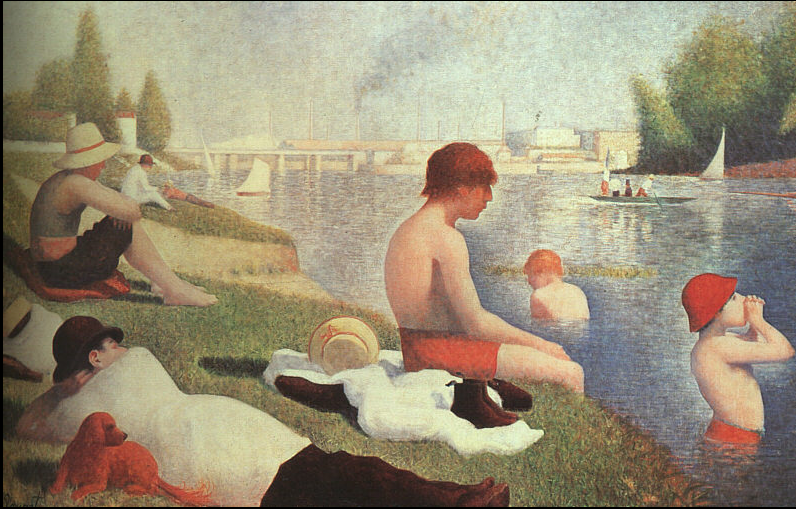
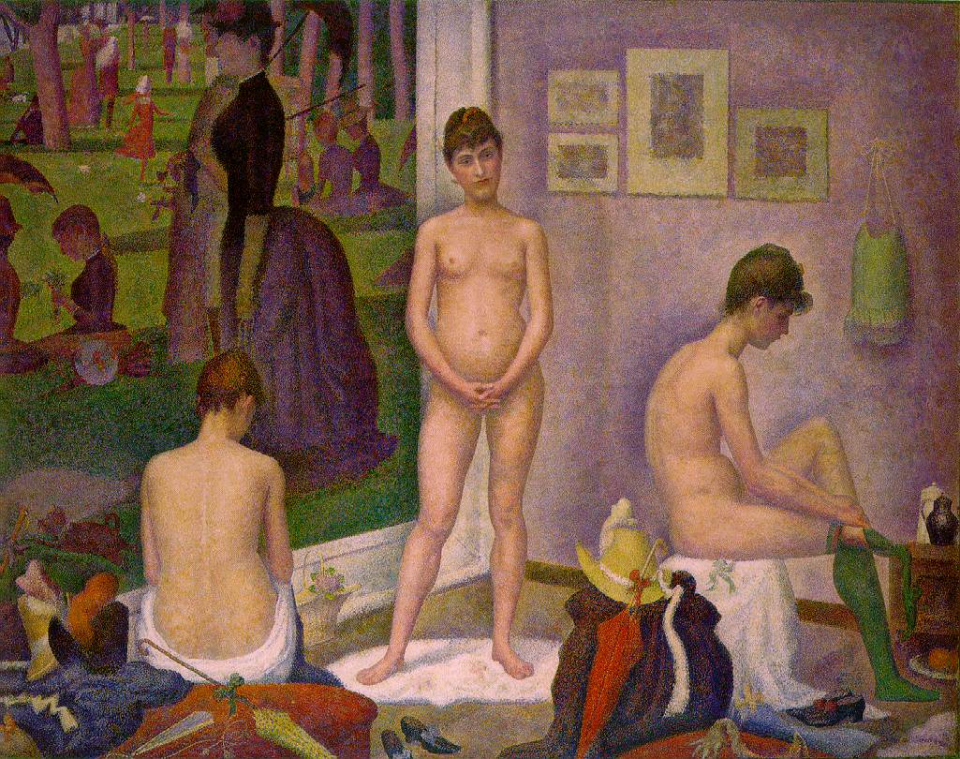


Chapter 5: Compositional Effects of Color



Art is harmony.
Harmony is the analogy of contrary and similar elements of tone, of color, and of line, conditioned by a dominant key, and under the influence of a particular light.

- *Georges Seurat*



Chapter 5: Compositional Effects of Color

Dominances

hue

value

chroma

contrast

Subordinance

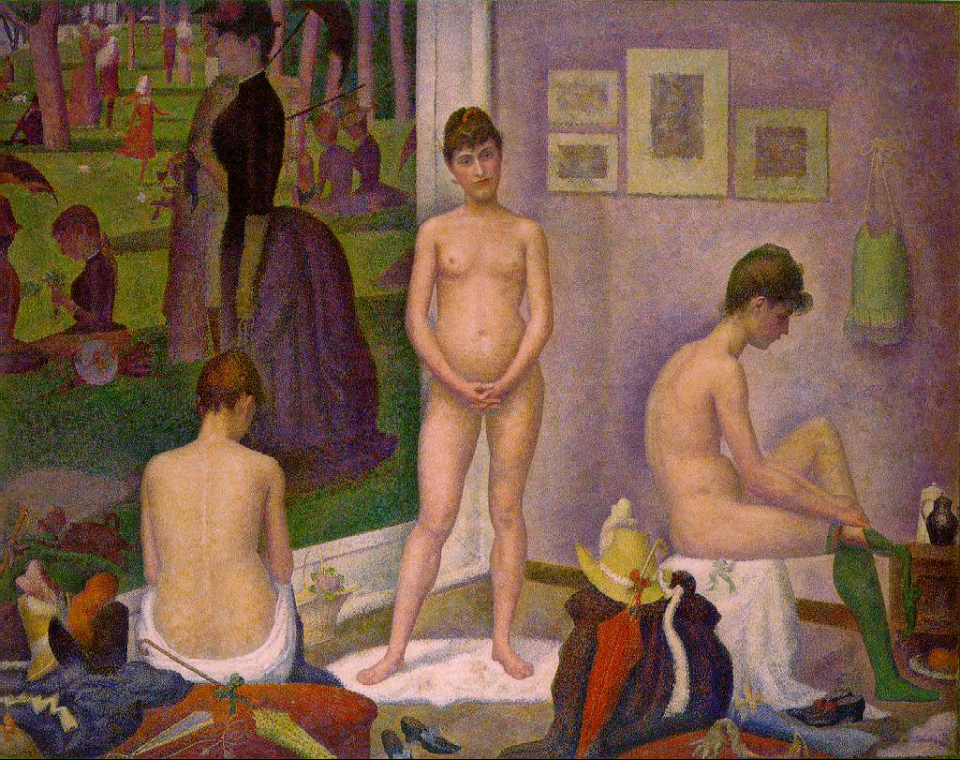
Accents

Focal Areas/Emphasis

Relief

Distribution & Balance





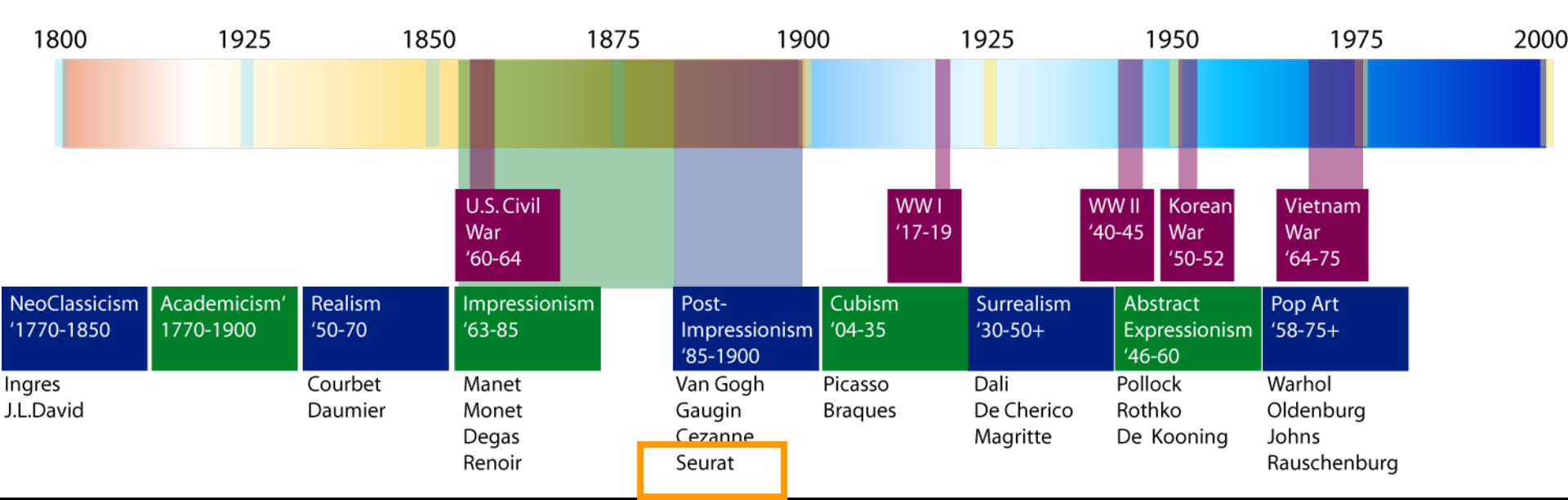
Chapter 5:
Compositional Effects
of Color: dominance

Art is harmony.

Harmony is the
analogy of
contrary and
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of line, *conditioned*
by a dominant
key, and under the
influence of a
particular light.

- Georges Seurat





Seurat

Georges Seurat
 French Post-Impressionist
 (classical)
 Studied Chevreul and other color theorists and attempted to apply theory to practice.



Georges Seurat

Seurat had left the **Ecole de Beaux Arts** after only a year of formal training to engage in **intense personal study of art as a science**. Seurat faithfully studied the paintings of classical painter **Eugene Delacroix** in order to understand color harmony.

The last half of the **19th century** also saw an **outburst of the scientific study of optics and color**. As seen in Seurat's handwritten notes and letters, **Seurat passionately read and took notes on books by aestheticians and scientists...**

<http://blogs.princeton.edu/wri152-3/dlieber/001735.html>



Georges Seurat

His influences include:

“**Charles Blanc** (Grammaire des arts du dessin- 1867),

David Sutter (Esthetique general- 1865),

Michael Eugene Chevreul (De la loi du contraste simultane des couleurs -1839),
and

Ogden Rood (Modern Chromatics) .

These authors converted an artist's intuition of color into scientific principles.

Seurat studied these principles in order to create artistic harmony with his colors; by adhering to the scientific principles of color **Seurat was convinced he would create striking colors that would aesthetically engage the viewer.**”

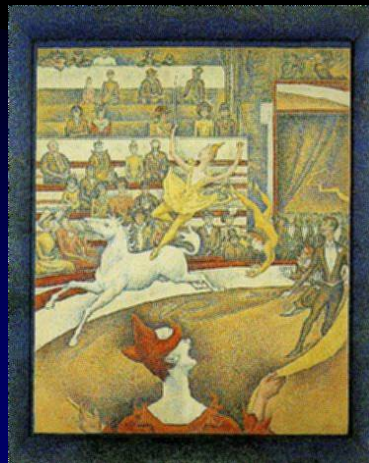
<http://blogs.princeton.edu/wri152-3/dlieber/001735.html>



In an 1890 letter Seurat tersely explains the tenets which governed his art throughout his lifetime: “Art is harmony. Harmony is the analogy between opposites and the analogy between elements similar in tonal value, color, and line.

He goes on to explain that his art consists of contrasts between light and dark, and contrasts between complementary colors “red-green, orange-blue, yellow-violet.

