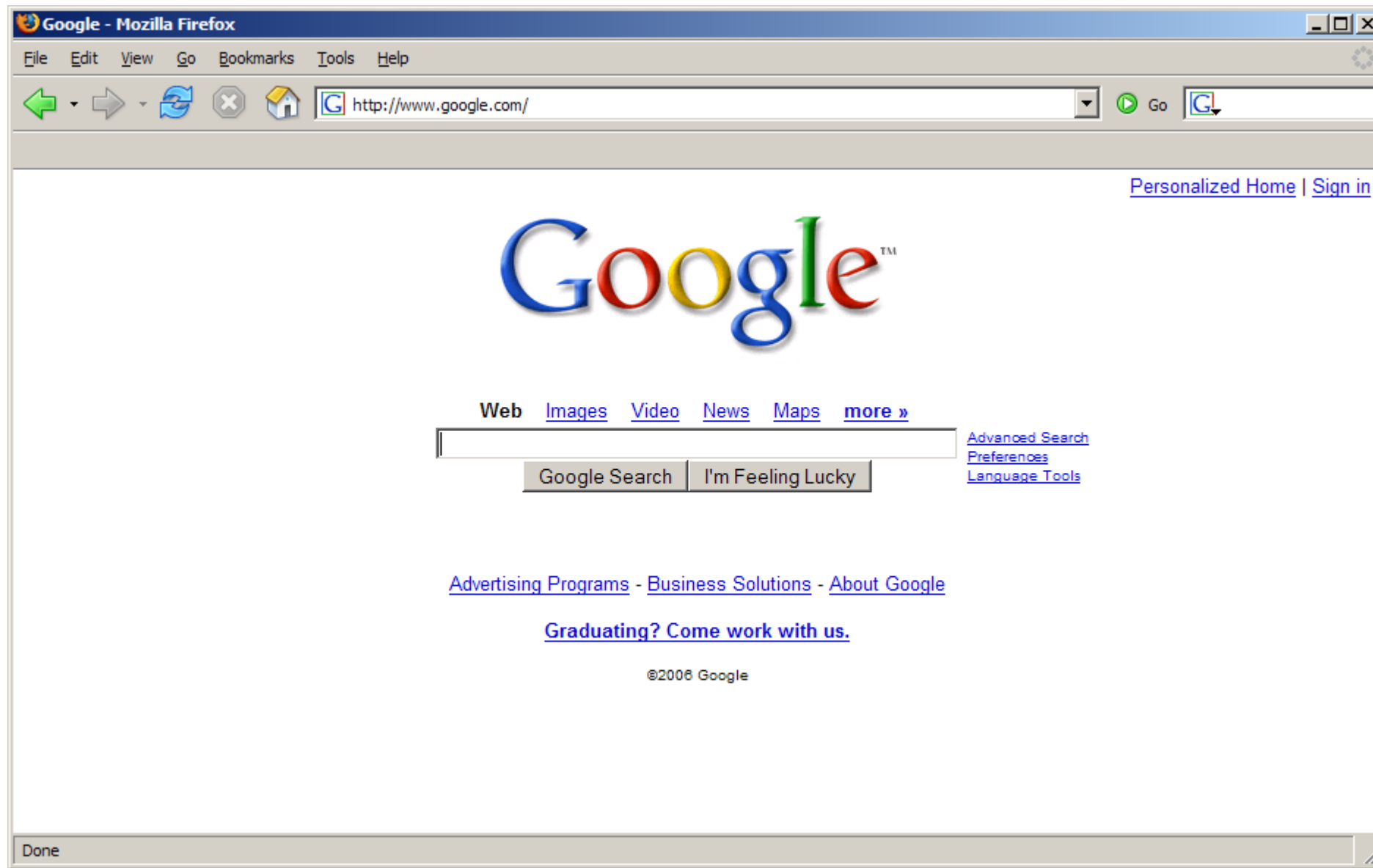


# Benefit: Recognizability



- Less visual clutter makes it easier to recognize what is there

# Benefit: Immediacy



Eye is immediately drawn to important visual elements

- Details that remain are more prominent

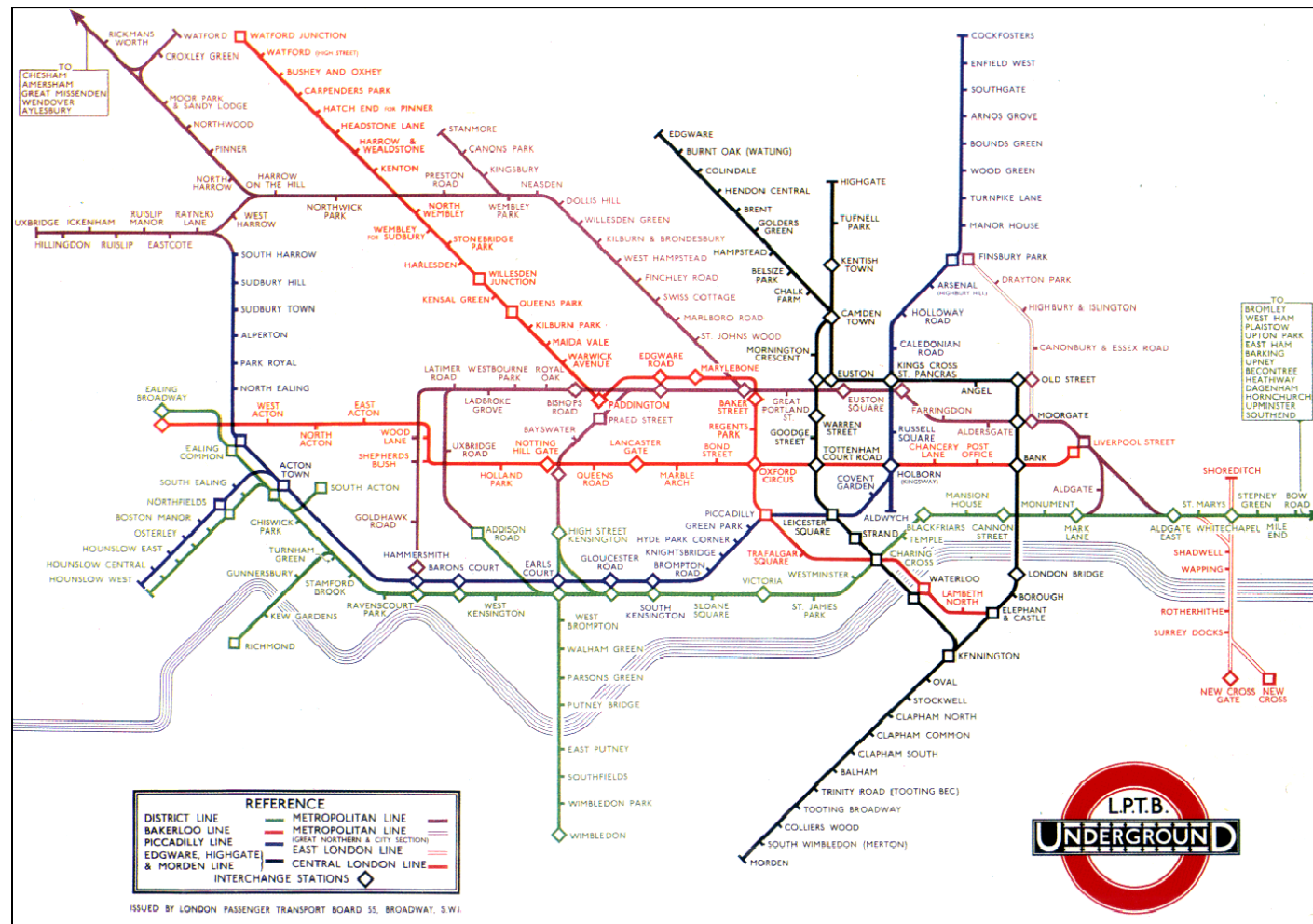
# Unity

- One path to simplicity & elegance is through unifying themes:
  - Forms, colors, components with like qualities

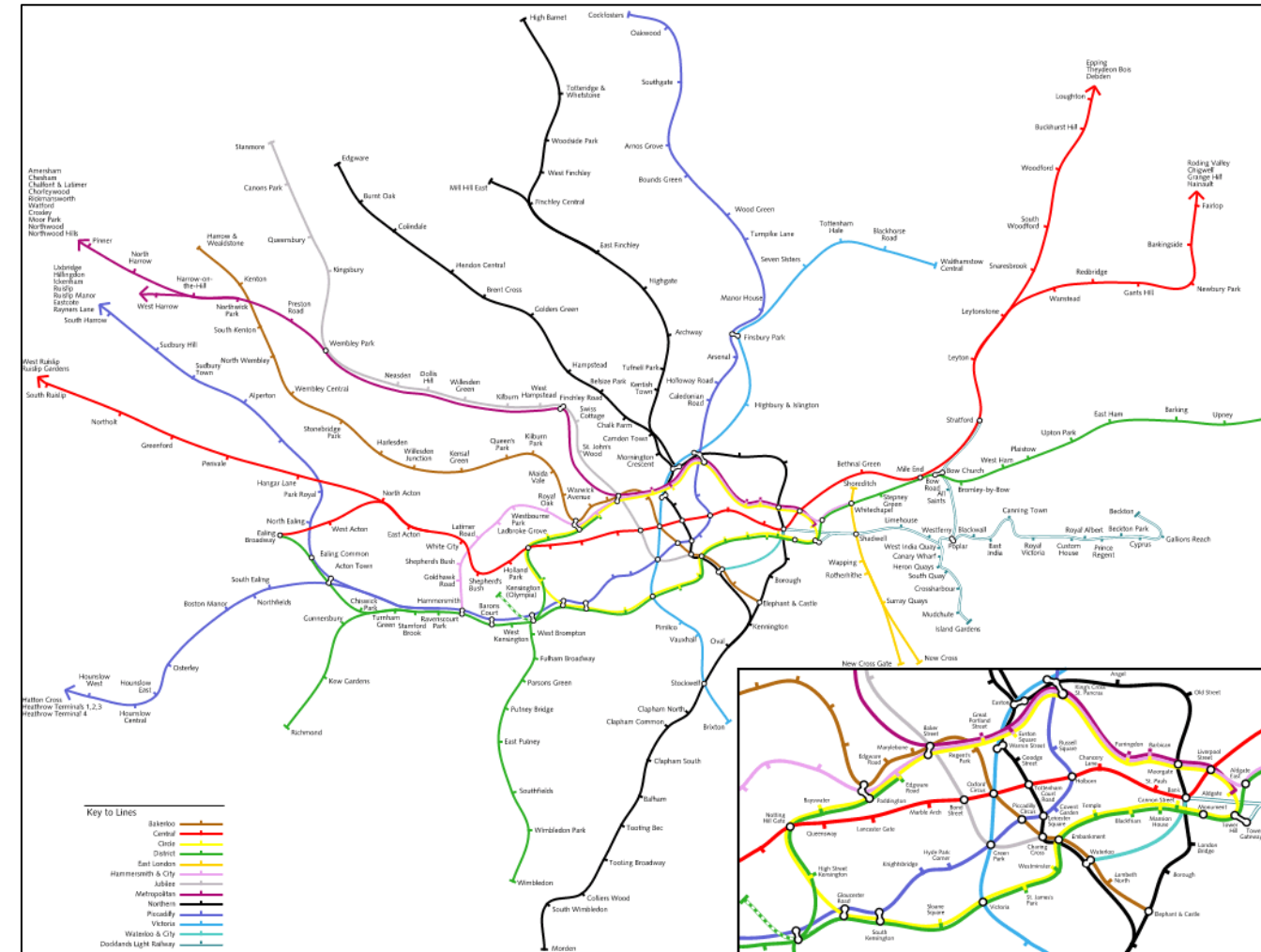




# Refinement



London Underground [Beck 33]

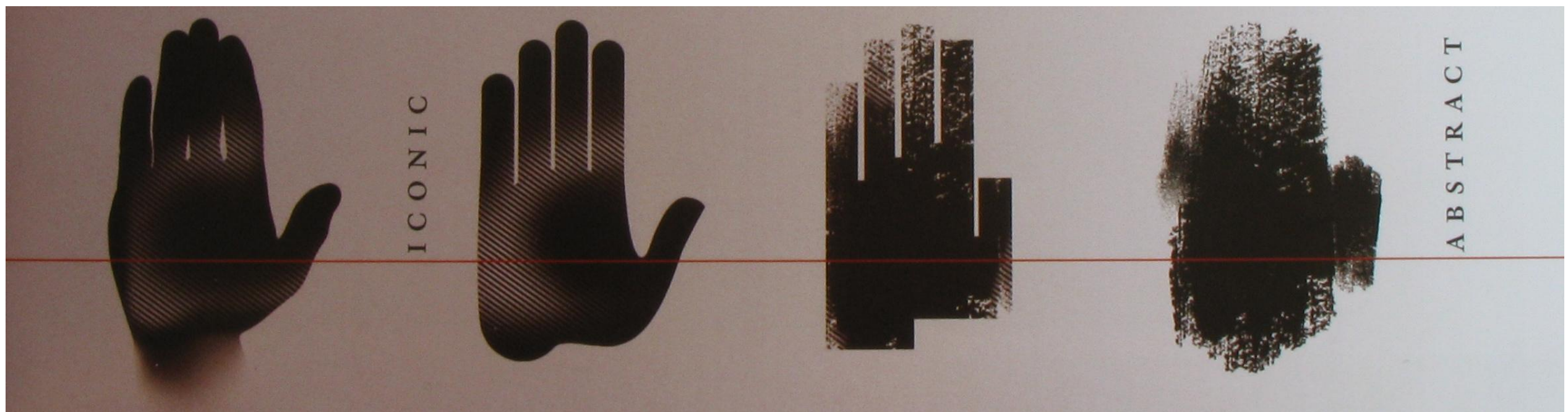
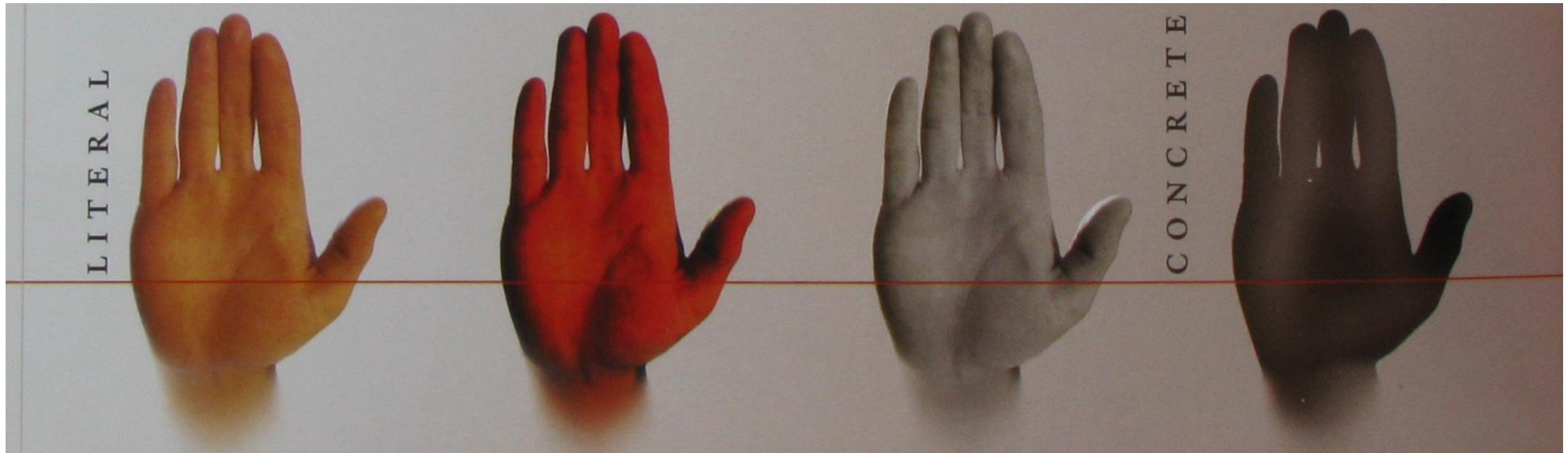


Geographic version of map

- Draw viewers' attention to essential information
  - Straighten subway lines to emphasize sequence of stops