<http://blogs.princeton.edu/wri152-3/dlieber/001735.html>

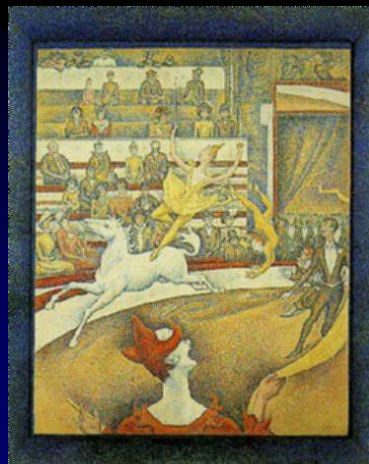


“...Seurat’s system includes the systematic representation of mood.
“Gaiety in terms of tonal value is a luminous dominant tonality of color, a warm dominant color...”

Calmness in terms of tonal value is an equal amount of dark and light in terms of color, and equal amount of warm and cool...

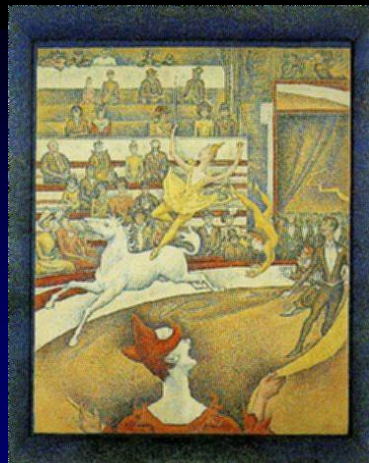
Sadness in terms of tonal value is a dominant dark tonality and in terms of color a cold dominant color.”

<http://blogs.princeton.edu/wri152-3/dlieber/001735.html>



“Seurat knew that these simplistic rules, if executed correctly, could be extremely powerful tools to command the mood of the viewers of his art. The pointillist method that Seurat developed was based on these tenets, and the color of each tiny dot (point) was determined by an application of these rules. Through this method, Seurat could achieve technical brilliancy.”

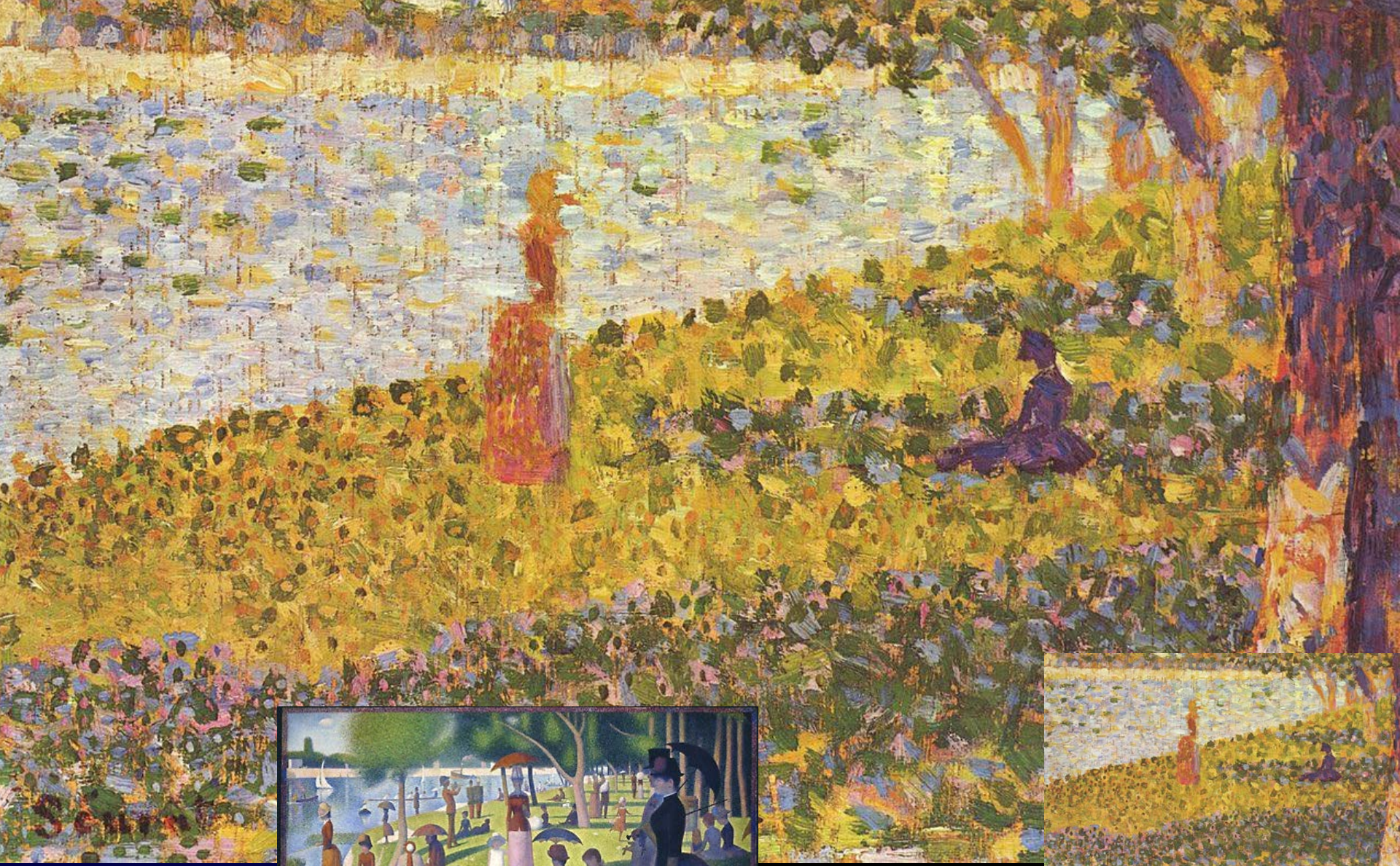
<http://blogs.princeton.edu/wri152-3/dlieber/001735.html>



Even as a vivid colorist, Seurat builds careful tonal relationships.

In the charcoal preparatory sketch, he explores ways of massing and contrasting shapes via value.

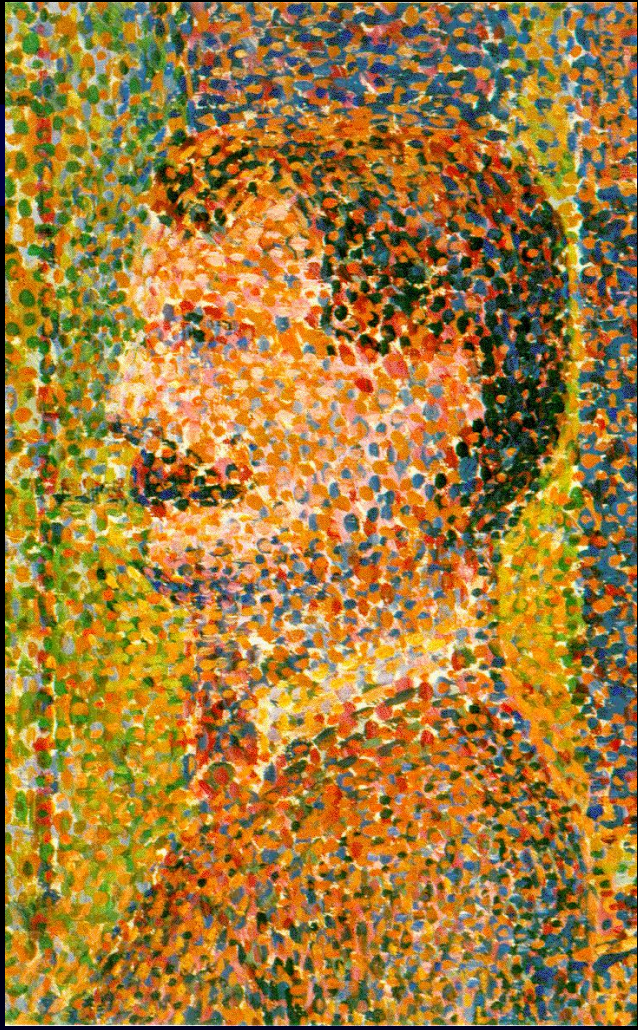


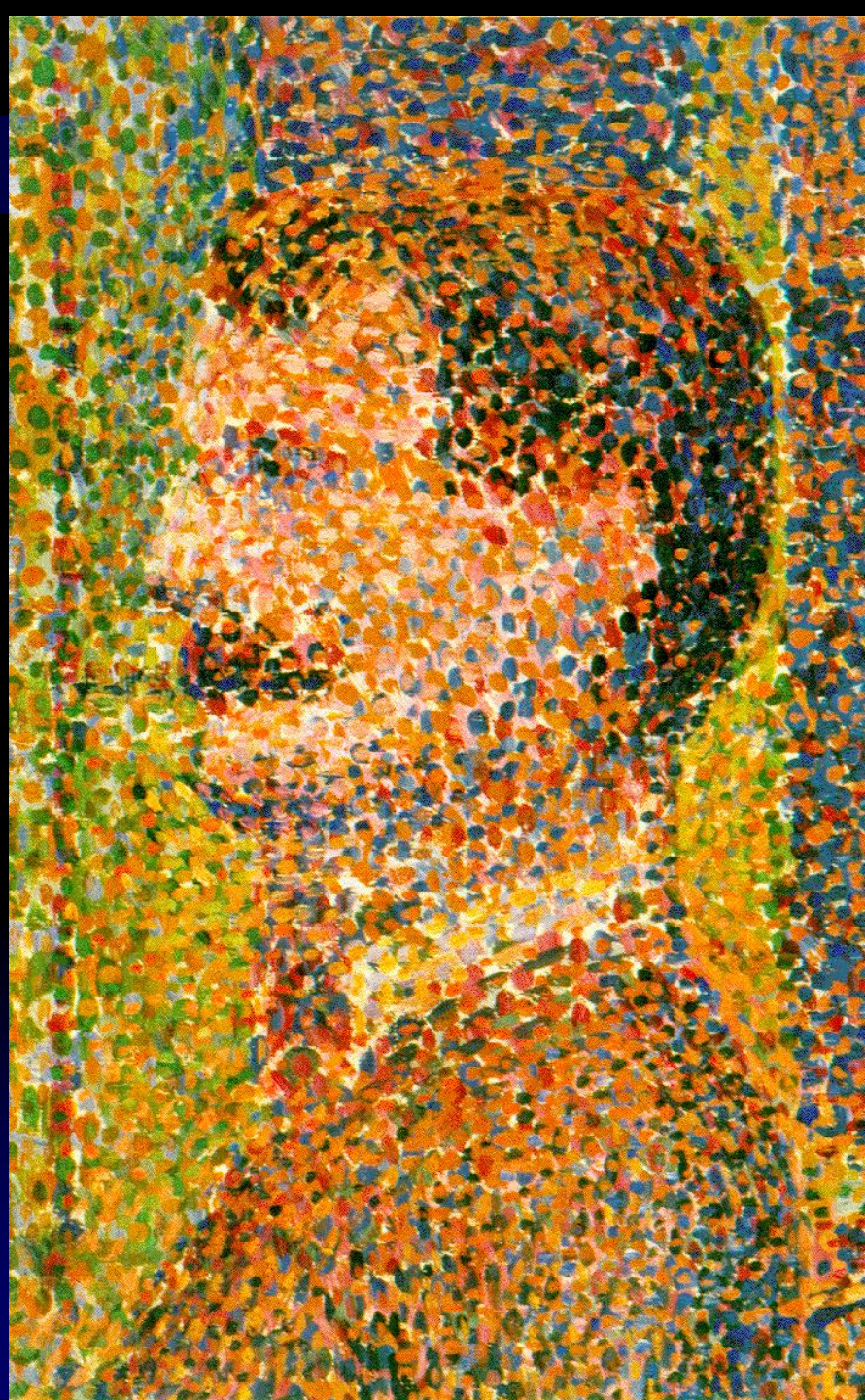


Femmes au
bord de l'eau
1885-1886

In this preparatory color study, note the fragments of color that optically mix at normal viewing distance.