# From Literal to Abstract



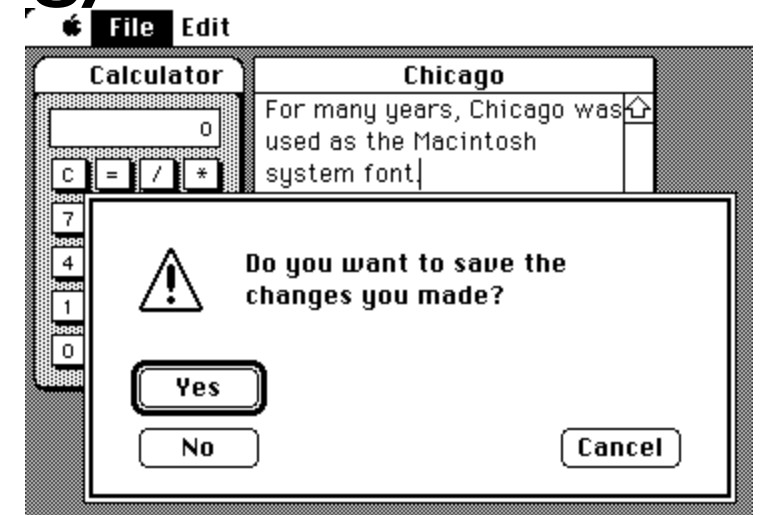
# Fitness

- Match design to capabilities of technology and user

**The Quick Brown  
Fox Jumps Over  
The Lazy Dog.**

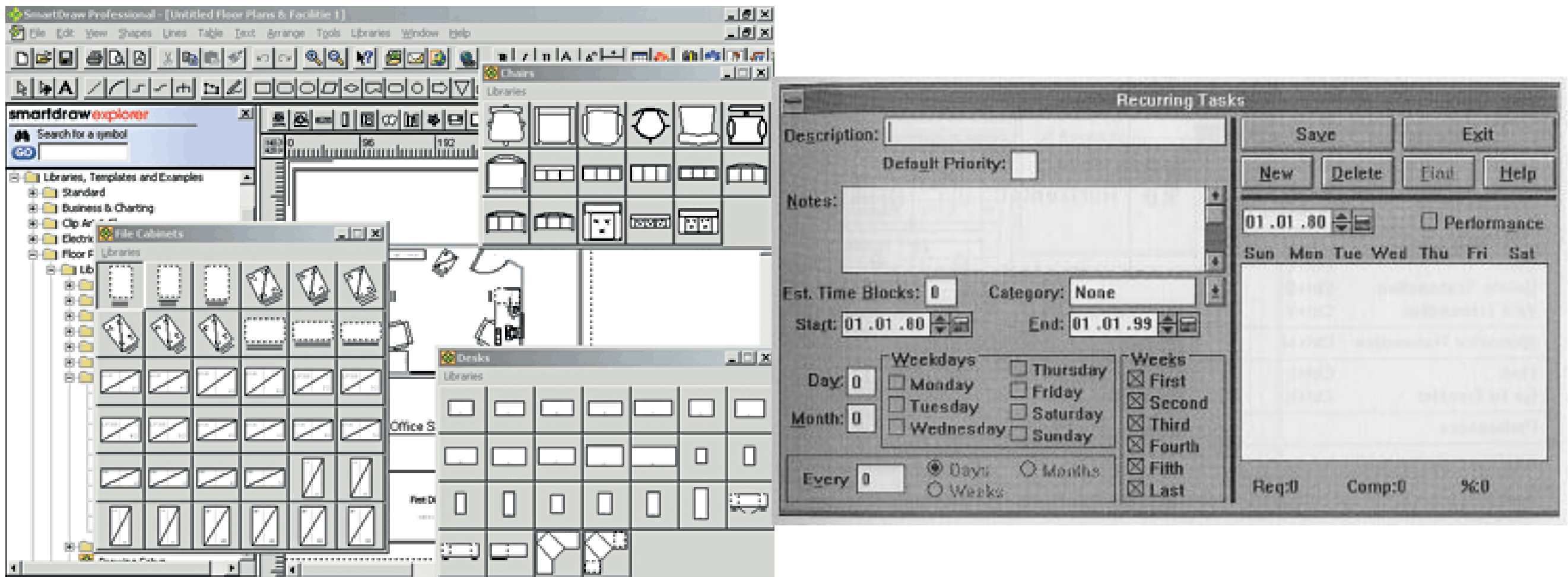
abcdefghijklmnopqrstuvwxyz0123456789 [ ] ( ) { } / \ < > ?

**g**



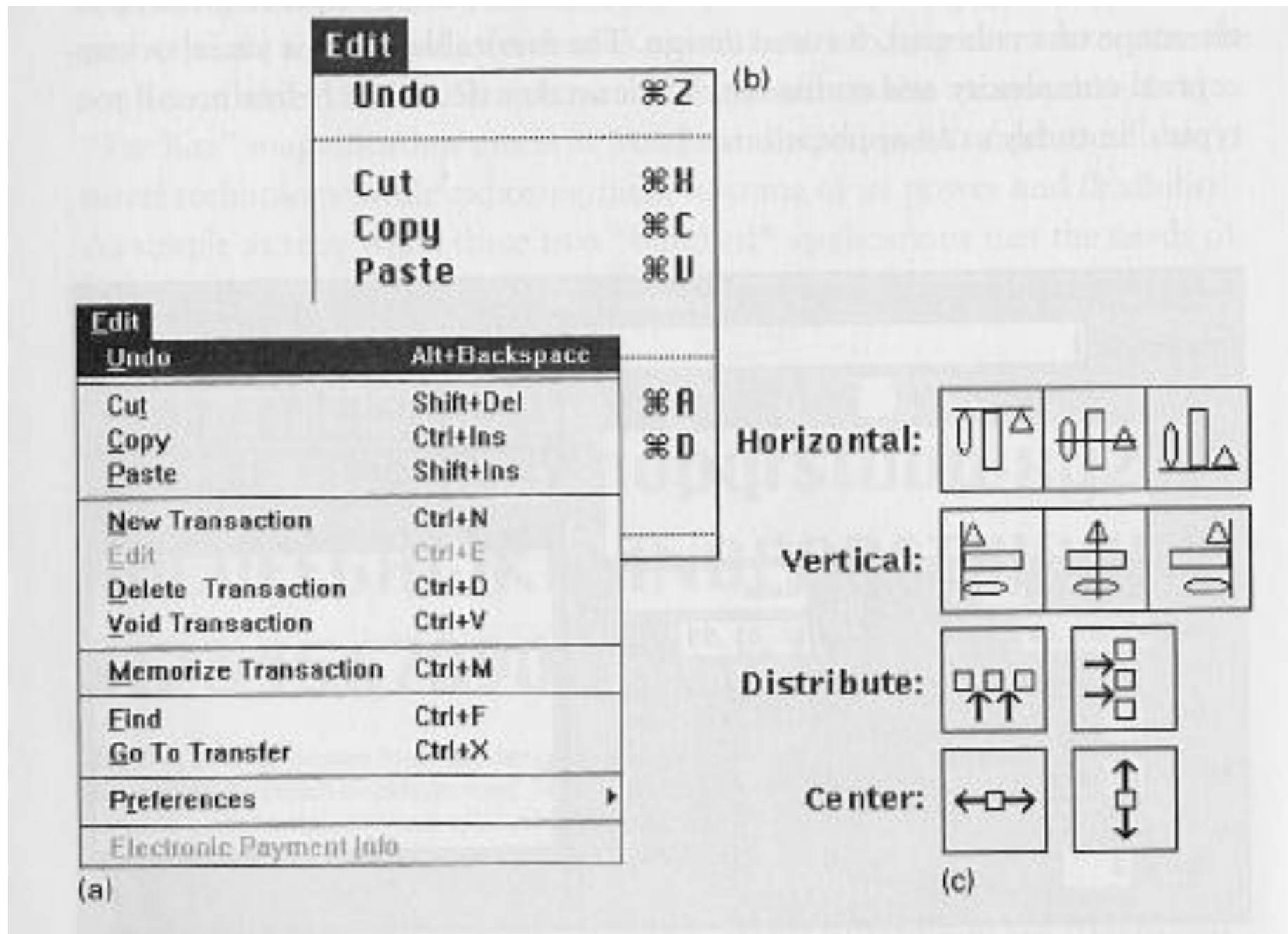
- Chicago screen font designed for early low-res Macintosh display
  - Thick verticals ensure visibility after applying 50% gray pattern
  - Used as default font 1984-1997

# Mistakes: Clutter & Noise



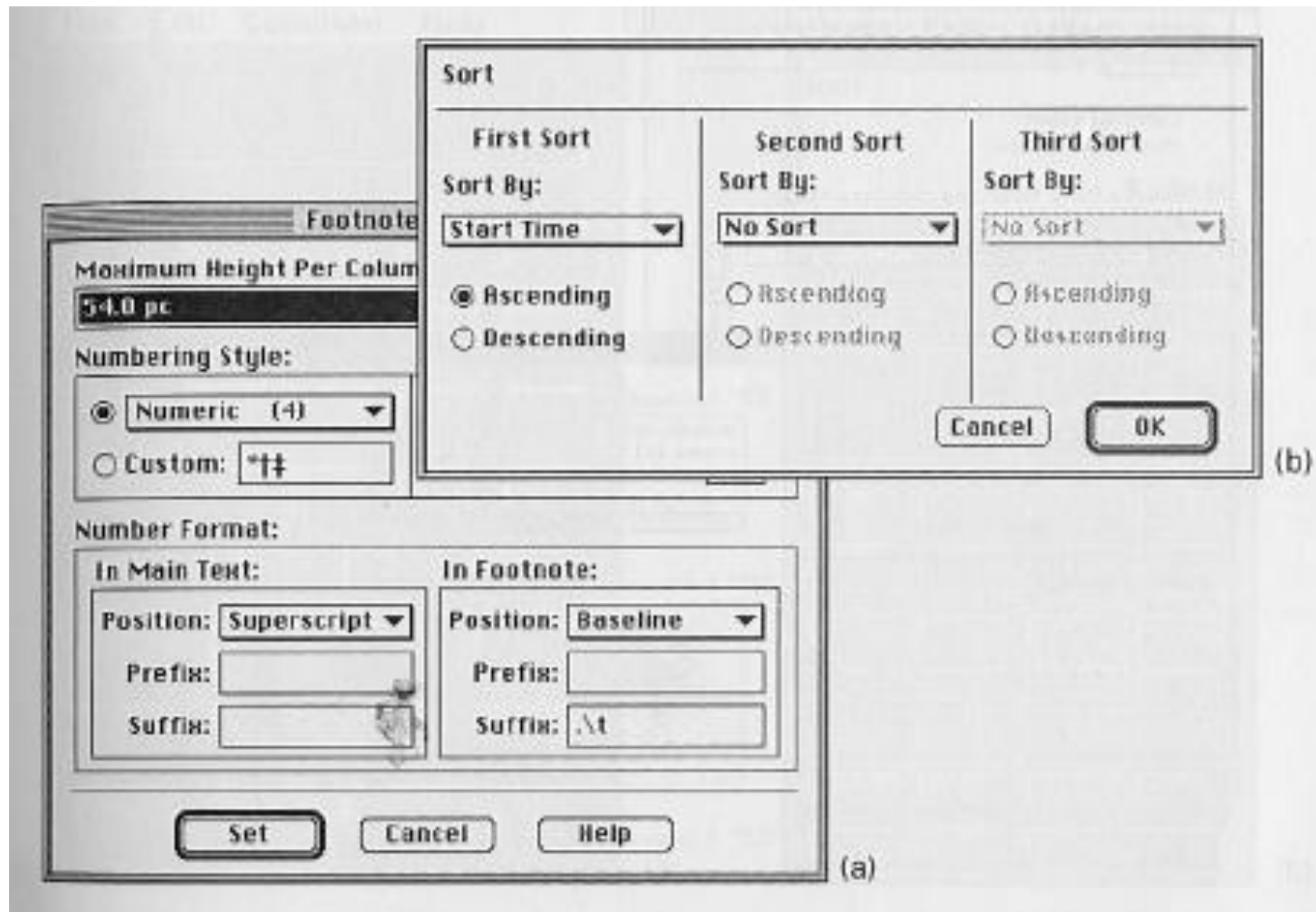


# Mistakes: Interference



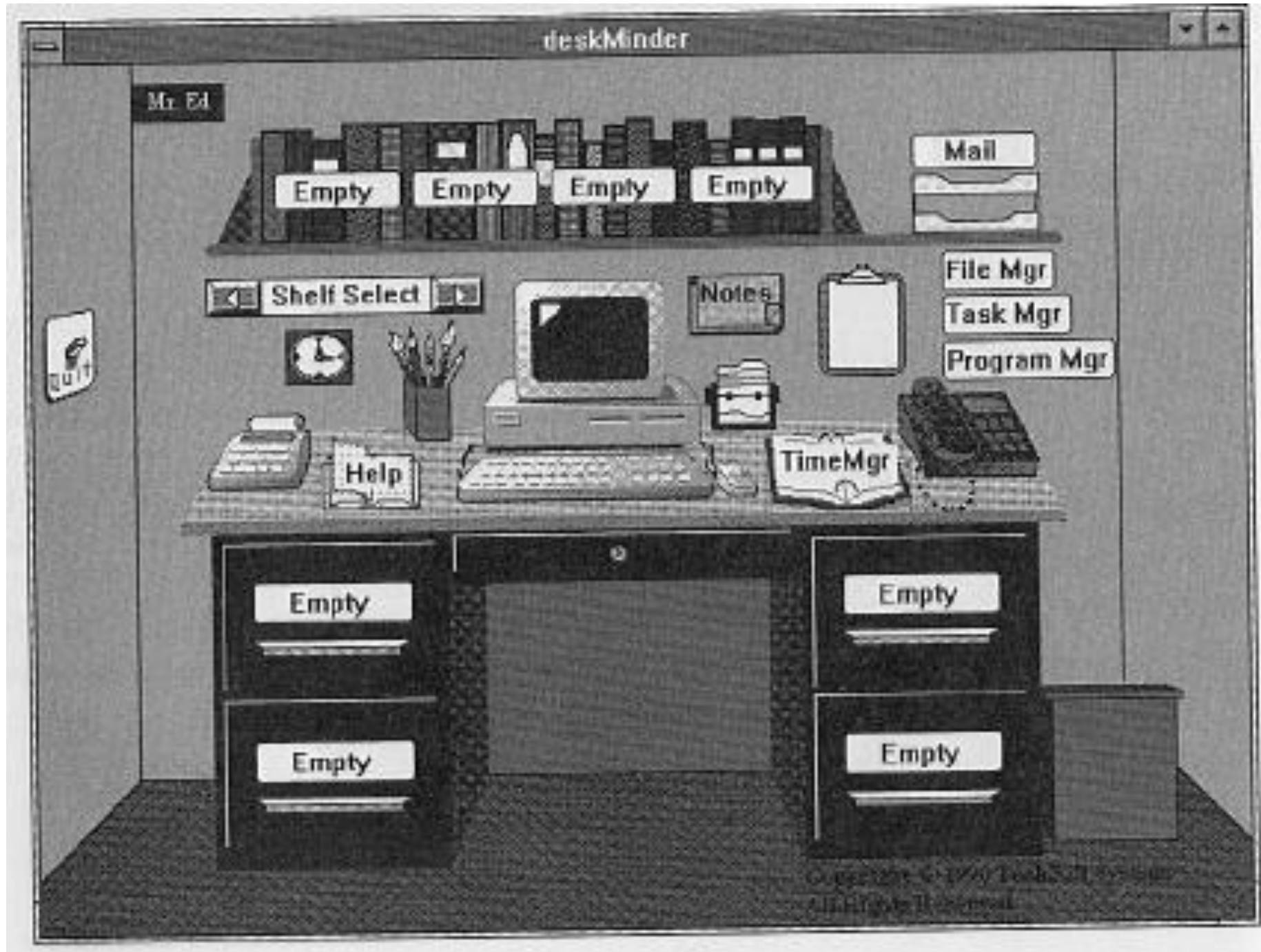
Shortcuts interfere with menu labels in (a) not in (b).  
Different shapes cause confusion in alignment tools

# Mistakes: Too Much Structure



Bounding boxes in (a) adds unnecessary structural information  
Simpler structure in (b) using space rather than lines is better