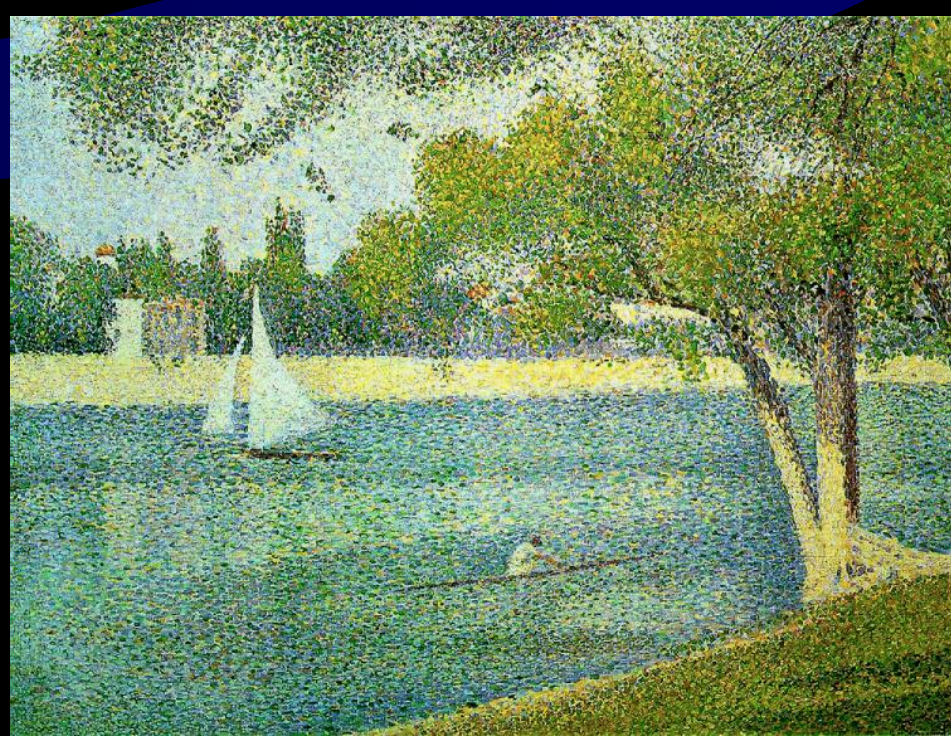


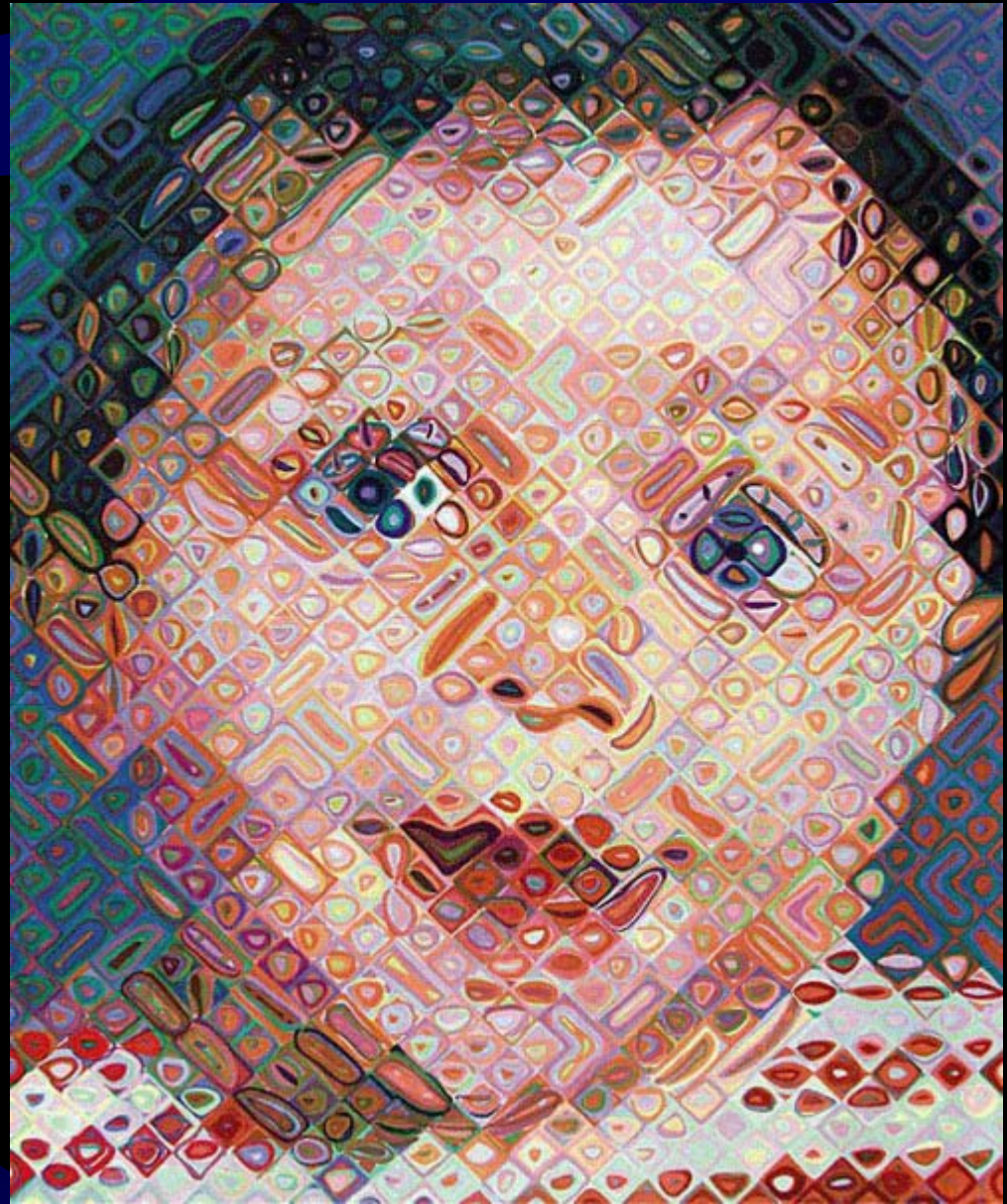




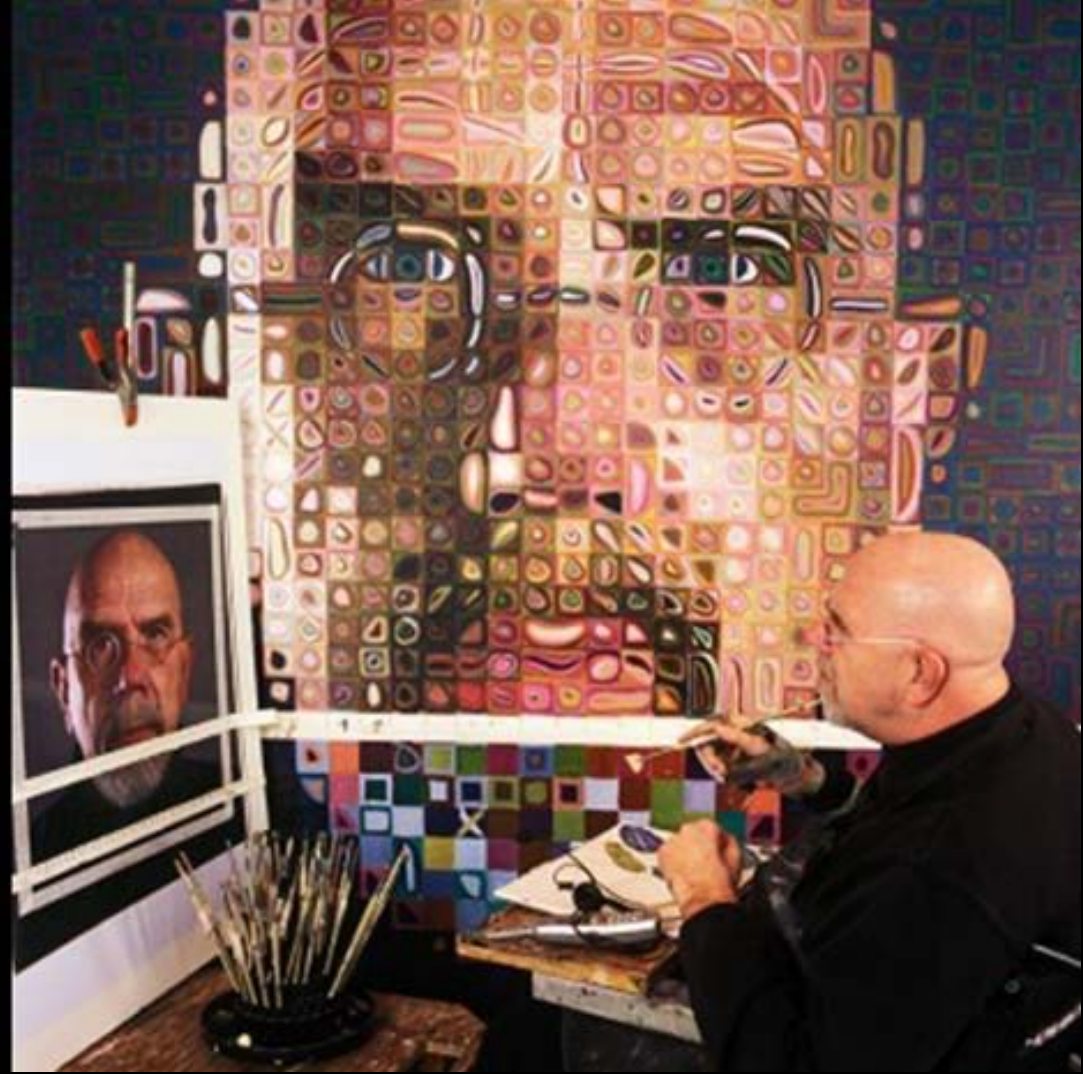
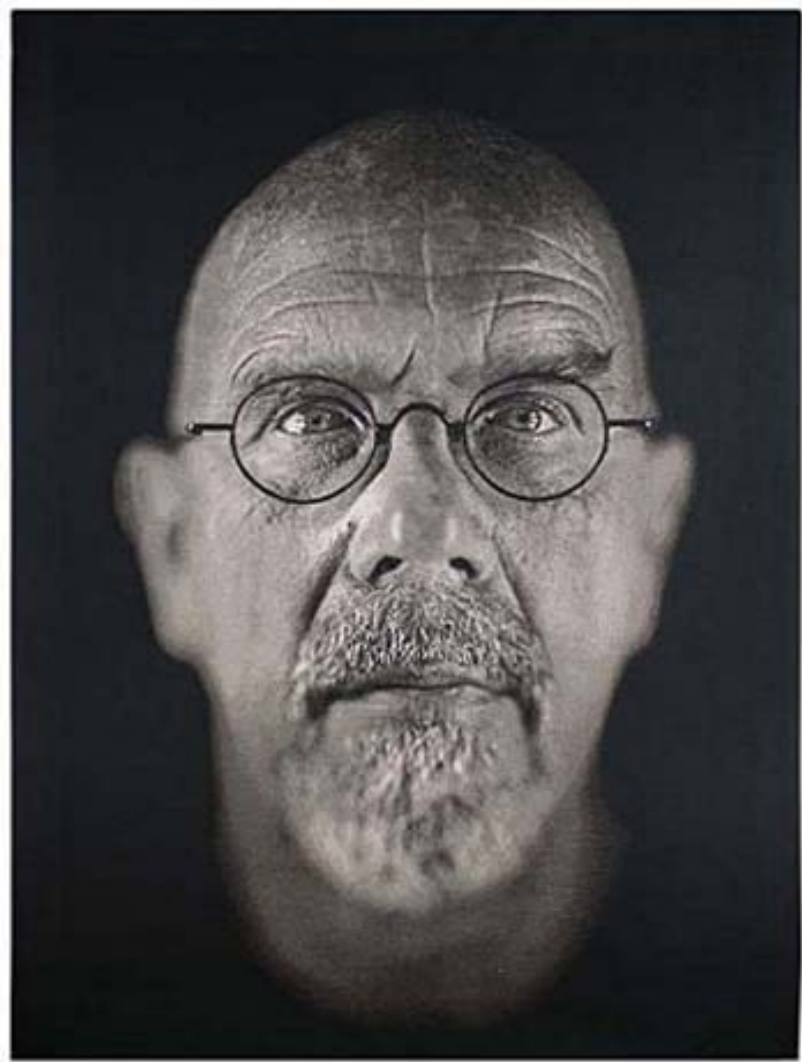