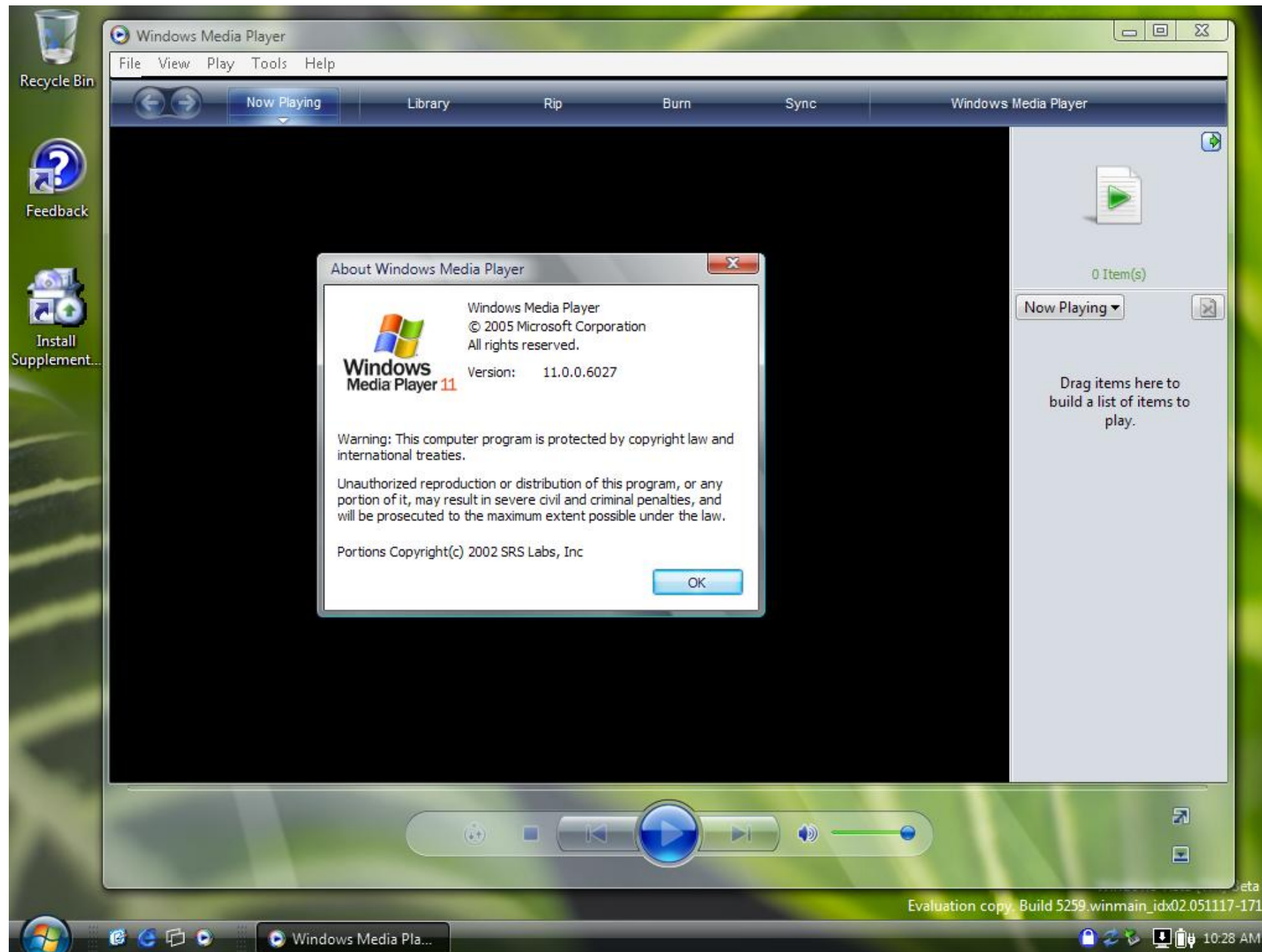
# Mistakes: Belaboring the Obvious







# Mistakes: Excessive Embellishment

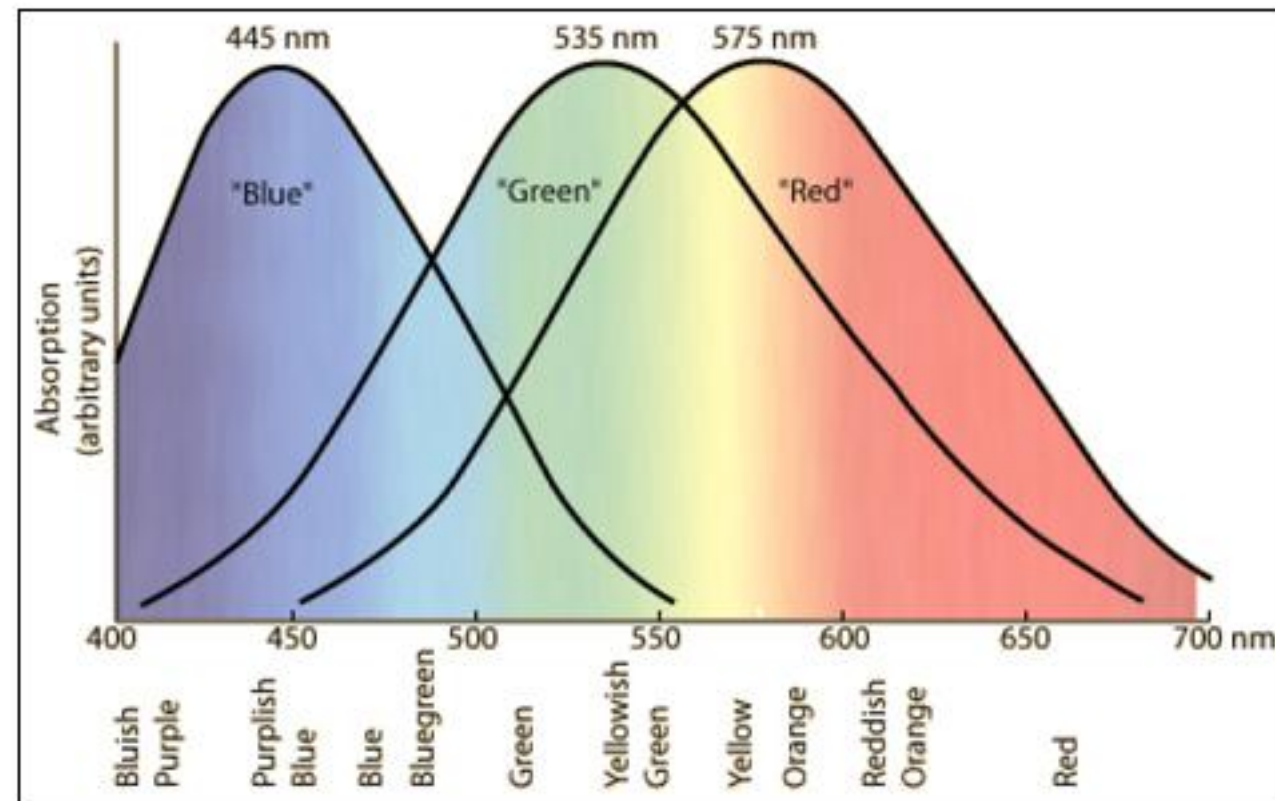


Minimalists hate it, but sometimes users like embellishment



**Color**

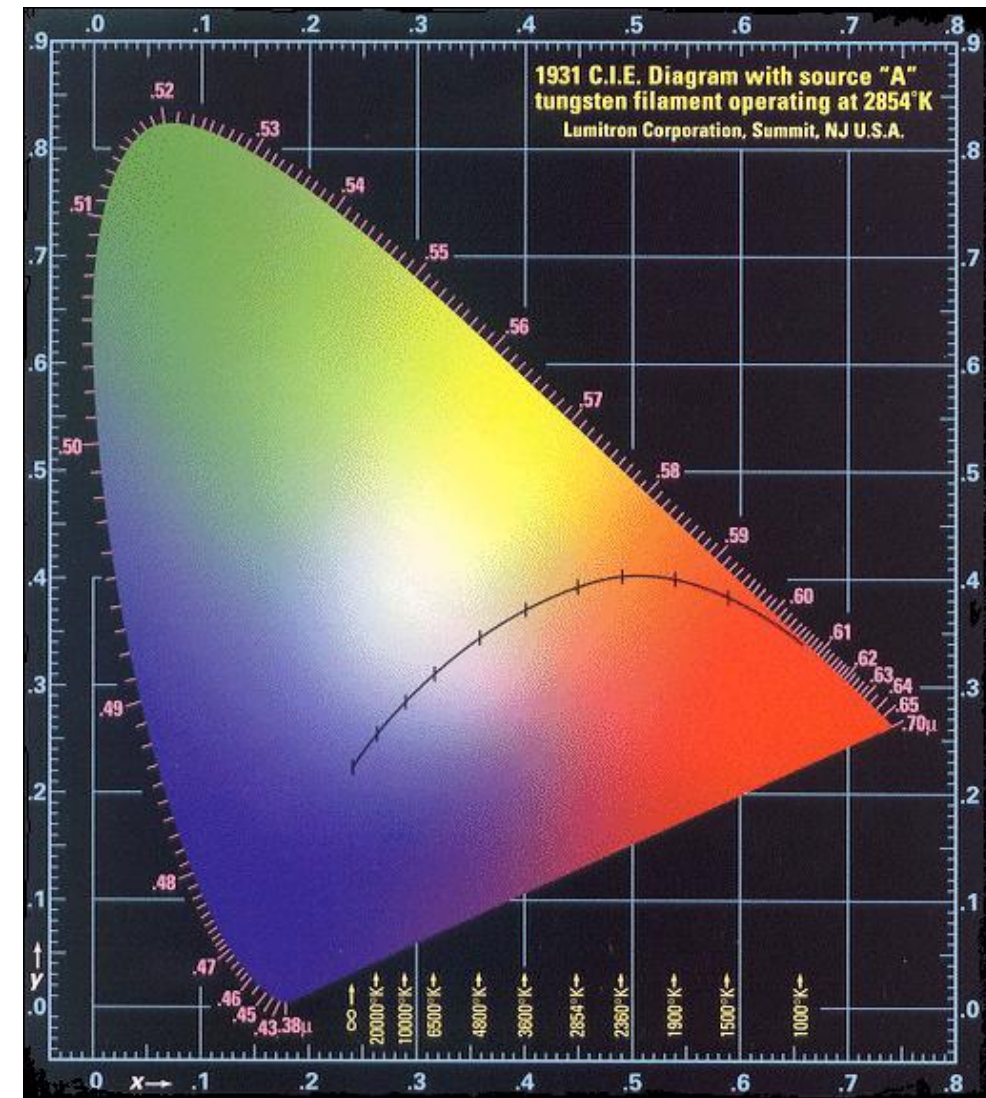
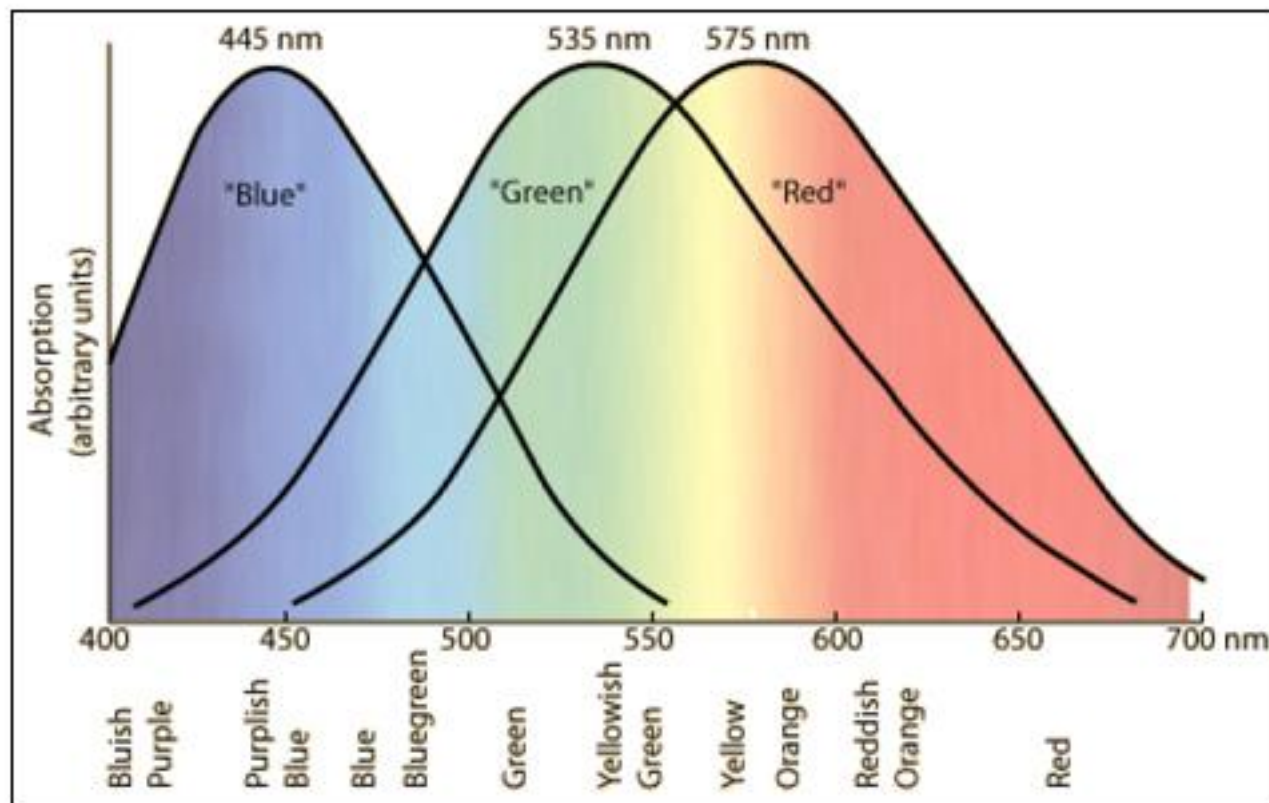
# Seeing color



The eye has rod and cone cells – only the cones respond to color. There are three types of cone, as shown above, and because of this, perceived color can be \*roughly\* modeled with 3 components.



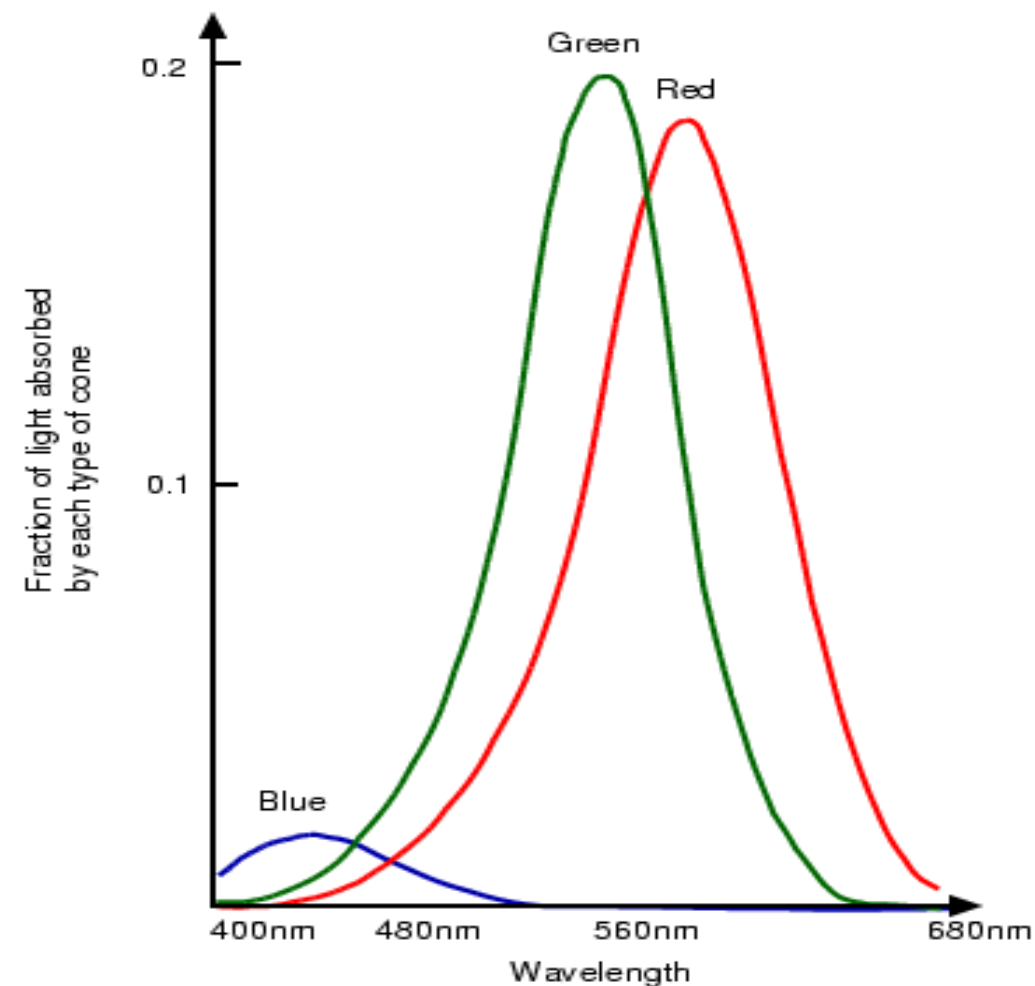
# Color Gamut



Since the responses curves for cones overlap, not all non-negative combinations of responses are possible (e.g.  $R > 0, B > 0 \rightarrow G > 0$ ).

That means we can't synthesize most pure colors with 3 colored emitters – real displays lack vividness for these colors.

# Color sensitivity

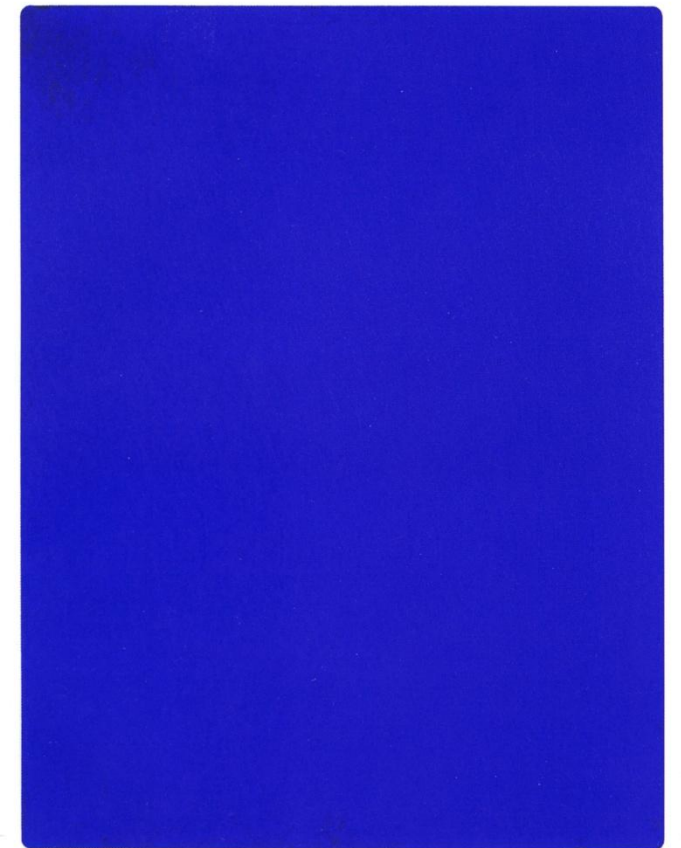


The absolute sensitivities of cones are quite different.

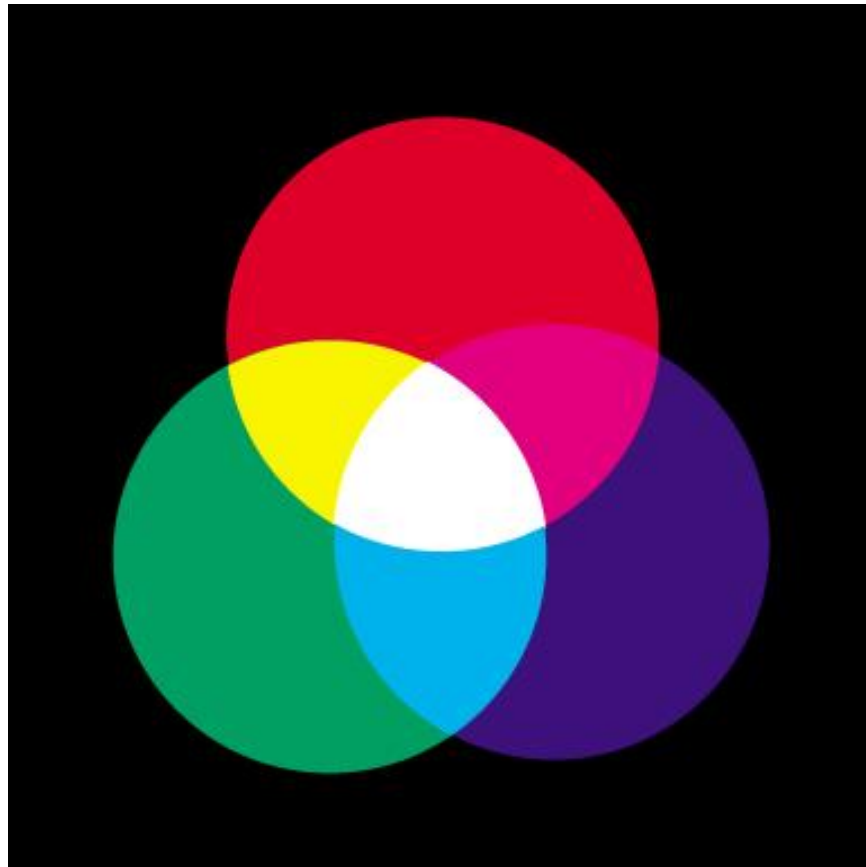
In fact we have a hard time seeing blue, and perceiving blue contrast.



# Yves Klein + IKB (#002FA7)



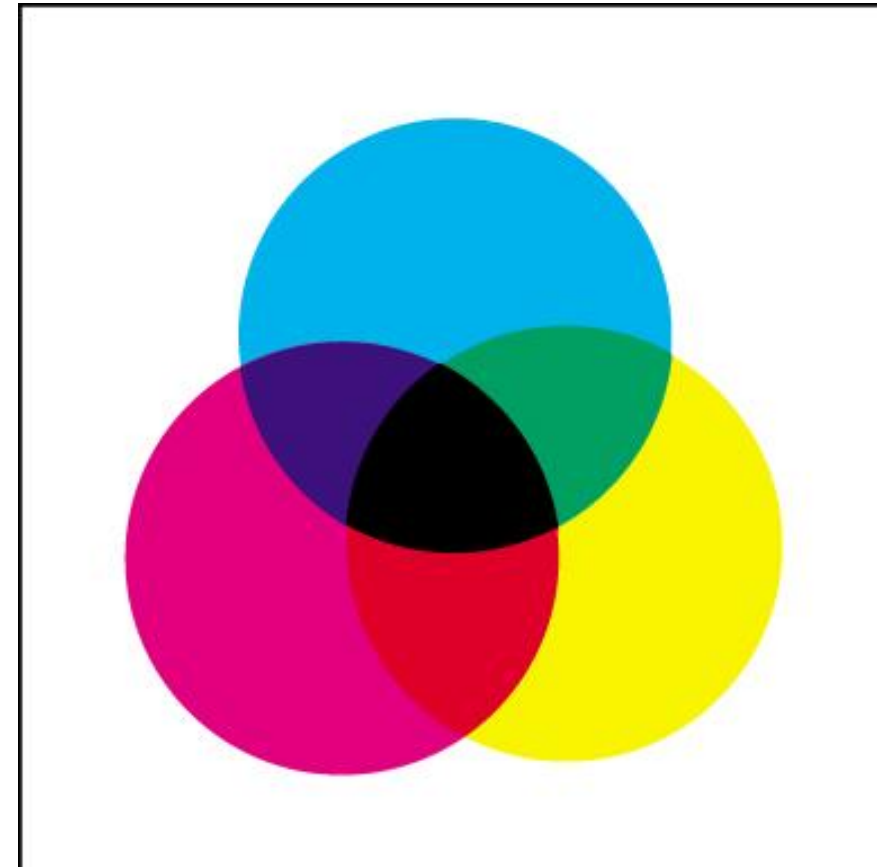
# Color Spaces



**RGB**

**Additive**

**Electronic Media**



**CMY**

**Subtractive**

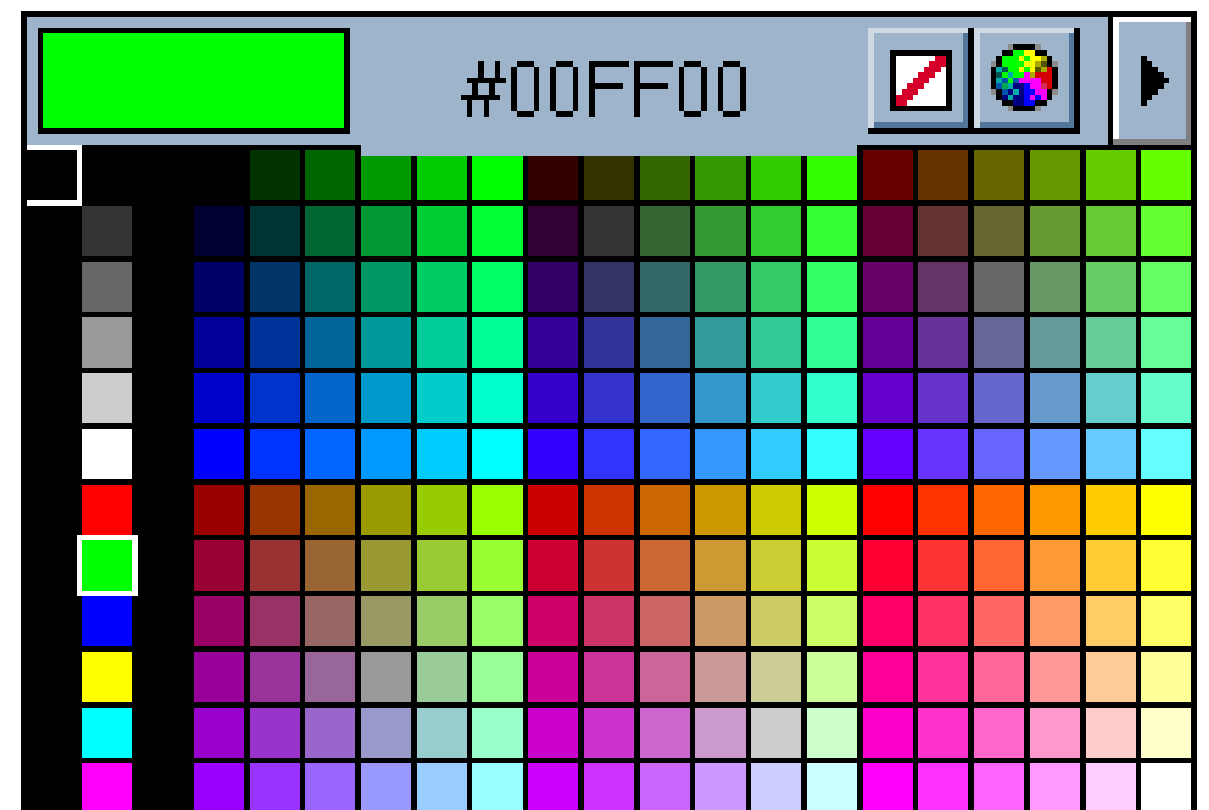
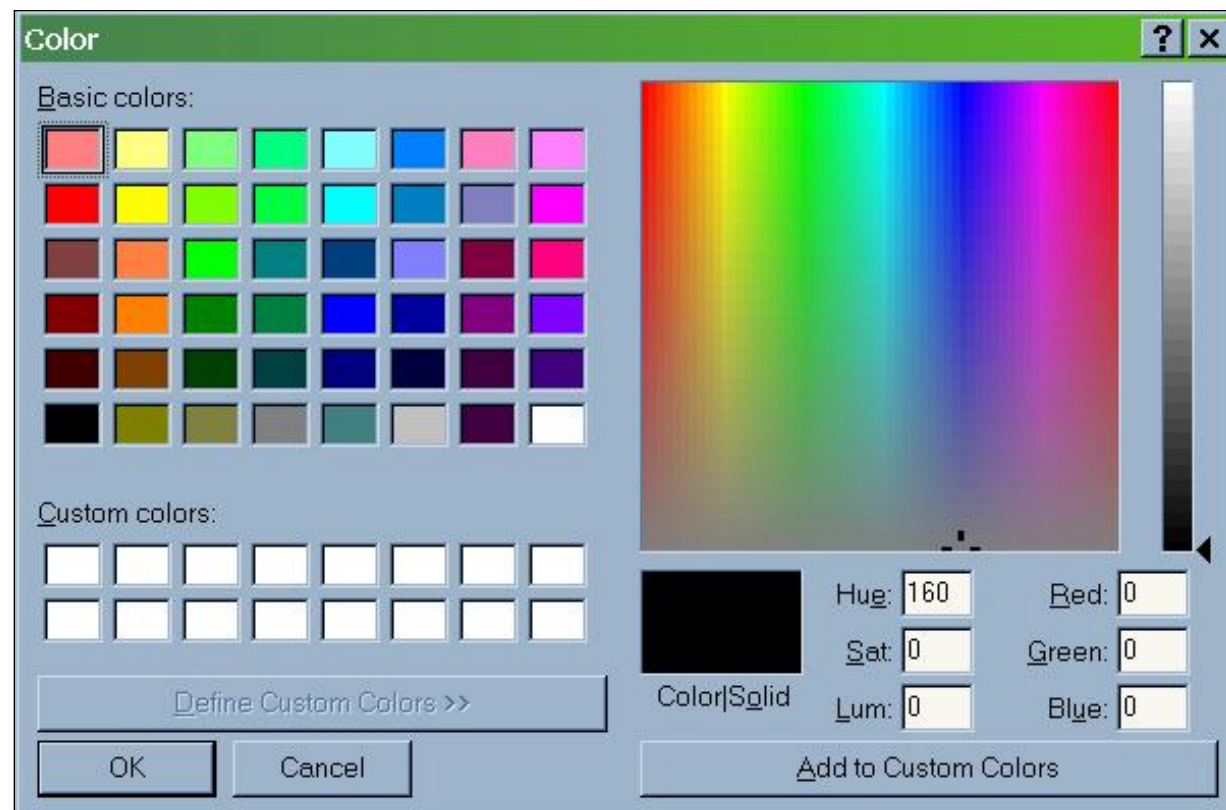
**Printed Media**

Parameters of color space driven by technology

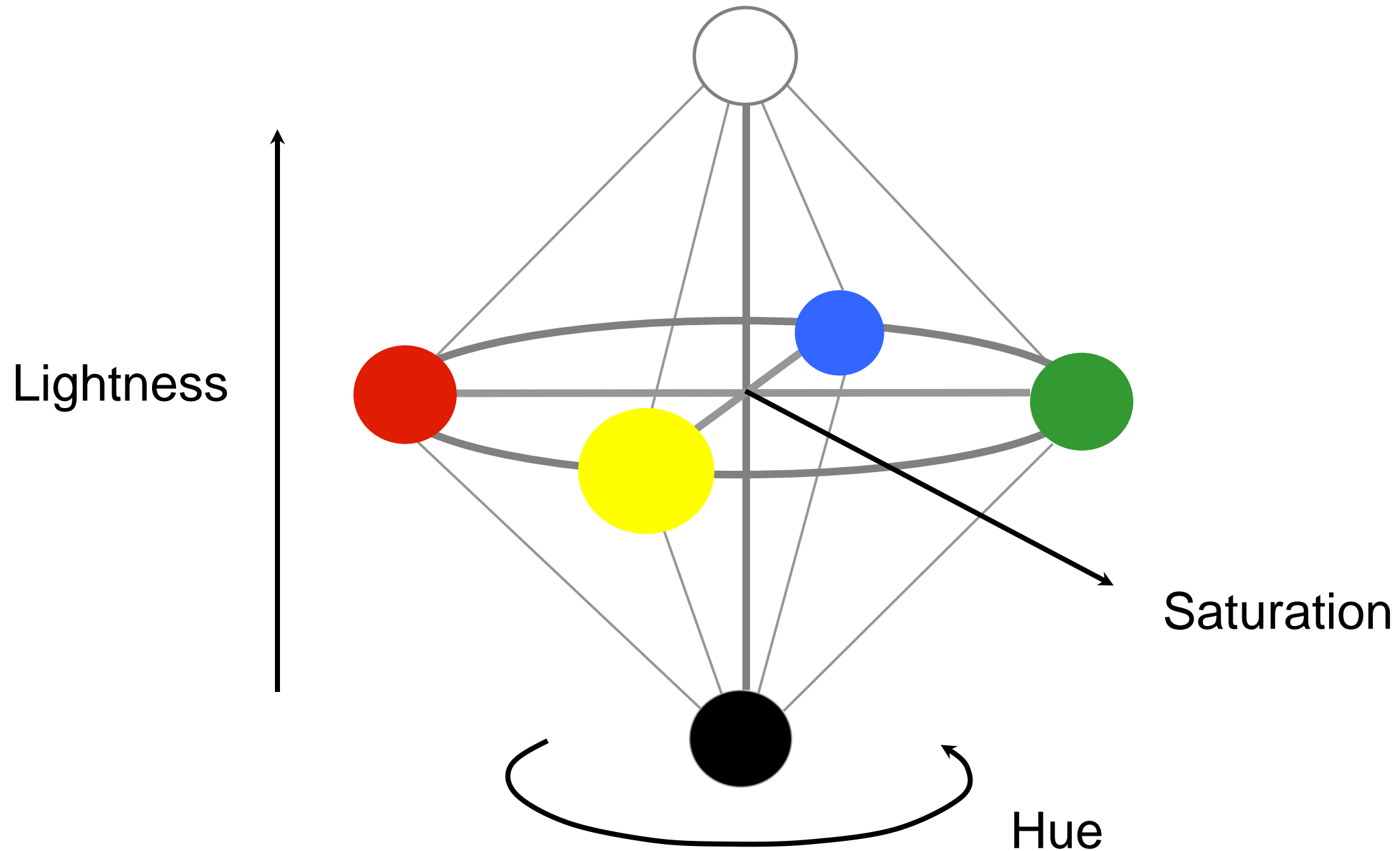


# Technology-Centered Colors

- Nice RGB Hex codes, “evenly” distributed
- But, lime green and hot pink?