La Tour Eiffel
1889

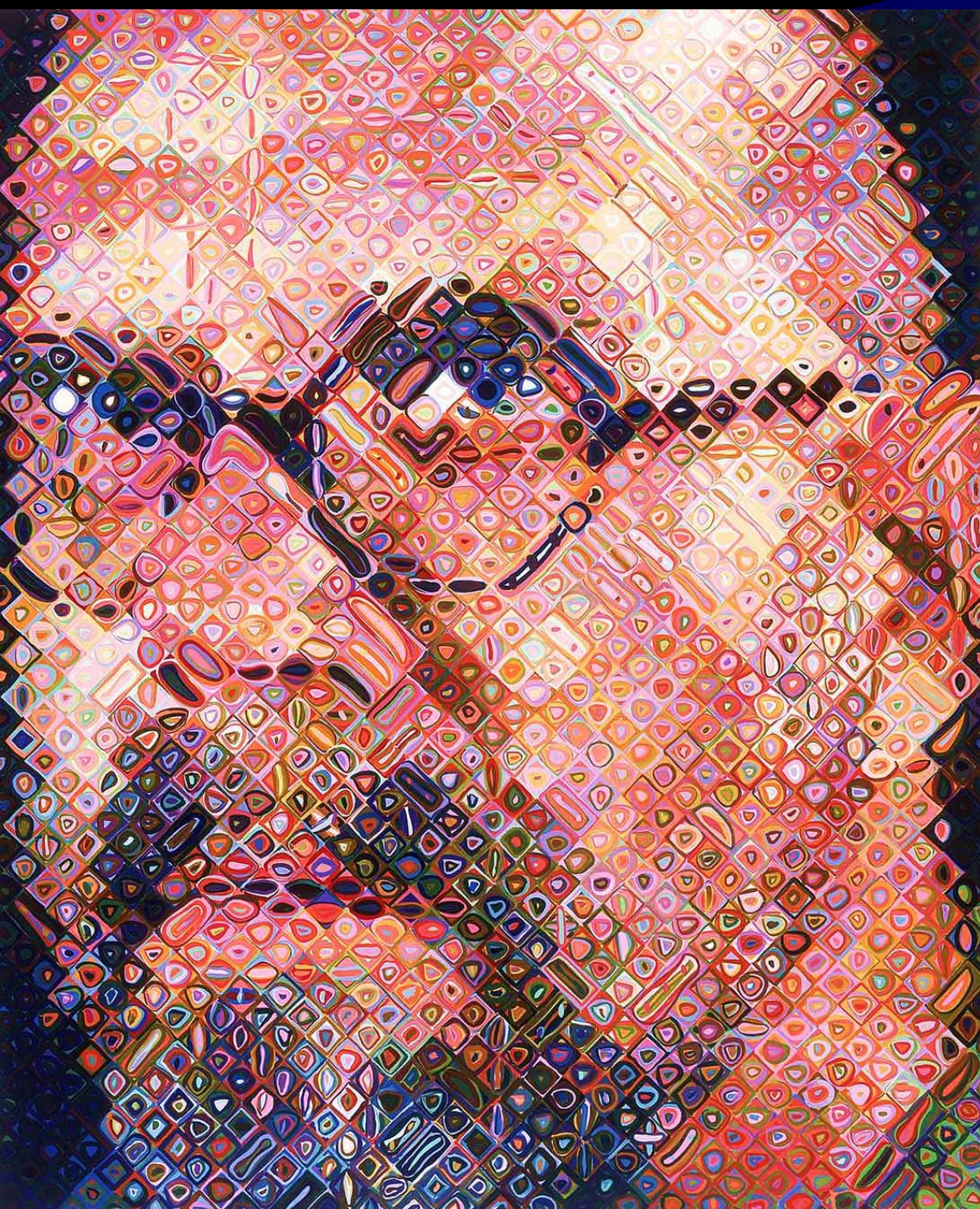




Chuck Close works primarily with large scale portraits painted from photographs. He has *prosopagnosia* or “face blindness.”

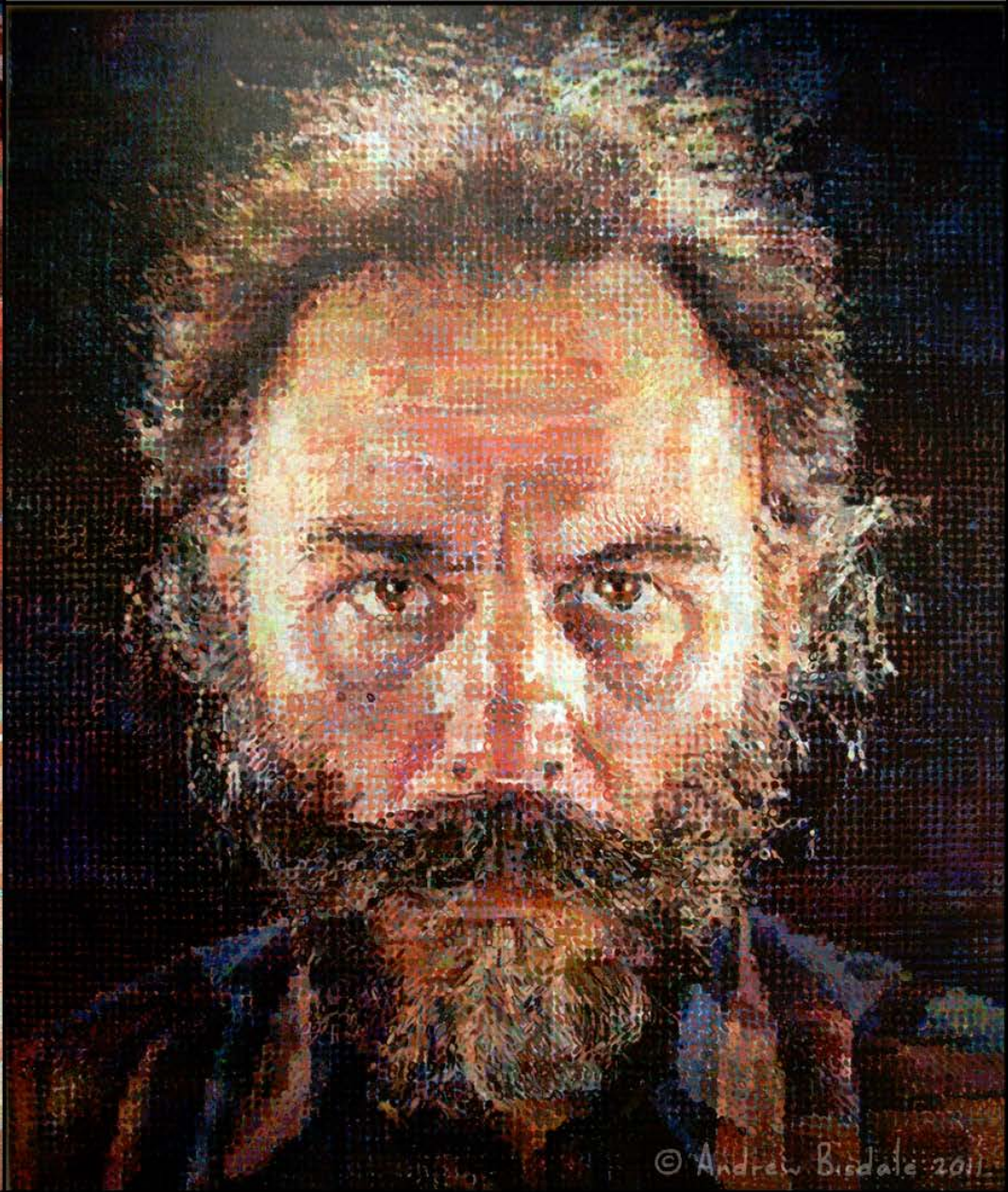


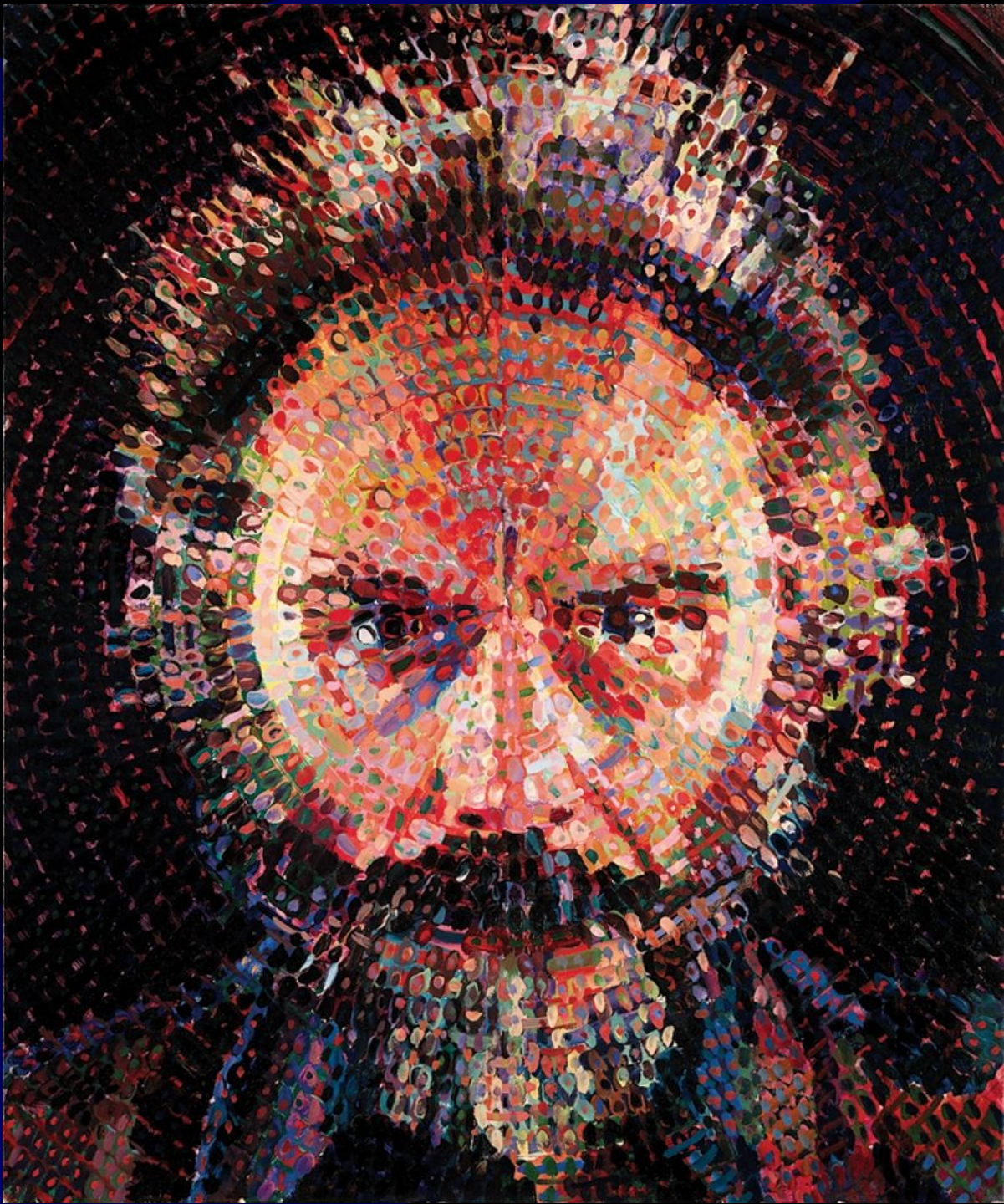
Just as color blindness makes it impossible to distinguish between hues, so prosopagnosia makes it impossible to distinguish one face from another – Chuck Close, then, does not recognize or remember anyone by their face. Neither do the 1 in 50 people who have it.