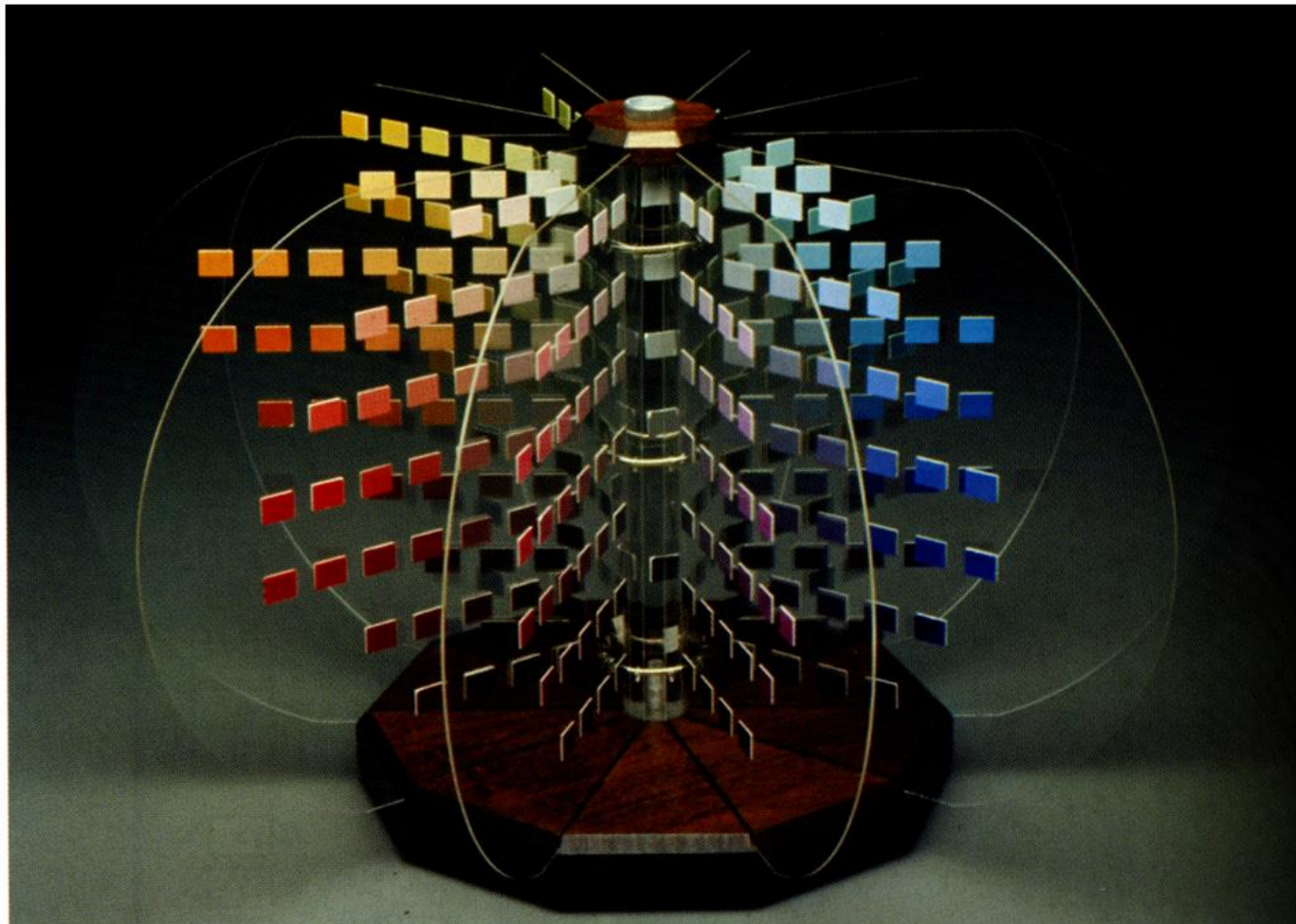
# Perceptual Organization



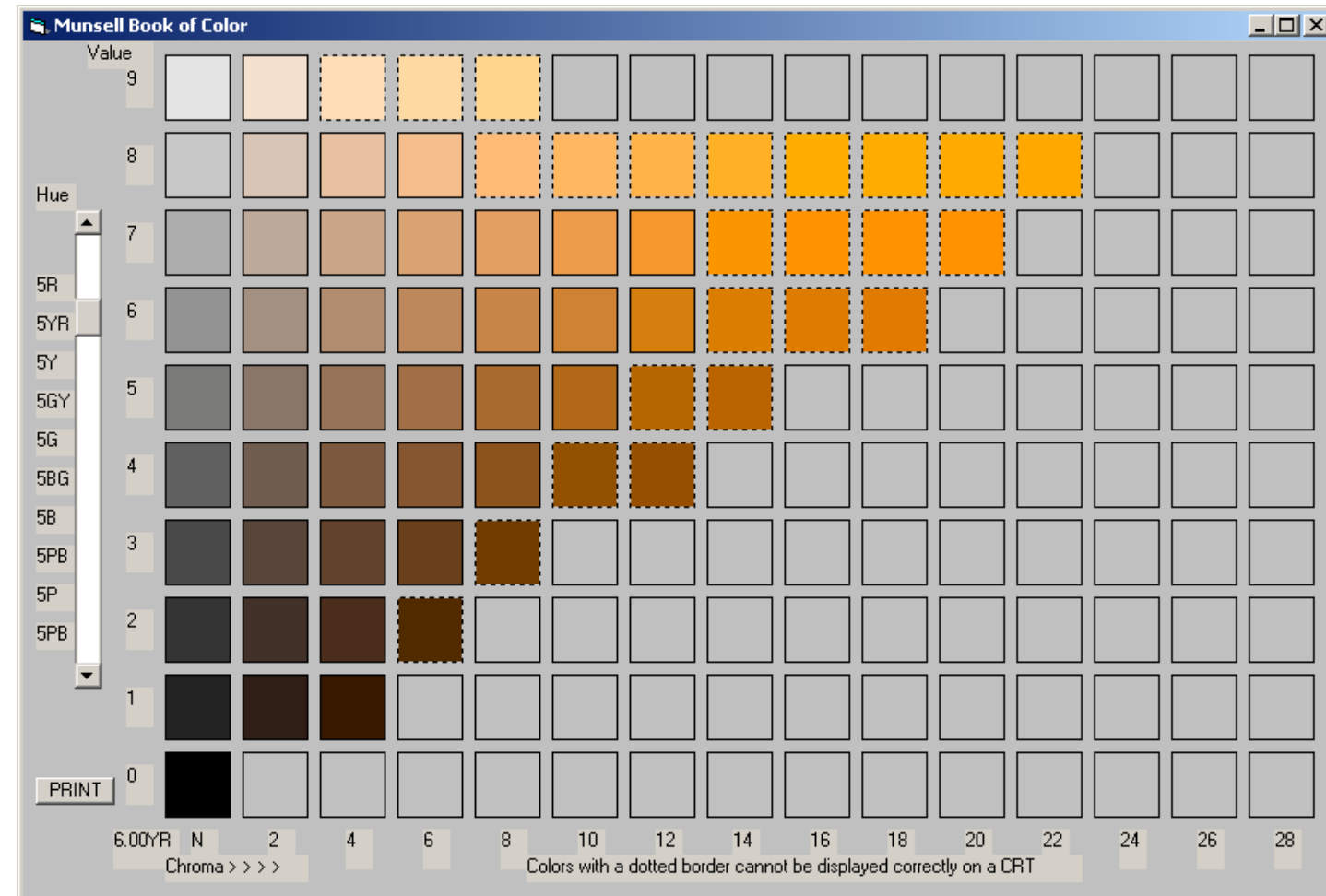
Parameters of color space driven by perception

# Munsell Color Space

Perceptually uniform book of painted chips



**Hue**



**Chroma vs. Value**

Munsell Color Utility: [www.wallkillcolor.com](http://www.wallkillcolor.com)



# Conflicts

**Some Red Text Here**

**Some Blue Text Here**

**Some Yellow Text Here**

**Some Red Text Here**

Use intensity contrast for text!!

# Tips for Picking Colors

We perceive color holistically when they are not directly related to the content – which is usually the case for interfaces.

Colors are often designed together into a “theme” – they work together to create the mood you want.

# Themes

The screenshot displays the Kuler website interface. At the top, there are five large color swatches: a dark green, a pale yellow, a bright orange, a muted red, and a dark brown. Below this, the main content area is divided into several sections. On the left, there is a search bar and a sidebar with navigation options: 'Create Themes', 'Newest', 'Most Popular', 'Highest Rated' (with an RSS icon), 'Random', and 'Community Links'. The main list of themes includes 'sandy stone beach ocea...', 'Firenze', '28X Dusty Petrol', 'Watermelon', 'Orange on olive', 'Cherry Cheesecake', 'Bright Tide', 'Japanese Garden', 'Vivaldi', and 'Quiet Cry'. Each theme is accompanied by a small color palette and a star rating. The 'Firenze' theme is highlighted, showing its name, a small flag icon, the creator 'by matthewpworth', and statistics: 'Last Edited: 3.1.07 at 2:51 AM', 'Rating: 4.05 (885 votes)', and 'Downloads: 10797'. Below the theme name is a list of color names: bellagio, boot, brick, bright, brown, burnt, cinque terra, cream, exterior, florence, gold, grapes, green, hotel, house, italian, italy, ivory, las vegas, light, mud, north, pastel, ritz, riviera, stucco, sun, sunshine, teal, turquoise, venezia, venice, vineyard, warm, wheat, wine, yellow. A comment section for the 'Firenze' theme shows three comments: 'looks great matt, should rate high if anything is getting rated!' (posted 3.1.07 at 2:57 AM by b\_wiebe), 'Delicious!' (posted 3.28.07 at 3:56 AM by scottbuzik), and 'Posted on: 3.28.07 at 07:17 PM by minimanjapan'. On the right side, there is a section for 'kuler member Karolen Deupree' with a 'Spotlight' on 'handmade beads'. Below this, there are sections for 'kuler desktop' (features drag-and-drop themes, Random Theme RSS feed, etc.) and 'kuler APIs' (view comments, color applications with kuler APIs). At the bottom right, there is a section for 'See the kuler mashups' with a brief introduction to Kuler and a sign-up prompt: 'Sign in with your Adobe ID, or sign up, it's free. You can then save, download, rate and comment on themes.'



# Themes

Pantone 1235 C 116 U	Pantone 1405 C	Pantone 165 C	Pantone 168 C	Pantone Red 032 <small>(Maryland Red)</small>
Pantone 201 C 1935 U	Pantone 202 C	Pantone 269 C	Pantone 272 C	Pantone 2725 C
Pantone 2955 C	Pantone 3155 C	Pantone 3727 C	Pantone 330 C	Pantone 349 C
Pantone 377 C 390 U	Pantone 448 C	Pantone 464 C	Pantone 5275 C 5265 U	Pantone 541 C
Pantone 568 C	Pantone 5767 C	Pantone 632 C	Pantone 658 C	Pantone 696 C
Pantone Cool Gray 5	Pantone Cool Gray 9	Pantone Warm Gray 5	Pantone Warm Gray 9	

# Themes

nano-chromatic

The new iPod nano. Now in 8GB and 16GB.





# Saturation

**Whyville** Welcome!

Already have an account? [Forgot your password?](#)

Username  Password

**Step 1**  
Click on a head to make your face.

**Step 2**  
  
or

**Welcome to Whyville!**  
Whyville is a virtual world where boys and girls from all over the real world come to chat, play, learn, and have fun together. You design your face, earn clams by playing games, hang out at the beach, and go to town events at the Greek Theater. You can start your own business, buy a car and give your friends a ride, or write for the town newspaper.  
Hop on this helicopter to take a tour of our world!

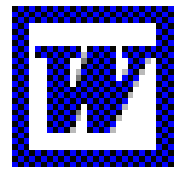
**Virtual World Scene:**  
This place is pretty cool!  
LOL :D  
Hey, don't fall in the stream!  
But I want to catch the fish and study it! :o)  
Talk to the Scientists Live!  
KIDS' SCIENCE CHALLENGE  
ENTER CONTEST

**Advertisement:**  
**Pearls Sale**  
happening now!  
Akbar and my monkey, Bob, here. Don't miss the Pearls Sale and...

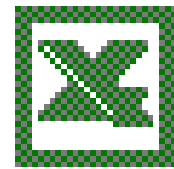
**Footer:**  
[About Whyville](#) | [Privacy Policy](#) | [Contact Us](#) | [What Kids Say](#) | [In the News](#) | [Teachers](#) | [Parents](#)



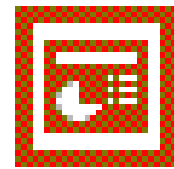
# Saturation



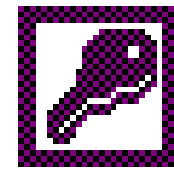
Microsoft  
Word



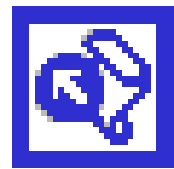
Microsoft  
Excel



Microsoft  
PowerPoint



Microsoft  
Access



Microsoft  
FrontPage



Microsoft  
Publisher



Microsoft  
Visio



Microsoft  
Outlook

# Tempered Saturation

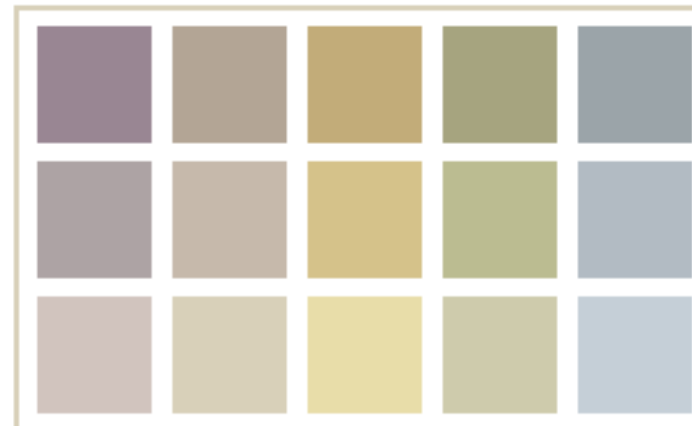


neutral

NEUTRAL

C M Y K

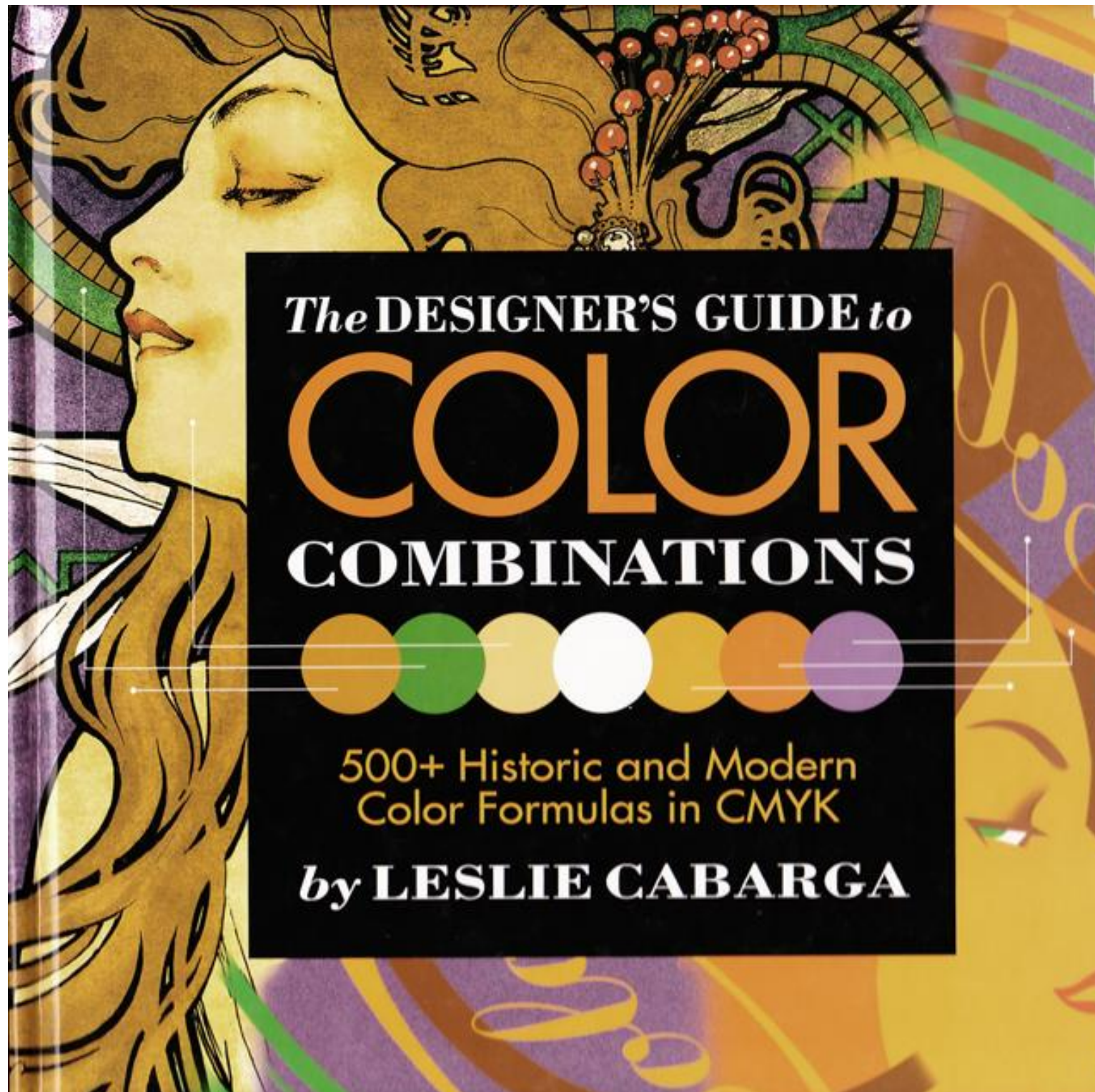
	C	M	Y	K
A	15	25	10	25
B	10	15	10	20
C	5	10	10	10
D	7	15	10	20
E	5	10	15	15
F	3	5	15	10
G	5	15	40	15
H	3	10	35	10
I	2	5	25	5
J	15	10	35	20
K	10	5	30	15
L	7	5	20	10
M	20	10	10	20
N	15	5	5	15
O	10	3	3	10



NEUTRAL-O	NEUTRAL-I	NEUTRAL-A
NEUTRAL-I	NEUTRAL-A	NEUTRAL-J
NEUTRAL-O	NEUTRAL-A	NEUTRAL-G
NEUTRAL-I	NEUTRAL-A	NEUTRAL-J
NEUTRAL-C	NEUTRAL-A	NEUTRAL-M

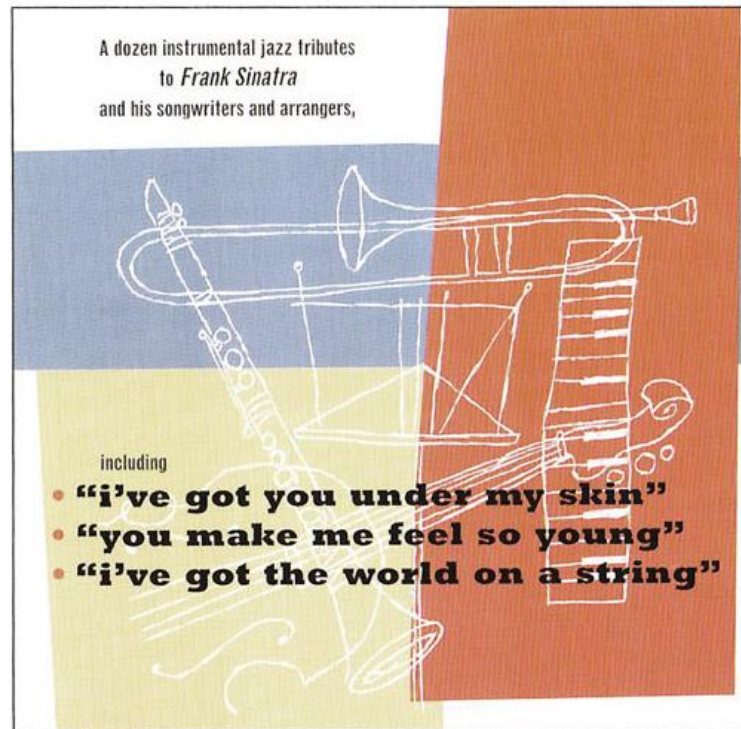


# Let Someone Else Pick For You

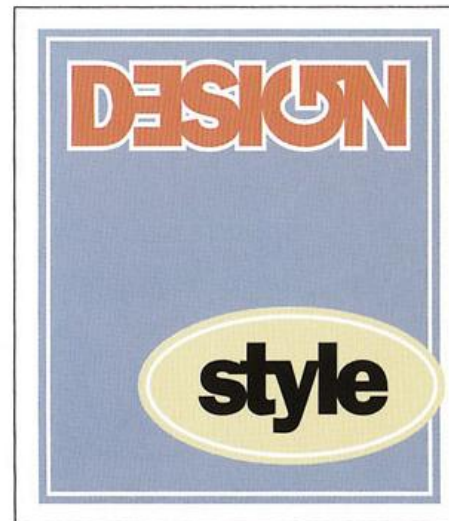




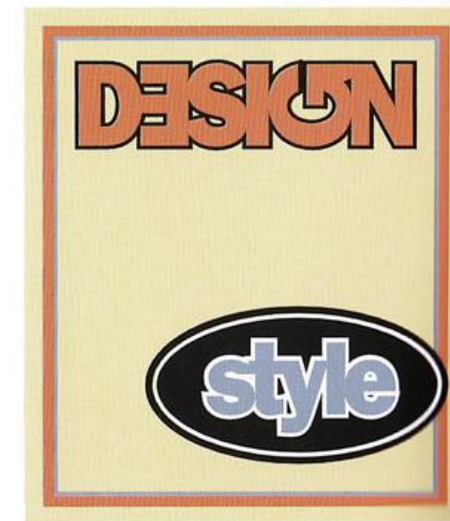
# Let Someone Else Pick For You



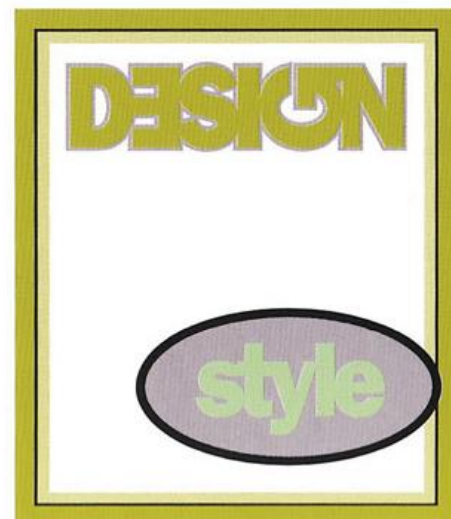
**SINATRA LAND**, Johnny Lee, art director, Andy Engel, designer, 1998  
*In this poster for a record release featuring a dozen jazz tributes to Frank Sinatra, Lee has captured the essence of that period in which the blue-eyed crooner reigned supreme. The musical instrument motif is given form by the three blocks of color behind it. These shapes are not arbitrarily placed. This example proves that there is a fine art to the design of seeming disarray.*



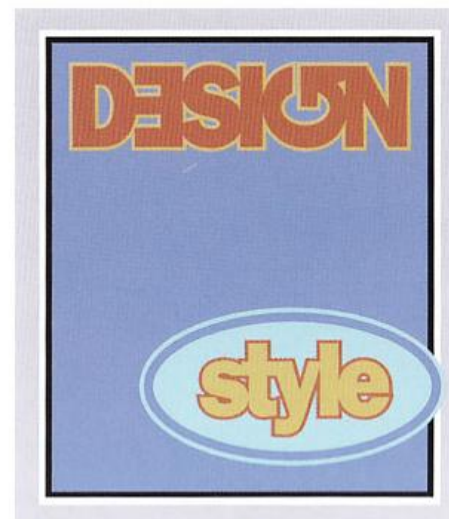
8 13 50  white  
 75 40 13 15  
 6 87 85  
 40 100



VARIATION



45 25 100  40 100  
 5 60 15  
 55 60 5  
 10 60

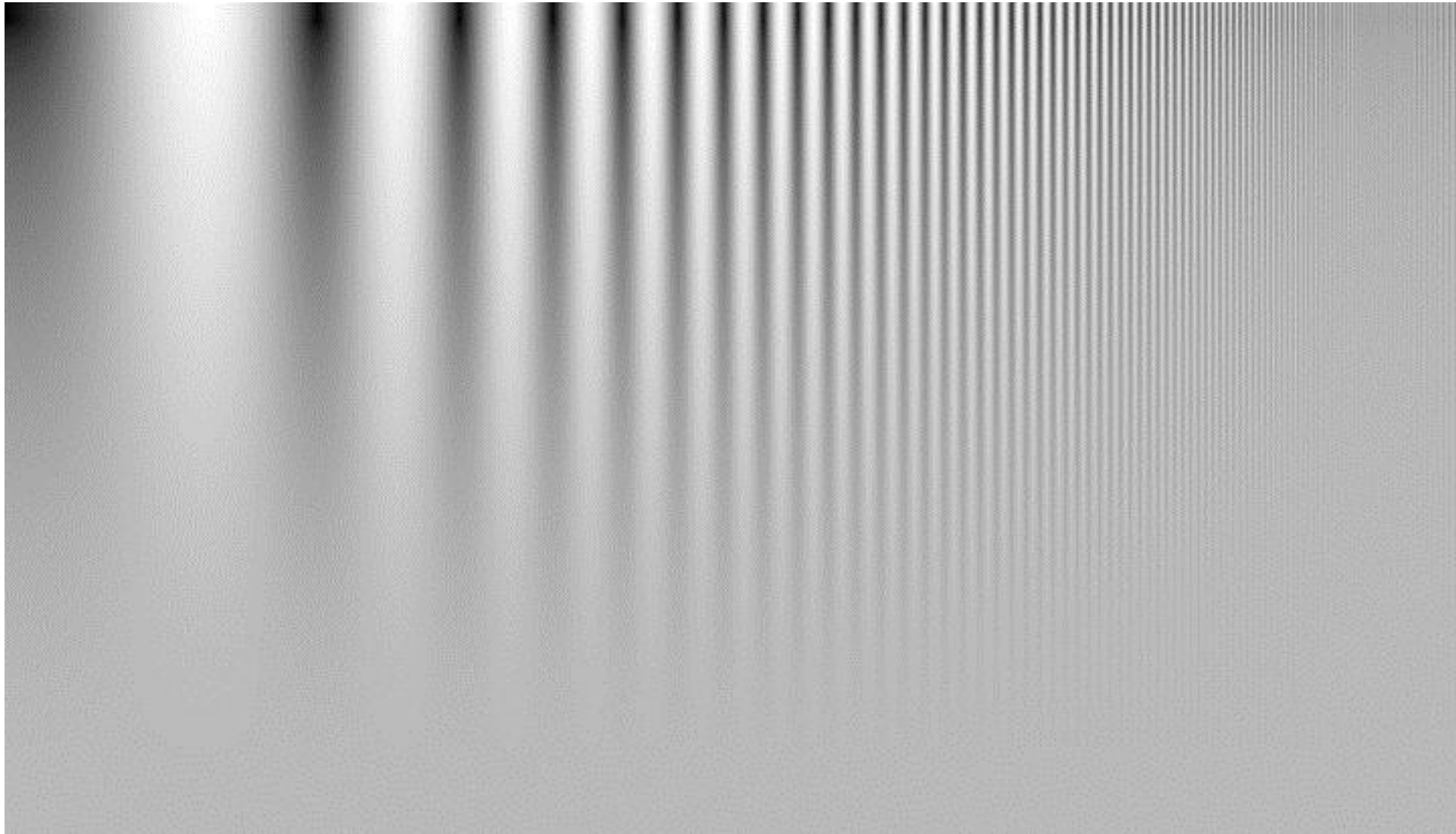


85 50 10 80 75 30  
 25 15 20  40 100  
 60  
 20 30 70



35 20 10 80 60 10  
 50 60 5 60 60 80 80  
 80 70 25 25  
 30 55 55 10

# Contrast Sensitivity





# Chiaroscuro



# **Gestalt Principles**

# Principles

- figure/ground
- proximity
- similarity
- symmetry
- connectedness
- continuity
- closure
- common fate
- transparency