Chuck Close's huge paintings explore optical mixing with bold patterns.

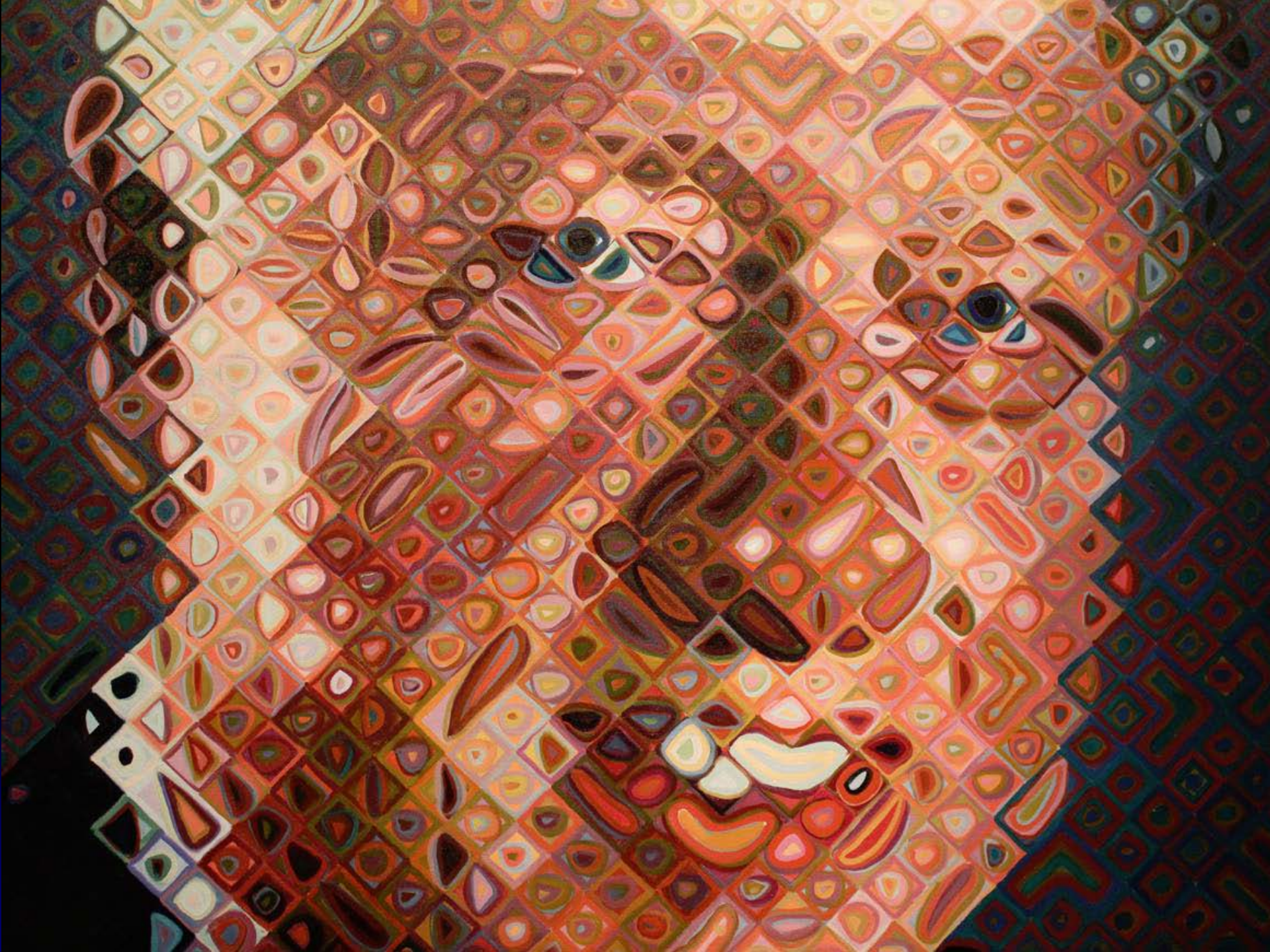


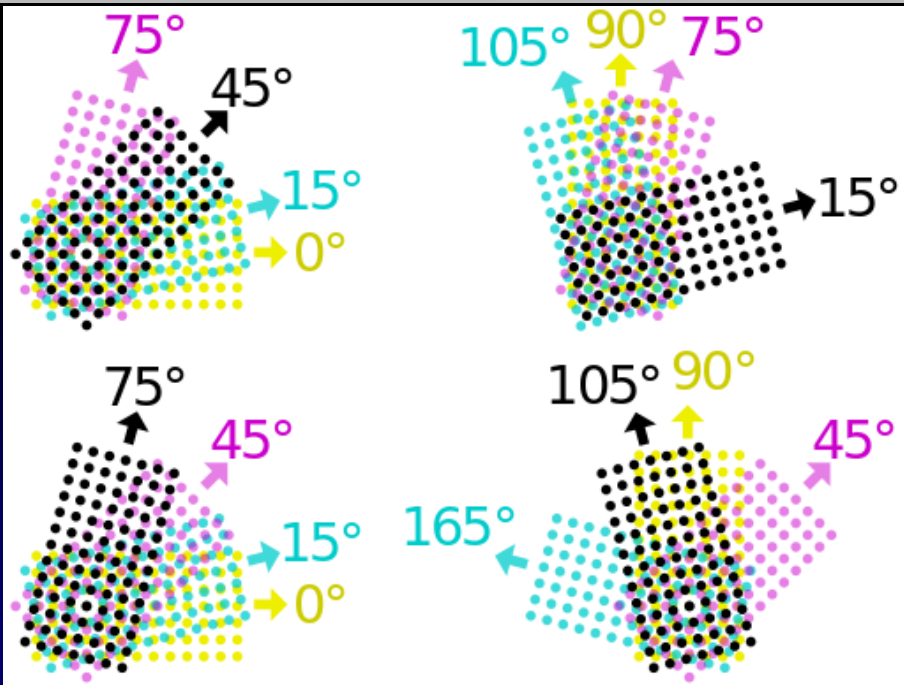
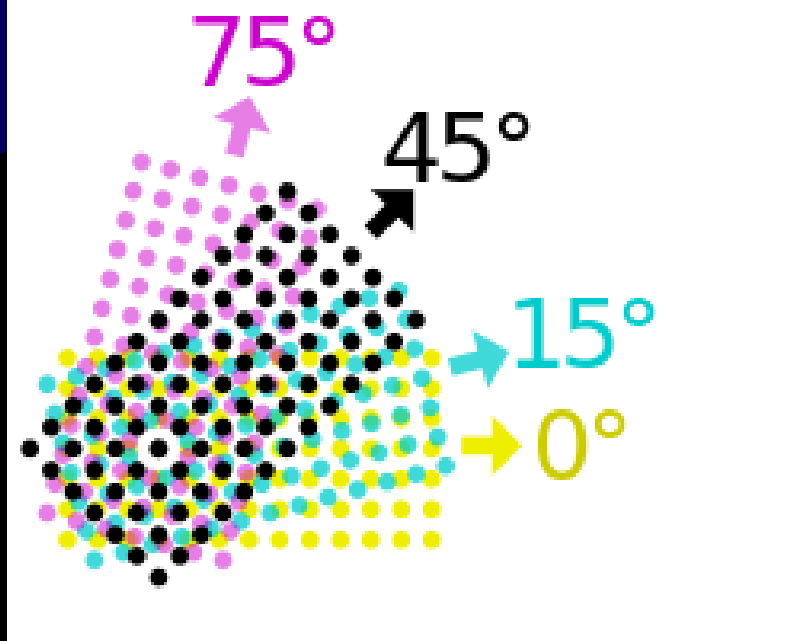
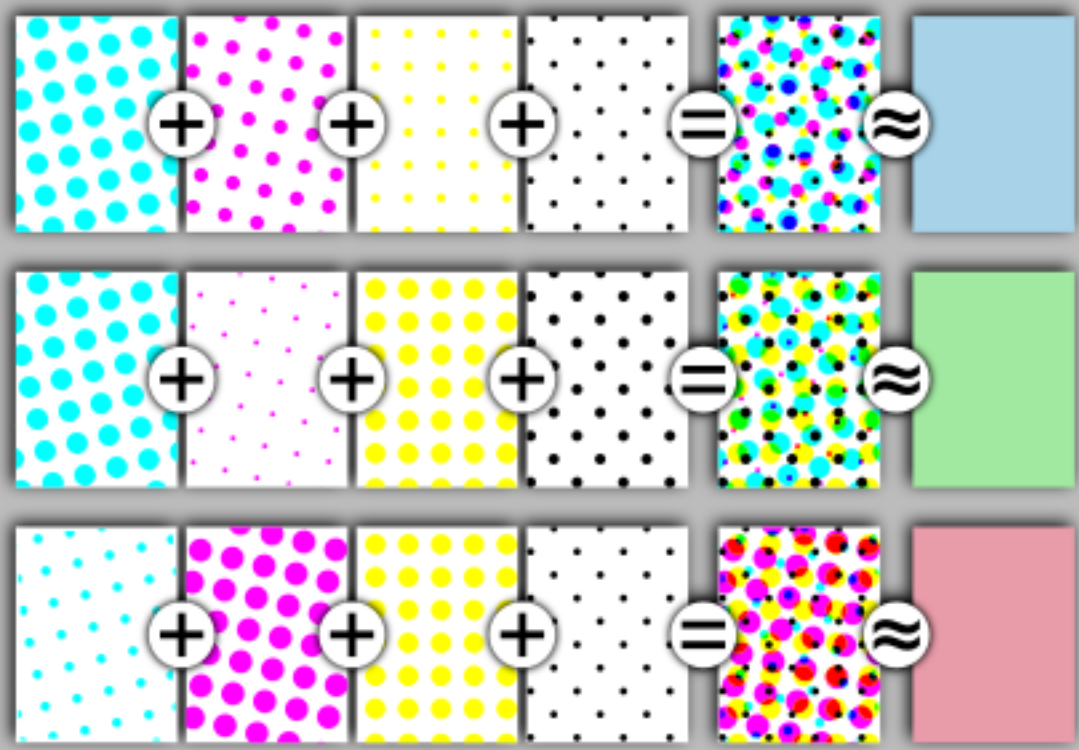




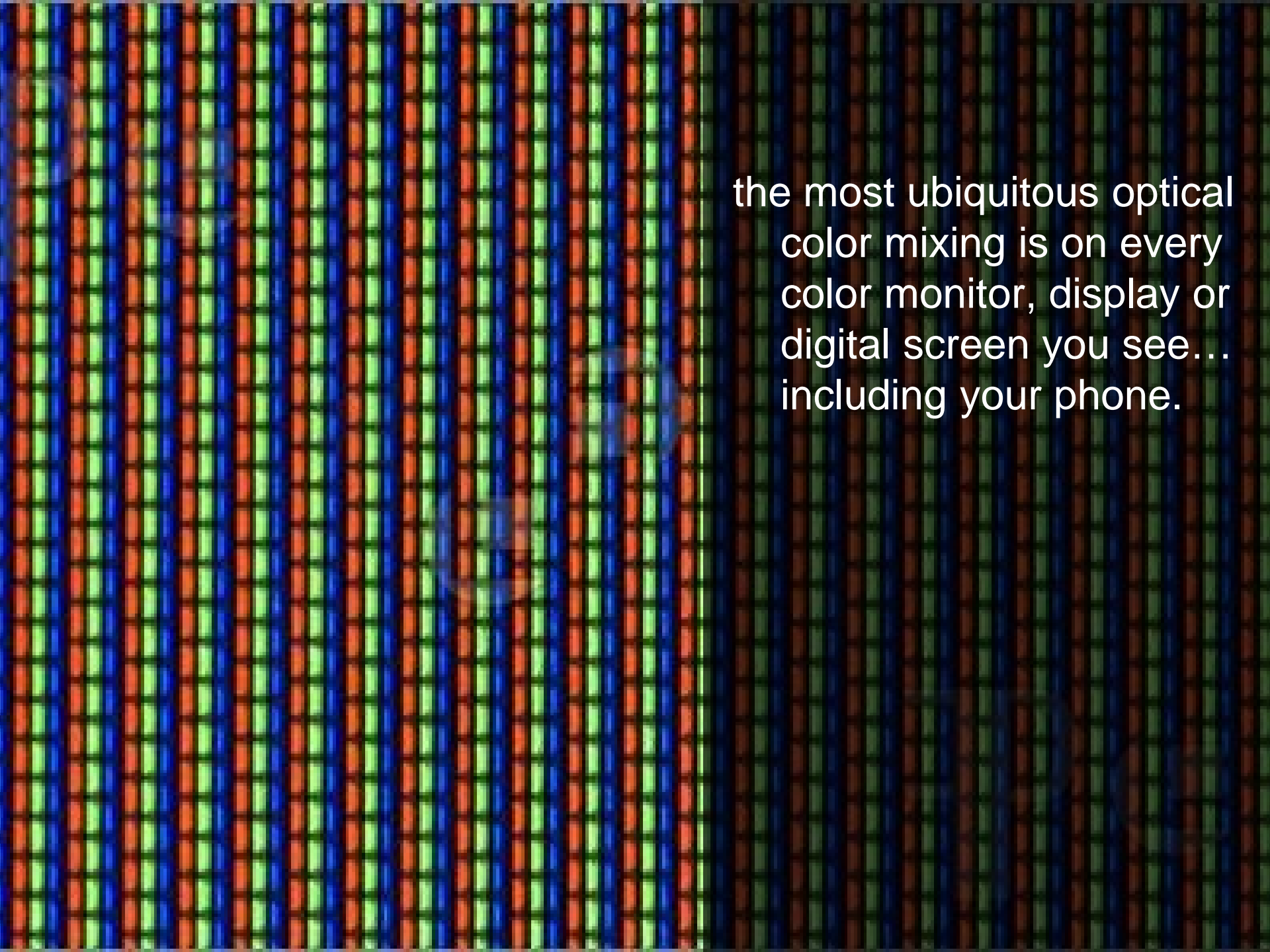
Lucas/1987



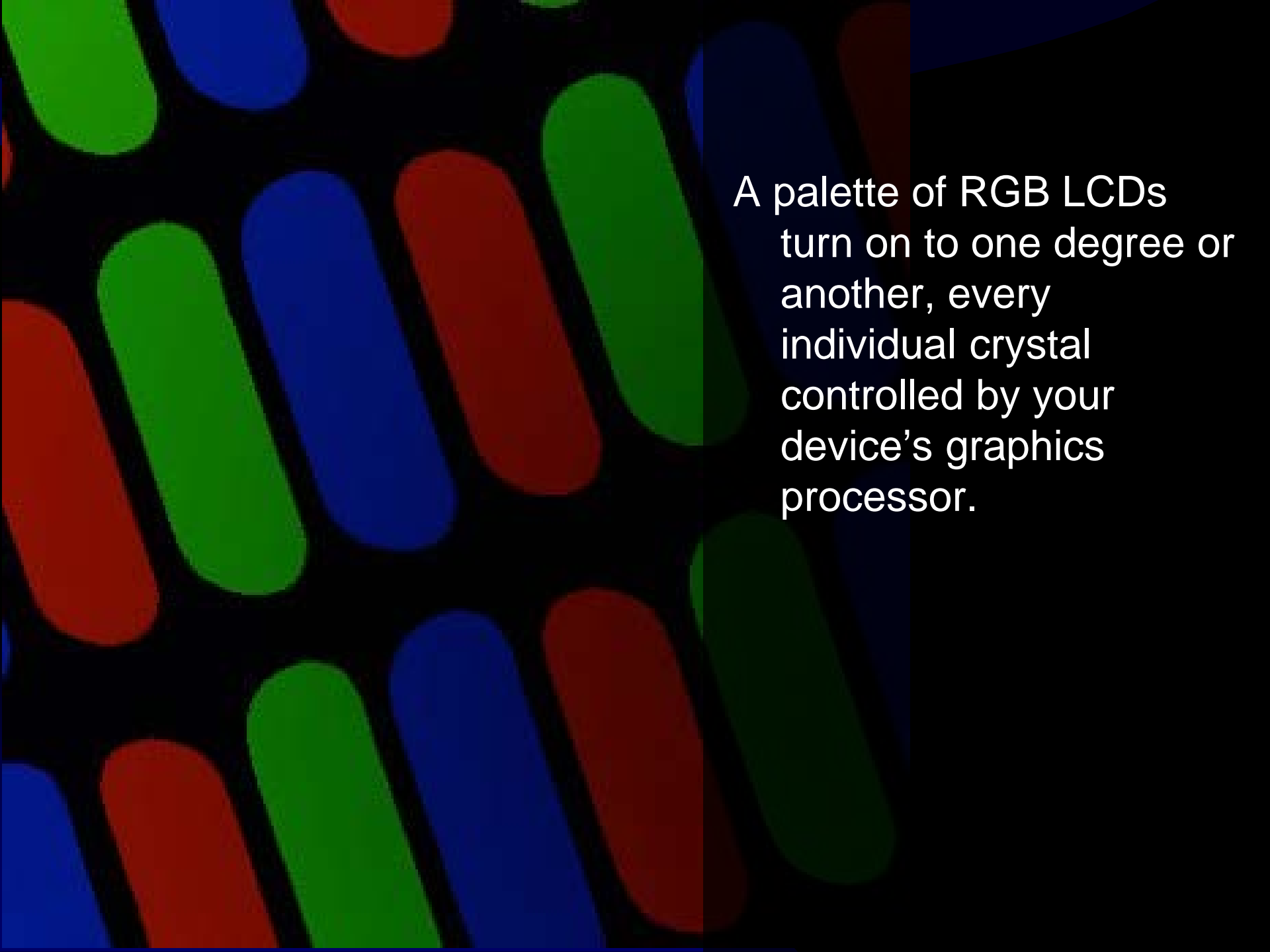




Your CMYK images in your textbook are all optically mixed colors using standard halftoning techniques to break color into small, printable dots of ink. Most printing technologies require “line art” - ink or no ink rather than true grayscales or gradients of color. Each color’s “screen” of dots must be printed at a different angle so that odd overlap patterns don’t appear.



the most ubiquitous optical color mixing is on every color monitor, display or digital screen you see... including your phone.



A palette of RGB LCDs
turn on to one degree or
another, every
individual crystal
controlled by your
device's graphics
processor.



What *basis* for color choices?

“Color choices may be based as much upon their influence on perceptions of **space, unity, and emphasis** as upon the artist’s desire for realism or psychological suggestion.”

P. 46, text

— *Many* issues influence *why* a color is chosen.

When focusing on the **emotion or psychology** of color, color affect or association dominates.

When dealing with **2D compositional issues**, emphasis, balance and unity may dominate.

When dealing with **representations of space**, issues of aerial perspective may become prominent.

Compositional Issues of Color

- Apparent Size
- Spatial Depth (3d illusion/suggestion)
- Compositional Balance and Visual Weight
- Graphic Emphasis and hierarchy
- Harmony, Unity and Variety
- Rhythm/Correspondence

- Emotional connotations and/or symbolism
- Harmony or Dischord—calm or tension

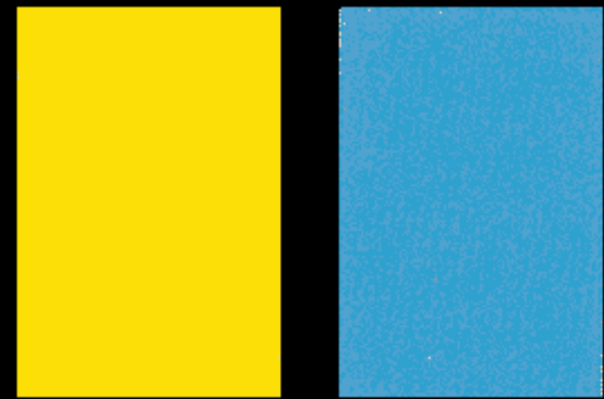
Compositional Issues of Color

- Harmony or Dischord—calm or tension

Compositional Effects of Color

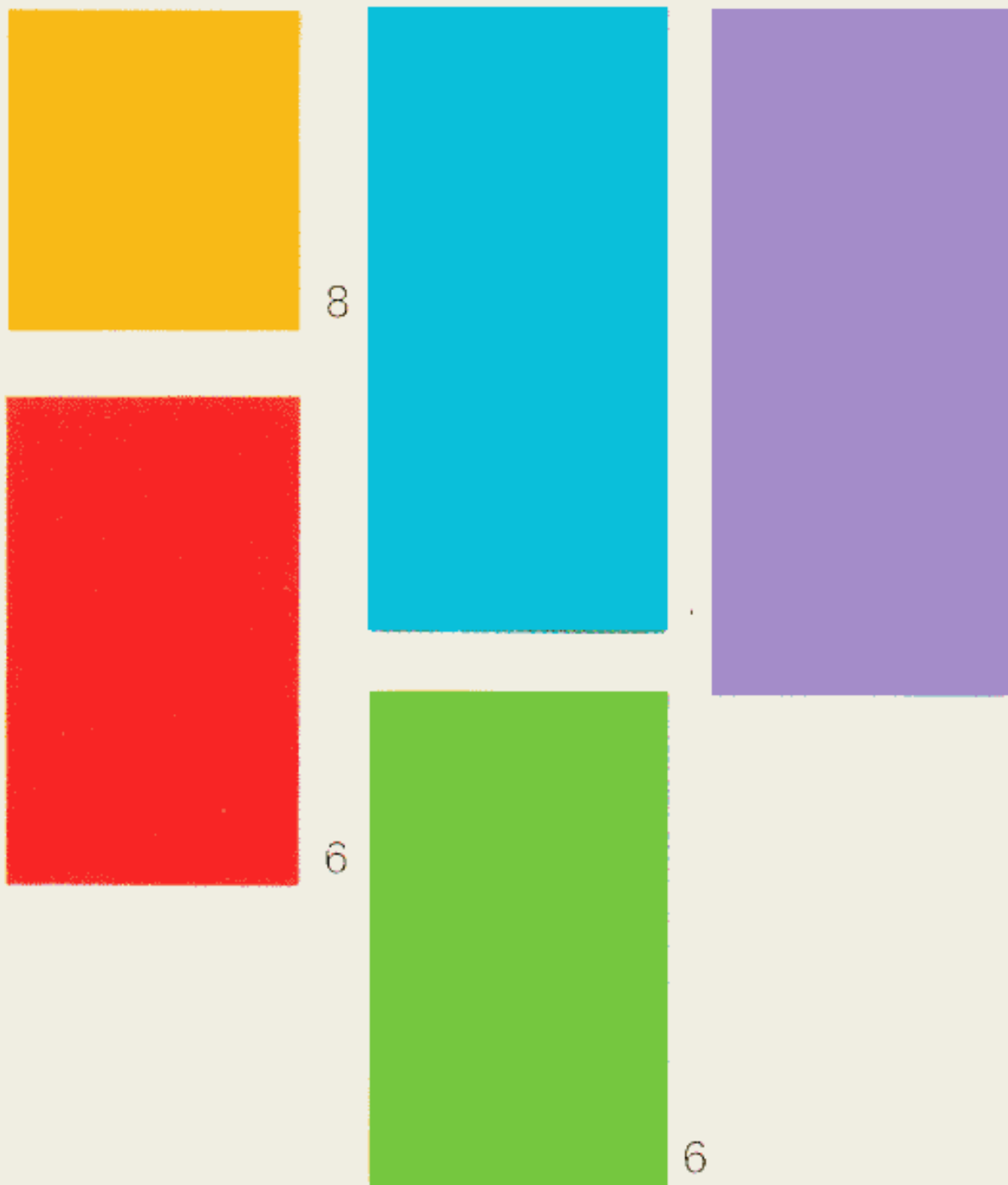
- Chevreul demonstrates that colors alter their neighbor's appearance – each color “pushing” the appearance of its neighbor away from itself.
- Color characteristics have a powerful impact on a design's overall effect – on the composition as whole.
- Proportion, quantity or area of each color.
- Juxtapositions of colors — contrast.
- Use in patterns — contrast.
- Clarity of transitions/edges — contrast