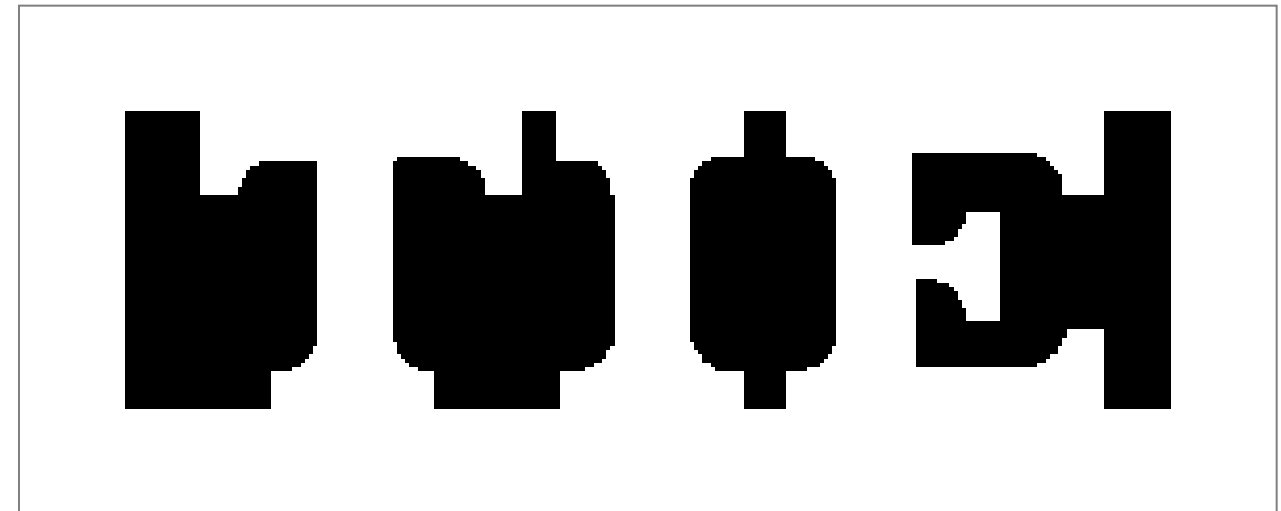


# Figure/Ground

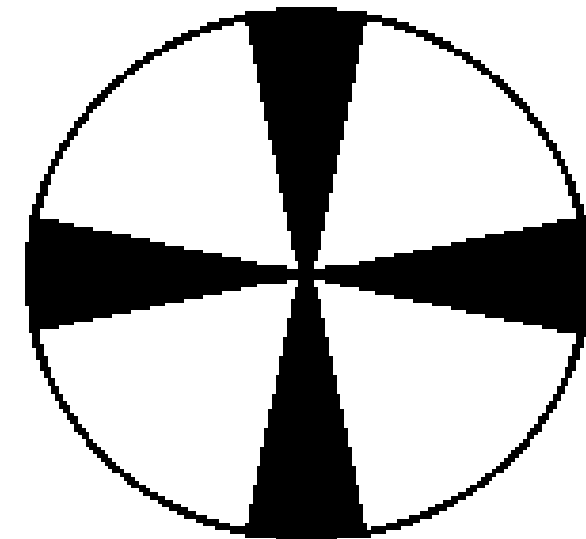


**Ambiguous**

<http://www.aber.ac.uk/media/Modules/MCI0220/visper06.html>



**Principle of surroundedness**



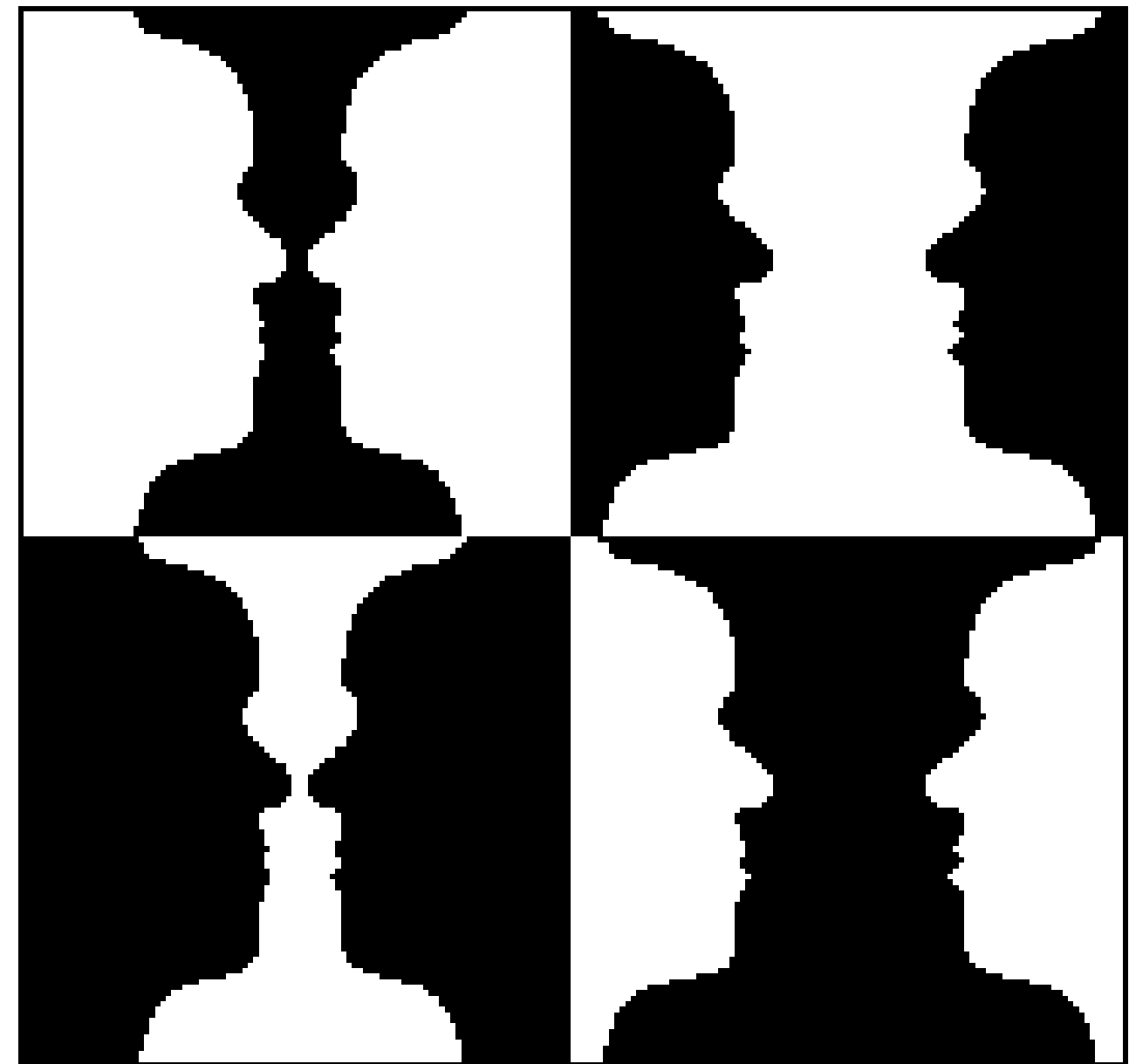
**Principle of relative size**

# Figure/Ground



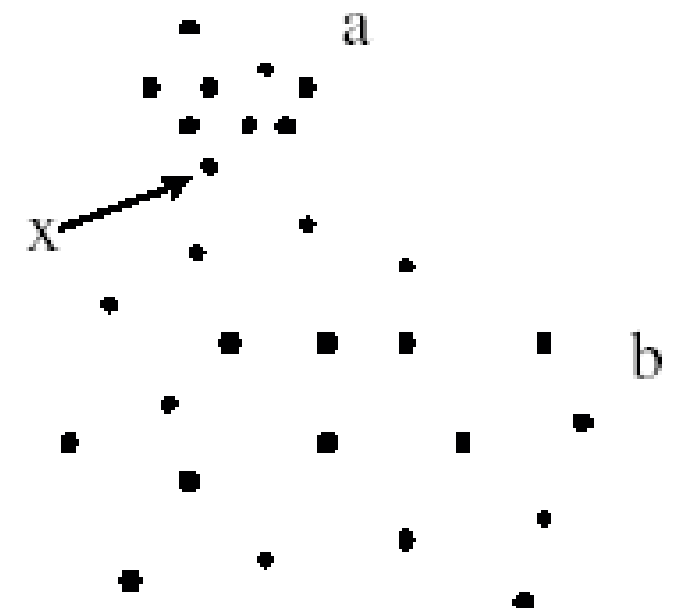
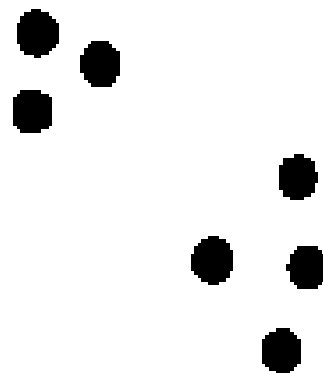
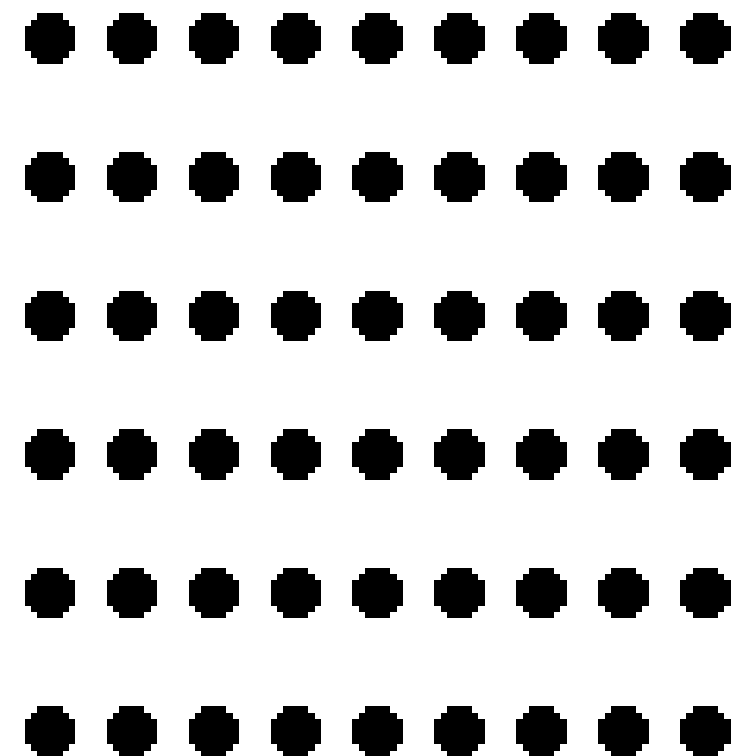
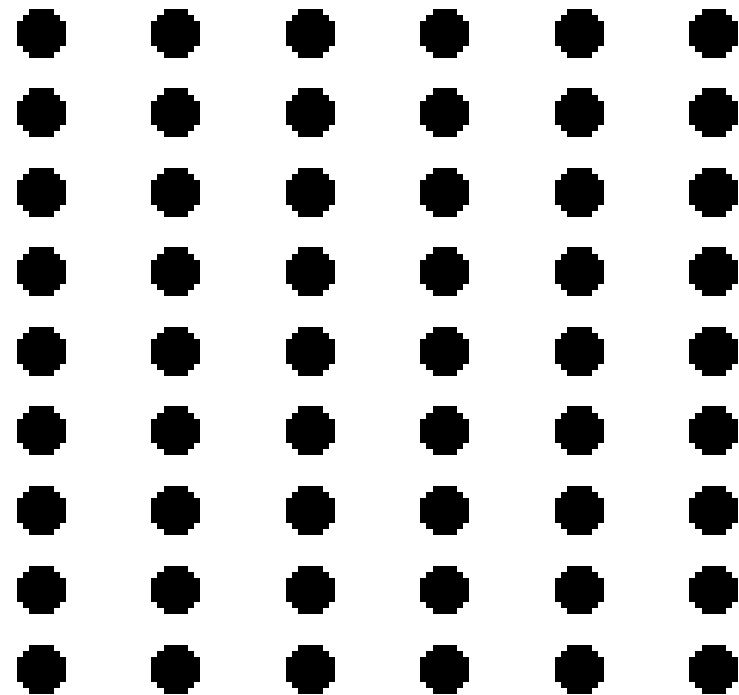
**Ambiguous**

<http://www.aber.ac.uk/media/Modules/MCI0220/visper06.html>



**Unambiguous**

# Proximity



Dots that are near one another are grouped  
Dots that are concentrated are grouped



# Proximity

Tuesday, November 4

Election Day

An American Menu \$75

Caesar salad with anchovies, egg, and  
Parmesan cheese

Clam chowder with Maine lobster and  
pancetta

Grilled chicken with house-made  
barbeque sauce with potato purée and  
greens

Apple and raspberry pecan crisp with  
vanilla ice cream

# Proximity

Tuesday, November 4 — Election Day

An American Menu

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Caesar salad with anchovies, egg, and  
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Clam chowder with Maine lobster  
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Grilled chicken with house-made  
barbeque sauce with potato purée  
and greens

Apple and raspberry pecan crisp  
with vanilla ice cream

# Similarity

TUESDAY, NOVEMBER 4 – ELECTION DAY

**AN AMERICAN MENU**      \$75

**Caesar salad**

with anchovies, egg, and Parmesan cheese

**Clam chowder**

with Maine lobster and pancetta

**Grilled chicken**

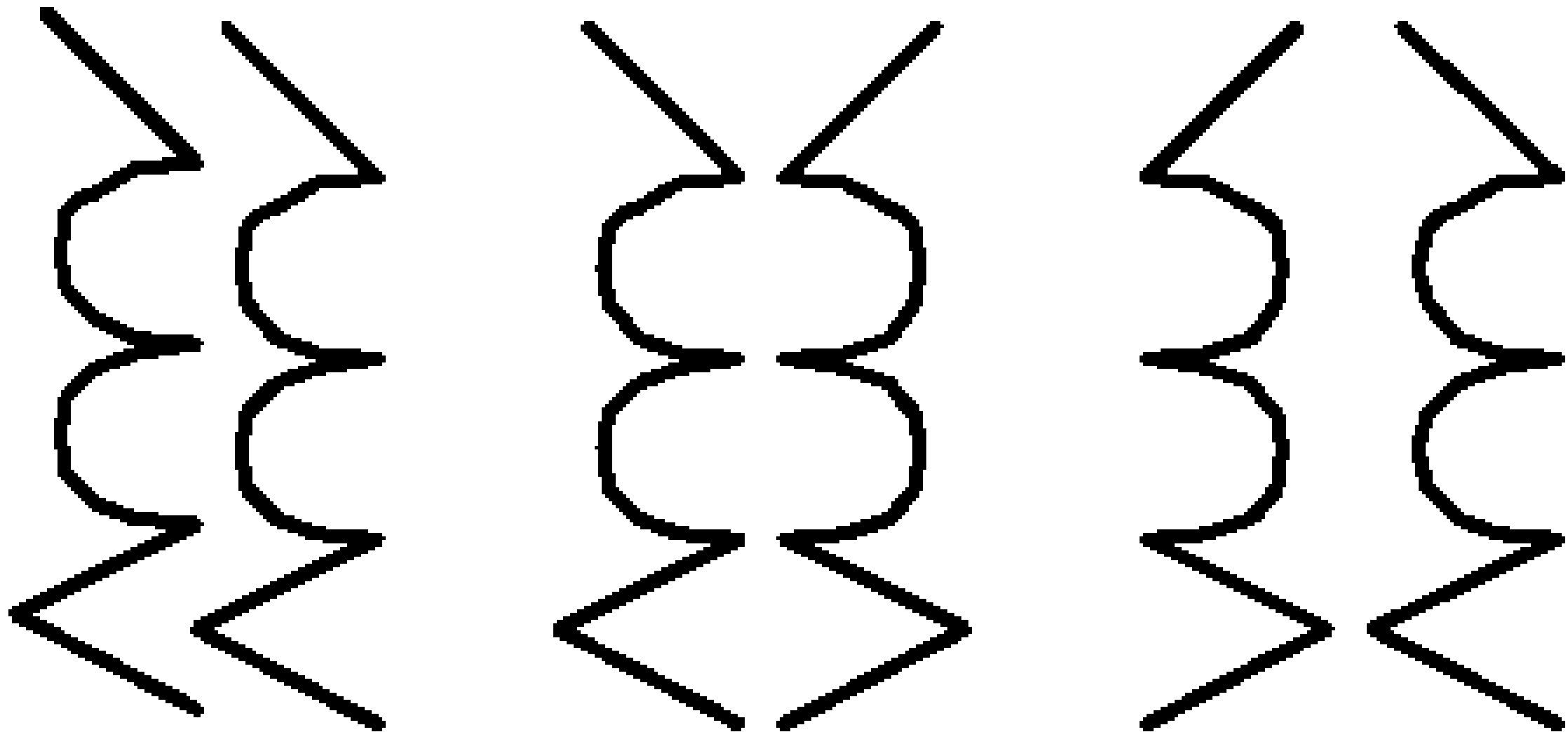
with house-made barbeque sauce with  
potato purée and greens

**Apple and raspberry pecan crisp**

with vanilla ice cream

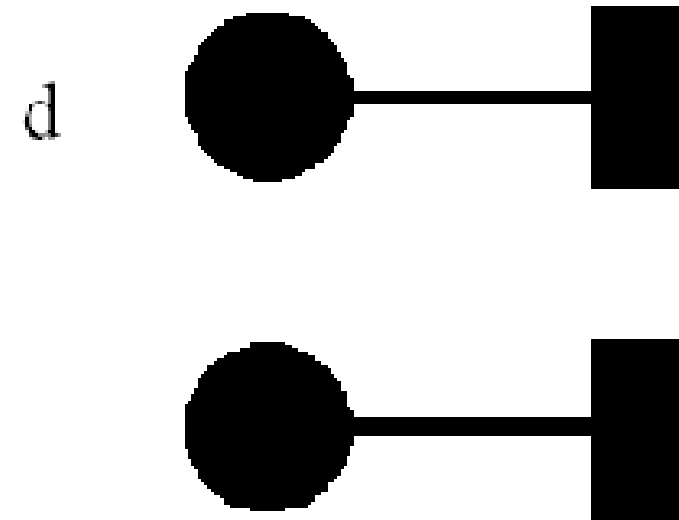
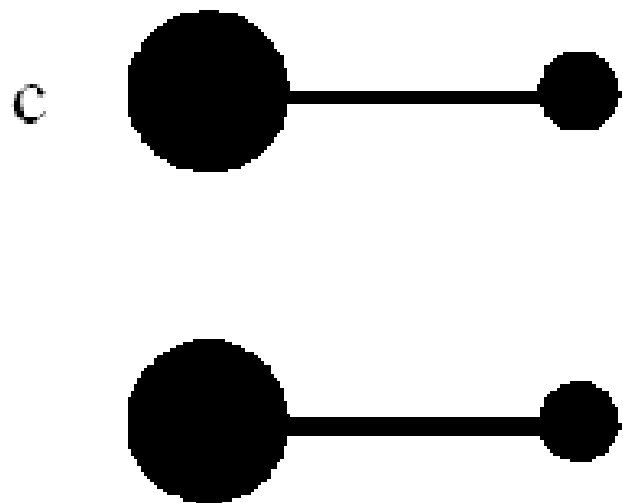
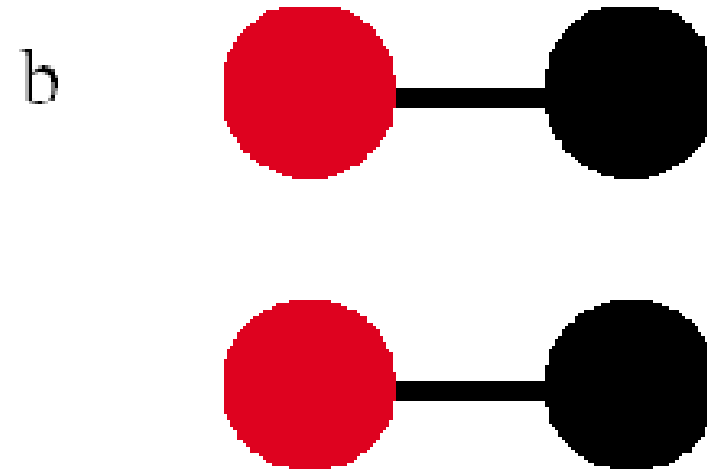
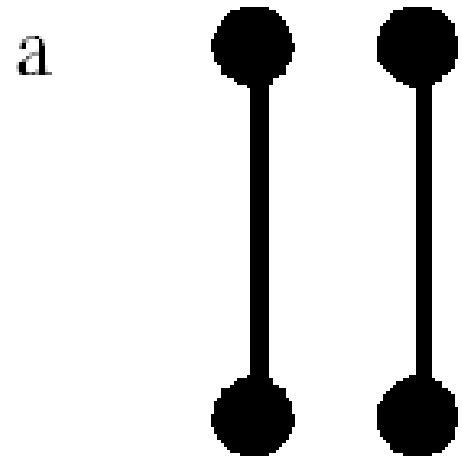