Spatial effects of Color



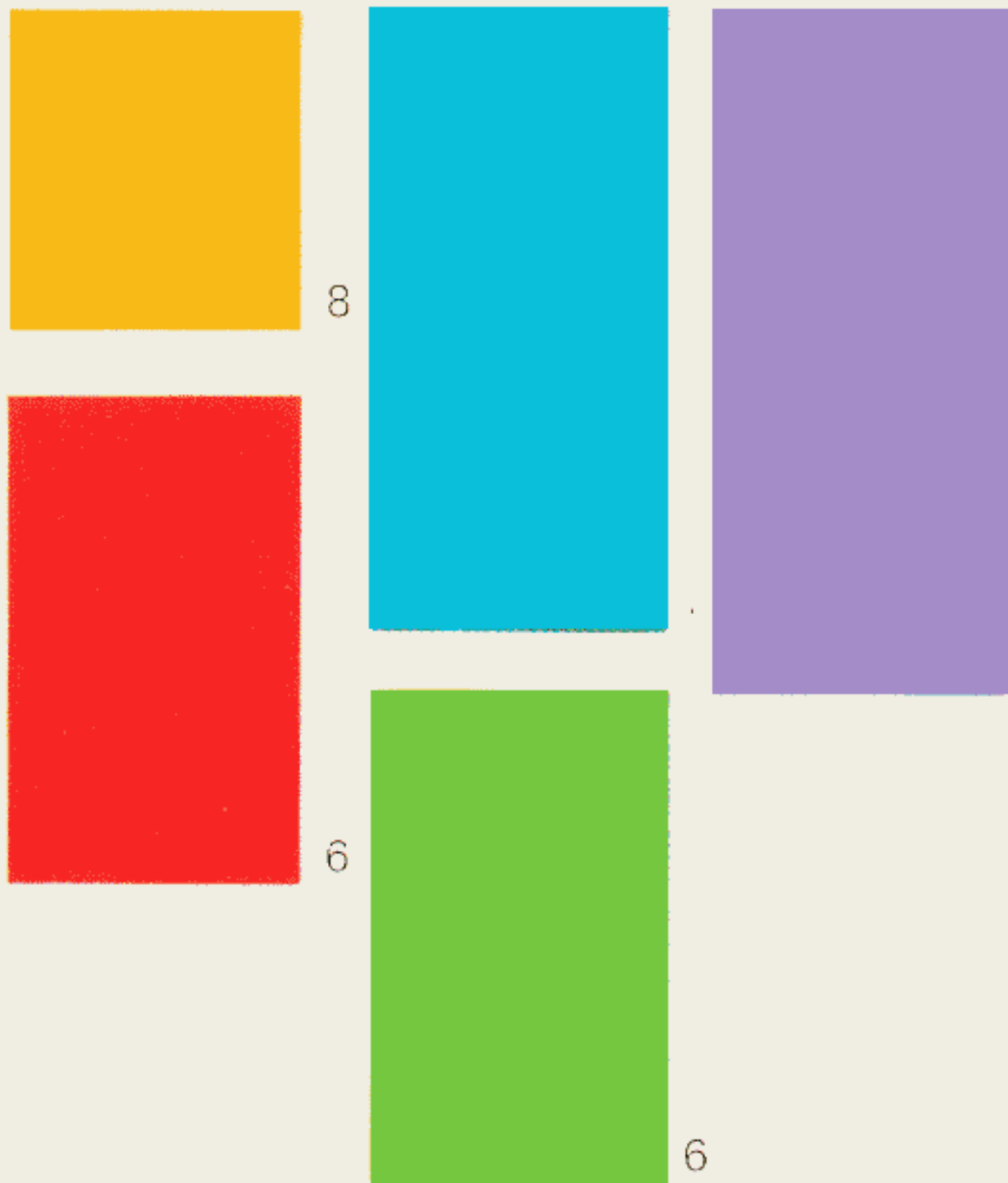
- Apparent Size (2D)
 - Some some situations, colors *tend to feel larger* than they are, in others situations color regions *seem smaller*.
- Spatial Depth (3D)
 - Some colors *tend to feel* ‘near’ —*advancing* towards the viewer — others feel ‘far’ — *receding* from the viewer.

- Goethe's Harmonious Scale of Areas
- What size must each color be to balance the *visual weight* of other colors?



- Goethe's observation was that each color (hue, in Goethe's discussions) has its own power to command attention — its own graphic impact or visual weight.

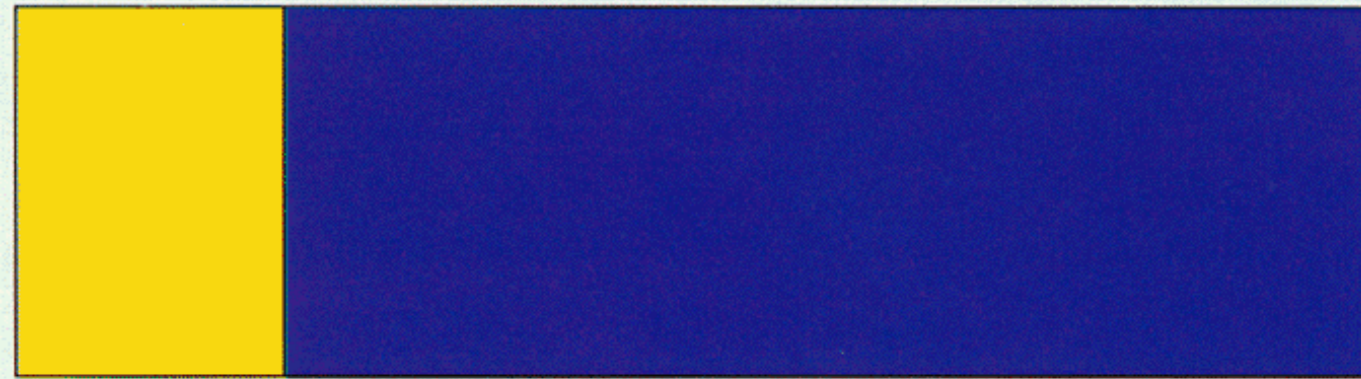
He attempted to “measure” the relative strength of each major hue in an effort to formulate how colors might best be balanced.



Color Balance

Prominence or Power of Hues

(note relation between intrinsic value and graphic impact—higher intrinsic value, stronger impact or “weight”)



Yellow

Violet



Orange

Blue



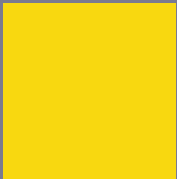
Red

Green

Color Balance

Prominence or
Power of Hues

Weighting of a color
varies with hue,
chroma and,
especially contrast
with its field.



Color Balance

Prominence or
Power of Hues

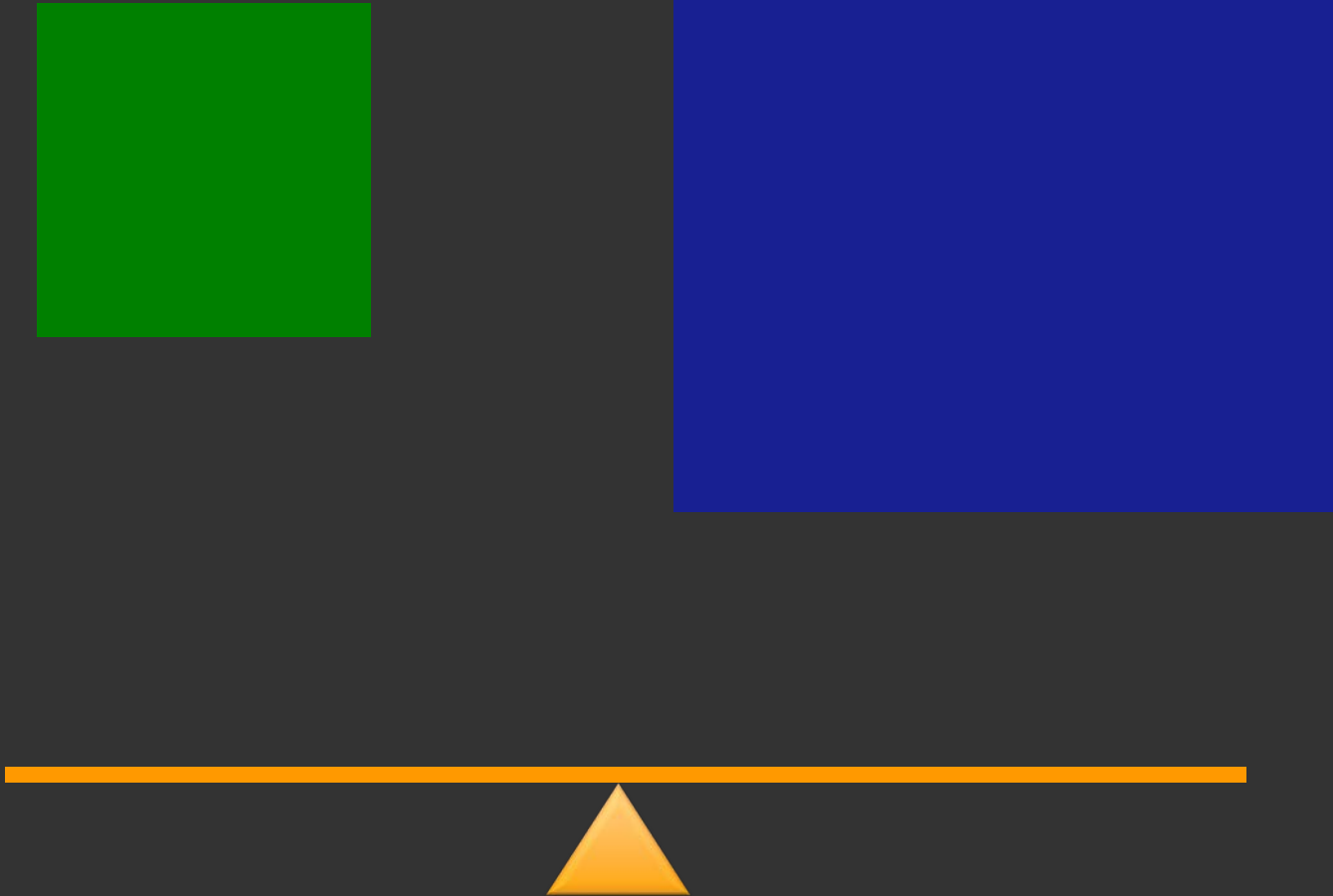
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Color Balance