# Symmetry



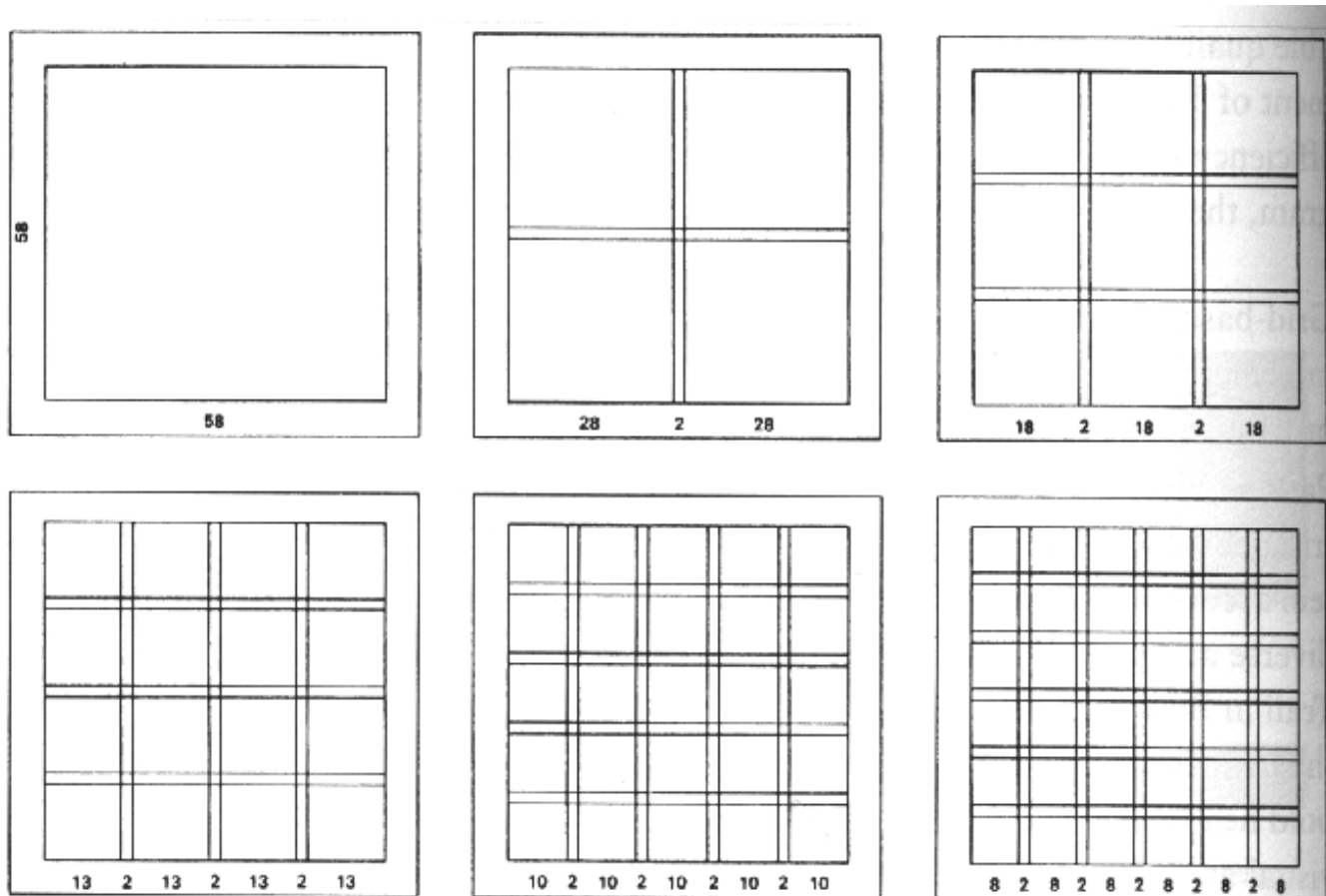
Bilateral symmetry gives strong sense of figure [from Ware 04]

# Connectedness

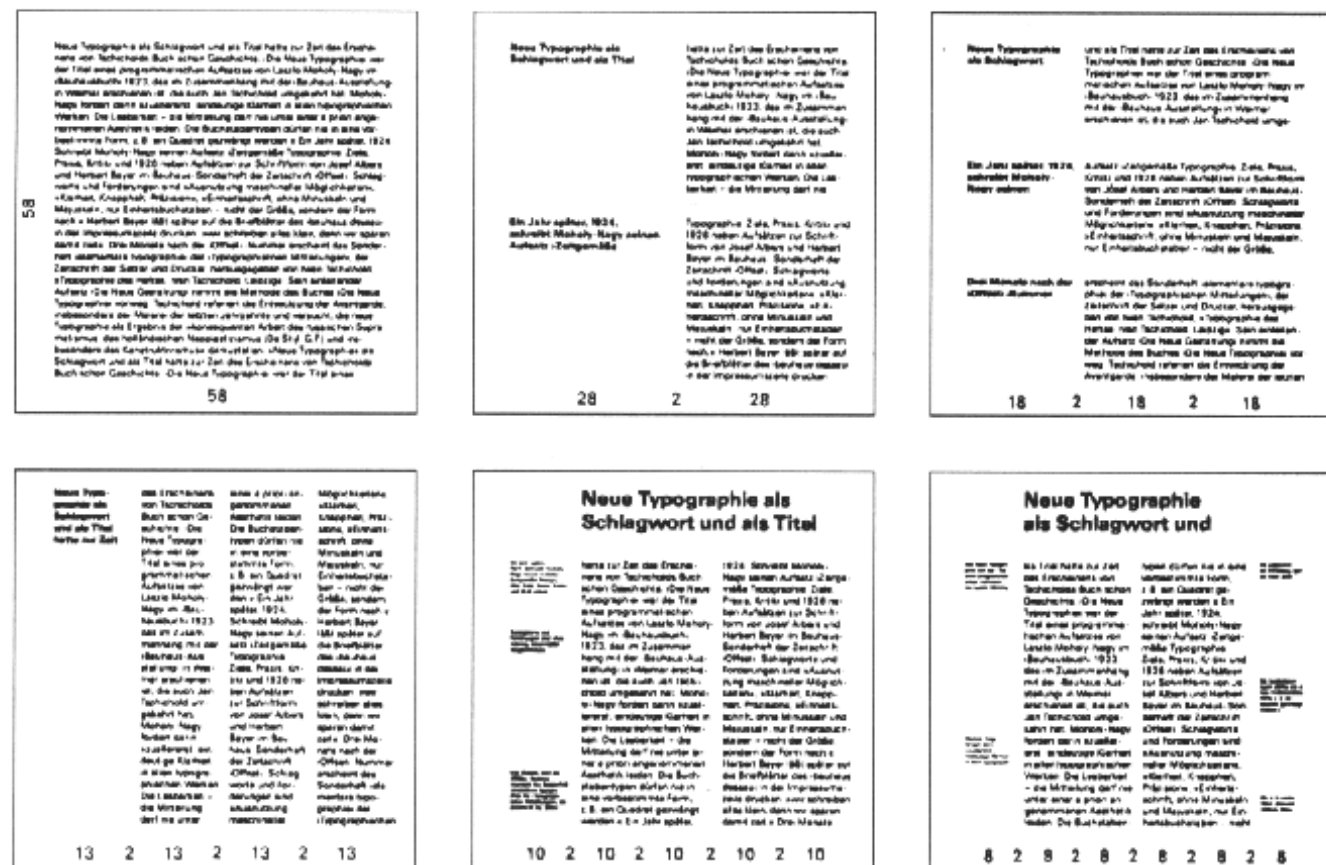


Connectedness overrules proximity, size, color shape [from Ware 04]

# Grid Systems



**142:** These typographic grids for book design subdivide the page uniformly into one to six columns. Grids for GUI design have important differences, but the goal of providing systematic structure is the same. From *Basic Typography: Design with Letters*, by Ruedi Rüegg, ABC-Verlag, Zurich, 1987.



**143:** Each of the grids in Figure 142 leaves a distinct imprint on the resulting layout. When the same grid is used throughout a book – or GUI application – this imprint becomes a unifying element for the entire work. From *Basic Typography: Design with Letters*, by Ruedi Rüegg, ABC-Verlag, Zurich, 1987.



# Web Page Layout

Grids can shape layout without over constraining it

- Grid is not always obvious from page layout
- Produces good repetition of size and shape



# Alignment

- Every item on a screen has a relationship to the other items. Elements that are almost collinear should be aligned.
- Left, right and both-justified alignments create strong boundaries around a piece of text.
- Its best to stick with one kind of justification within a page.

# Alignment

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solving your design problems

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Springfield, IL 60528  
123-456-7890

Q Search

## Fusce porta suscipit eros

Mauris elementum. Proin quis dolor ut augue imperdiet fringilla. In cursus, magna ut eleifend aliquam, risus lorem mattis mauris, eu congue nisi nisi et sapien. Donec eget dui. Praesent a diam. Cras nunc. Morbi id orci quis nisi consequat scelerisque.

### Duis vitae urna

Aenean ut risus nec tellus sodales bibendum. Morbi porta, urna nec aliquam condimentum, sapien lectus elementum est, in placerat elit mi pretium diam. Sed at lectus. Etiam laoreet massa vitae mauris blandit faucibus.

### Fusce non ligula

Phasellus sit amet leo. Proin fermentum congue purus. Fusce non ligula. Donec a erat. Curabitur mollis ultricies elit. Ut ut tortor nec metus commodo tristique. In hac habitasse platea dictumst. Donec bibendum, neque non dignissim accumsan, urna felis commodo libero, euismod imperdiet arcu felis tincidunt velit. Duis mollis interdum sem. Nunc volutpat dictum justo.

### Donec hendrerit magna

- Nulla sed tortor id neque consectetur auctor.
- Nullam laoreet erat eget nibh.
- Sed vitae nisi non enim semper rhoncus.
- Curabitur ac magna eu elit rhoncus ultrices.
- Proin quis metus nec mauris dictum convallis.
- In auctor mauris quis neque.

### Vivamus sodales

- Nulla sed tortor id neque consectetur auctor.
- Nullam laoreet erat eget nibh.
- Sed vitae nisi non enim semper rhoncus.
- Curabitur ac magna eu elit rhoncus ultrices.
- Proin quis metus nec mauris dictum convallis.
- In auctor mauris quis neque.

### Navigation

[Nulla neque habitant morbi](#)  
[Nullam laoreet commodo](#)  
[Sed vitae nisi lacus enim](#)  
[Curabitur cursus faucibus](#)  
[Proin quis metus erat volutpat](#)  
[euctor mauris tincidunt quis](#)


[Quisque sit amet est et](#)  
[ullamcorper placerat eleifend](#)  
[vehicula elit feugiat vitae](#)

Cras aliquam. Aliquam ultrices dignissim enim. Donec hendrerit magna in libero. Suspendisse accumsan. In sed sapien non lorem lobortis egestas. Fusce in libero id lacus auctor dignissim. Sed et arcu. Nunc felis enim, dapibus ac, tincidunt nec, feugiat et, dolor. Donec gravida ligula. Nulla a augue.

eget | turpis | metus | rutrum | commodo



# Alignment



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solving your design problems.

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### Navigation

[Nulla neque habitant morbi](#)  
[Nullam laoreet commodo](#)  
[Sed vitae nisi lacus enim](#)  
[Curabitur cursus faucibus](#)  
[Proin quis metus erat volutpat](#)  
[auctor mauris tincidunt quis](#)

[Quisque sit amet est et](#)  
[ullamcorper placerat eleifend](#)  
[vehicula elit feugiat vitae](#)

Cras aliquam. Aliquam ultrices dignissim enim. Donec hendrerit magna in libero. Suspendisse accumsan. In sed sapien non lorem lobortis egestas.

Fusce in libero id lacus auctor dignissim. Sed et arcu. Nunc felis enim, dapibus ac, tincidunt nec, feugiat et, dolor. Donec gravida ligula. Nulla a augue.

### Fusce porta suscipit eros

Mauris elementum. Proin quis dolor ut augue imperdiet fringilla. In cursus, magna ut eleifend aliquam, risus lorem mattis mauris, eu congue nisi risi et sapien. Donec eget dui. Praesent a diam. Cras nunc. Morbi id orci quis nisi consequat scelerisque.

### Duis vitae urna

Aenean ut risus nec tellus sodales trisendum. Morbi porta, urna nec aliquam condimentum, sapien lectus elementum est, in placerat elit mi pretium diam. Sed at lectus. Etiam laoreet massa vitae mauris blandit faucibus.

### Fusce non ligula

Phasellus sit amet leo. Proin fermentum congue purus. Fusce non ligula. Donec a erat. Curabitur mollis ultricies elit. Ut ut tortor nec metus commodo tristique. In hac habitasse platea dictumst. Donec bibendum, neque non dignissim accumsan, urna felis commodo libero, euismod imperdiet arcu felis tincidunt velit. Duis mollis interdum sem. Nunc volutpat dictum justo.

### Donec hendrerit magna

- Nulla sed tortor id neque consectetur auctor.
- Nullam laoreet erat eget nibh.
- Sed vitae nisi non enim semper rhoncus.
- Curabitur ac magna eu elit rhoncus ultrices.
- Proin quis metus nec mauris dictum convallis.
- In auctor mauris quis neque.

### Vivamus sodales

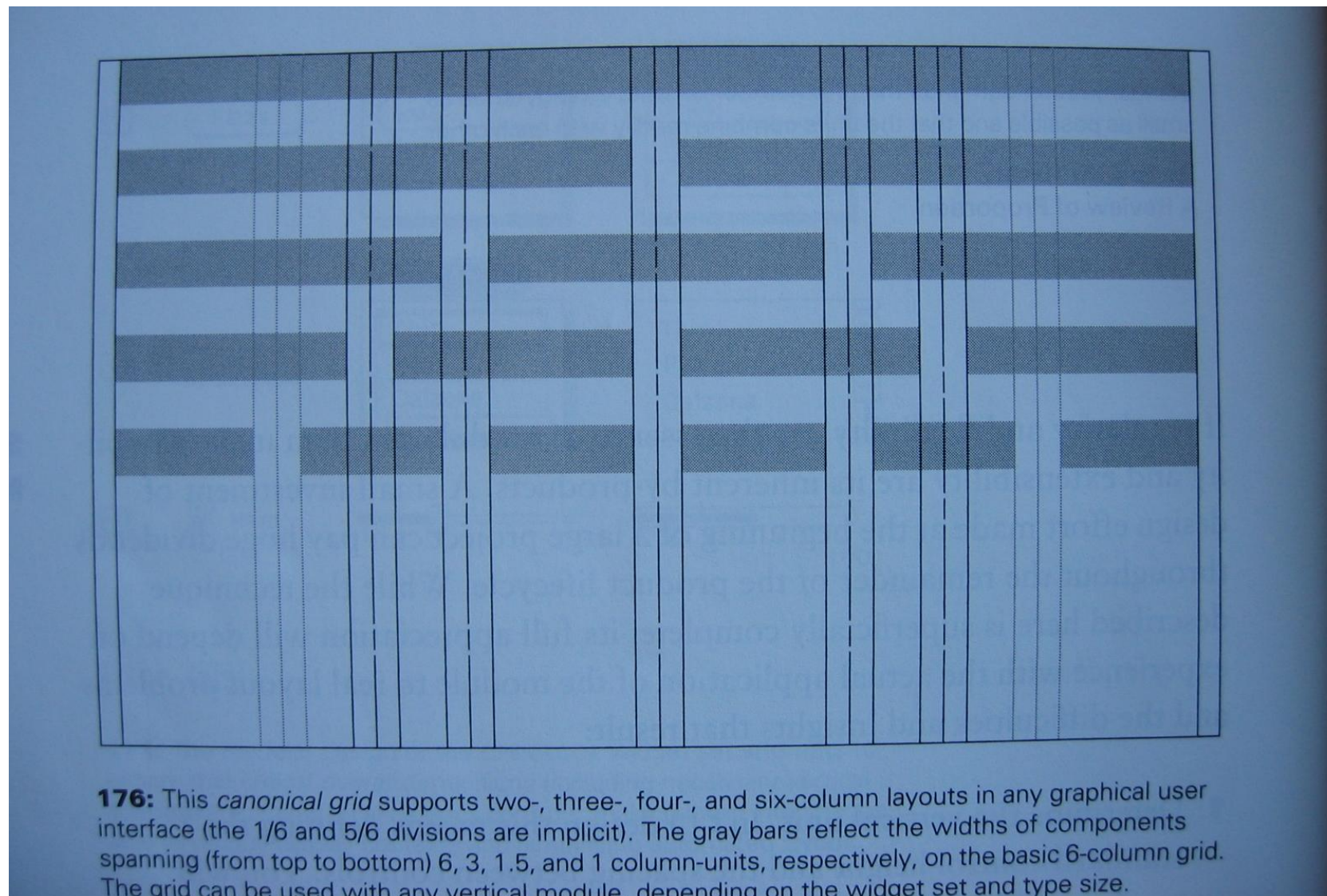
- Nulla sed tortor id neque consectetur auctor.
- Nullam laoreet erat eget nibh.
- Sed vitae nisi non enim semper rhoncus.
- Curabitur ac magna eu elit rhoncus ultrices.
- Proin quis metus nec mauris dictum convallis.
- In auctor mauris quis neque.

eget | turpis | metus | rutrum | commodo

# Techniques

## Canonical Grid

- Six-column grid with column separators and label templates
- Covers most common grid-based layouts
- Can be implemented with HTML tables



# Summary

- Design is about communication, form and function
  - Simplicity and elegance are keys to good design
  - Minimalism constrains you and reduces chances of bad design
- Use a small palette of colors
  - Let others pick them for you ([colorbrewer.org](http://colorbrewer.org))
- Human vision is organized by Gestalt Principles
  - Be aware of these principles as you design the visual look
- Avoid common layout mistakes by using grid-based design