Prominence or
Power of Hues

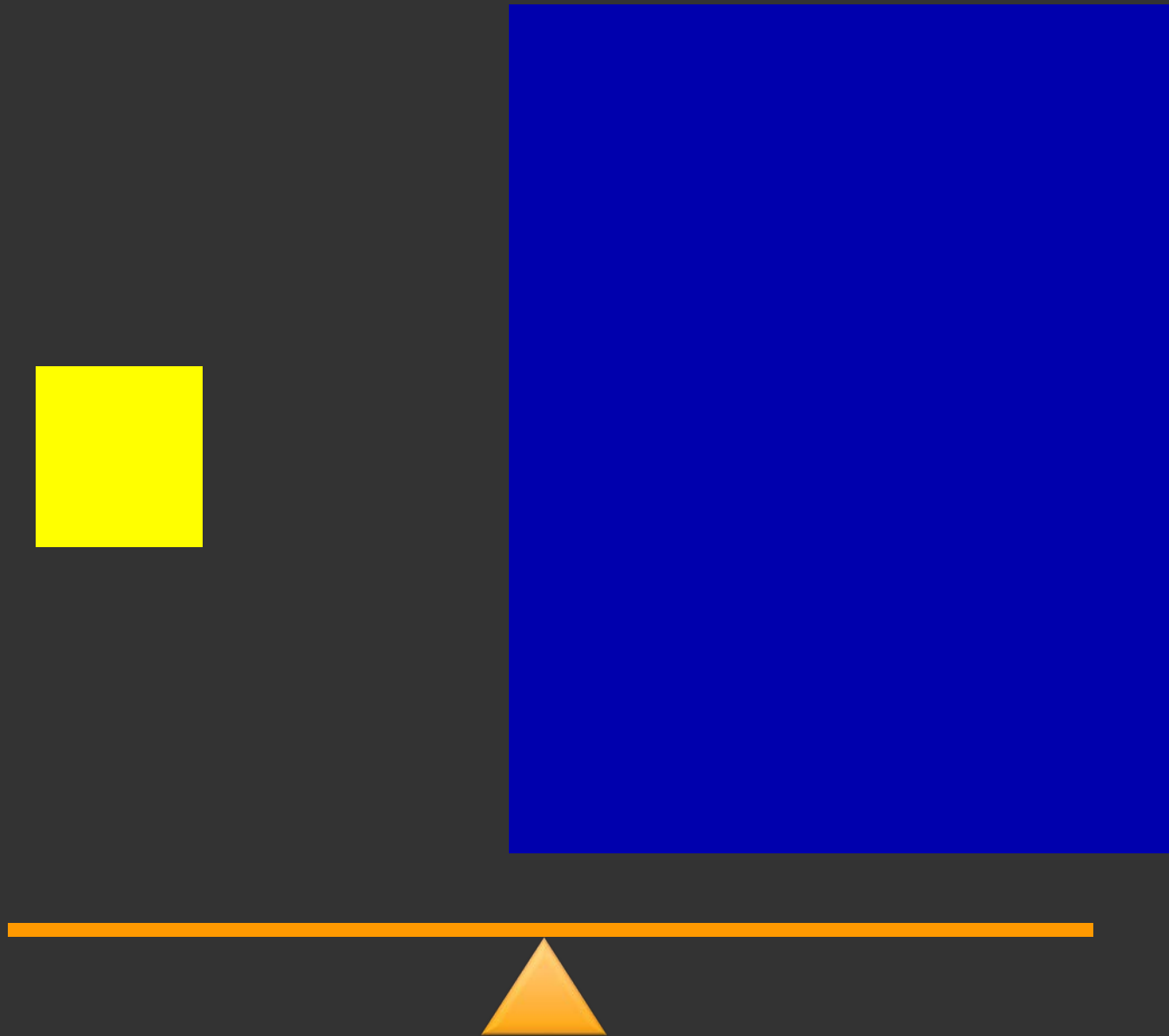
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(note relation
between intrinsic
value and graphic
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Color Balance

Prominence or Power
of Hues





Courtesy of www.marycassatt.org



Mary Cassatt - The Complete Works



Color Balance

Prominence or Power of Hues



Color Balance

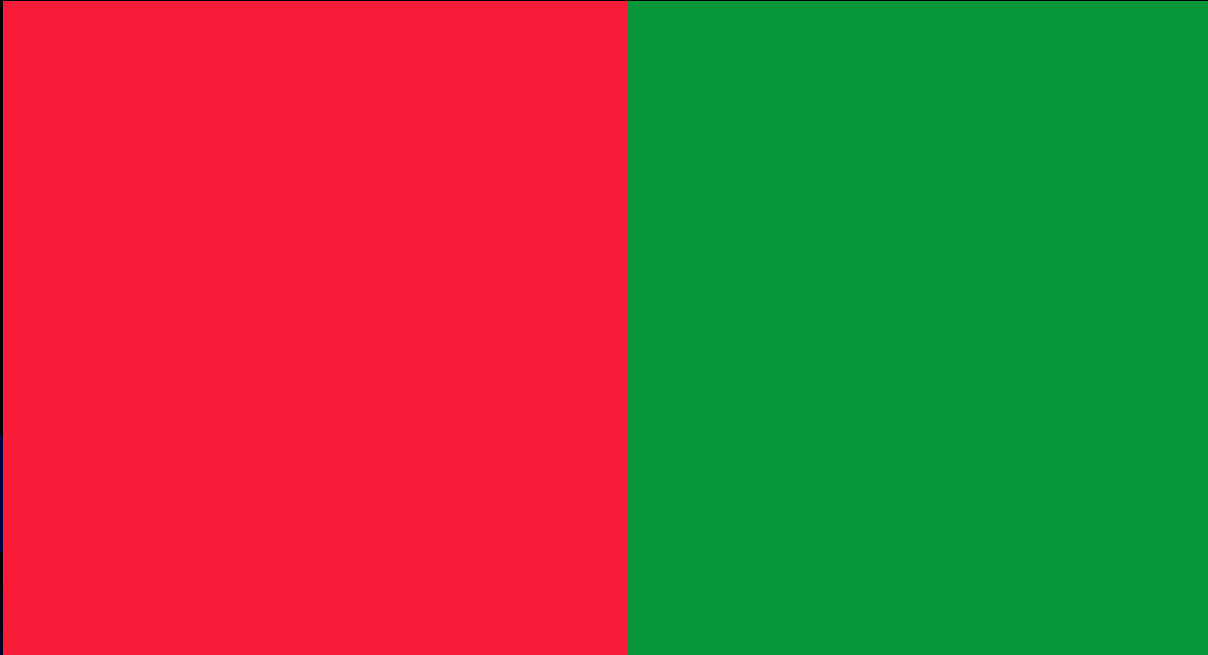
Prominence or Power of Hues



Color



Color Balance



Prominence or Power
of Hues

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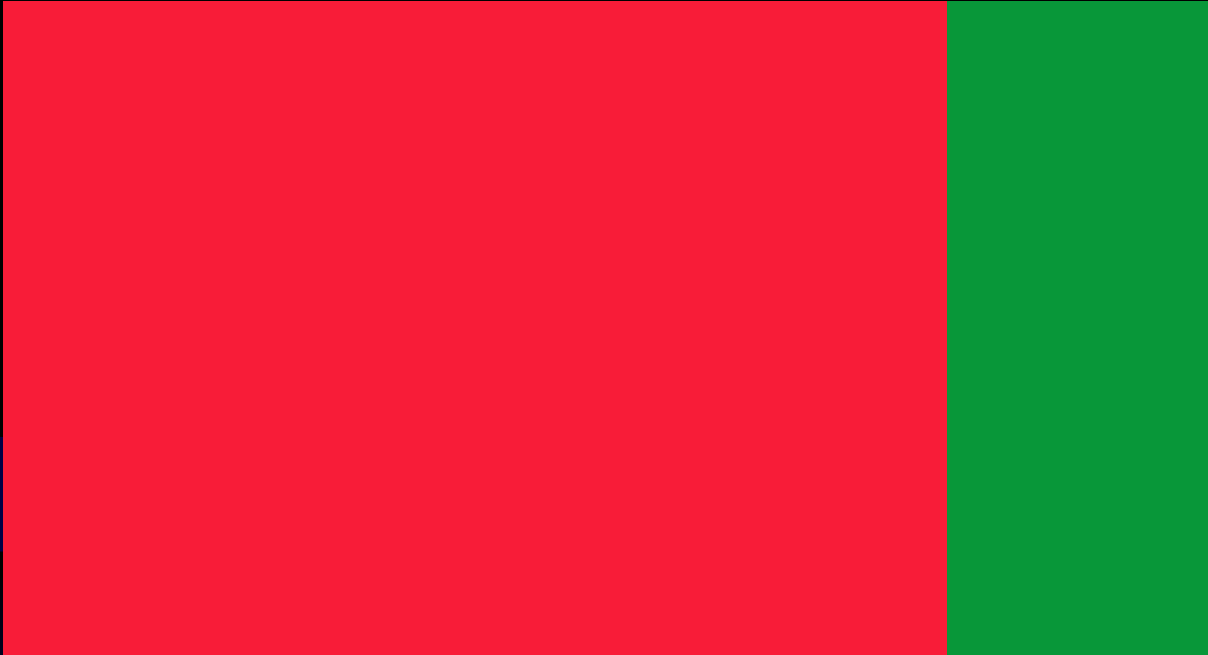
Color Balance



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Color Balance





Color Balance

Prominence or Power of Hues

(note relation between intrinsic value and graphic impact—higher intrinsic value, stronger impact or “weight”_



Yellow

Violet



Orange

Blue



Red

Green



- Which triangle is lighter?
- Which is richer in chroma?



- The size of a region of color alters perceived value and chroma of the color.
- In general, **large expanses seem lighter and more brilliant**



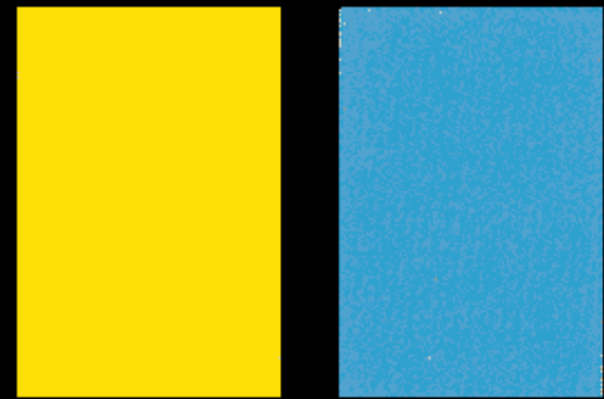
- Size of a region of color alters perceived value and chroma of the color.
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Spatial effects of Color: factors involved

- Size of color region
- Actual color — esp. warm vs. cool, & chroma
- Color relationship/juxtapositions

- Note that other types of spatial cues will either conflict with, or reinforce color-spatial cues. Either tension or order/consistency can be introduced.

Spatial effects of HUE



- “...hues that are lighter at maximum saturation (yellows, oranges) appear larger (2D) than those that are darker at maximum saturation (blues, purples)”

Text, p 46

- *Hues of a high intrinsic value tend to advance (3D) and expand (2D).*
- *Hues of a low intrinsic value tend to recede (3D) and contract (2D).*



The white smock of the lecturing physician (left) has stronger graphic impact than the same white on the nurse's apron. Why?



On the left, the size of the large white region develops more impact or “weight” than the smaller, irregular (less massed) shape of on the right.

Bodoni Light
Bodoni Regular
Bodoni Demi Bold
Bodoni Bold
Bodoni Black

“Bold” type offers broad, unbroken shapes rather than narrow, small, fine shapes — thus contrast and graphic impact are stronger.

There’s no doubt that “bold” type has more graphic impact, but recognize that it is the expanse of unbroken color — a broader region of color—that creates that increased boldness.

Bodoni Light
Bodoni Regular
Bodoni Demi Bold
Bodoni Bold
Bodoni Black

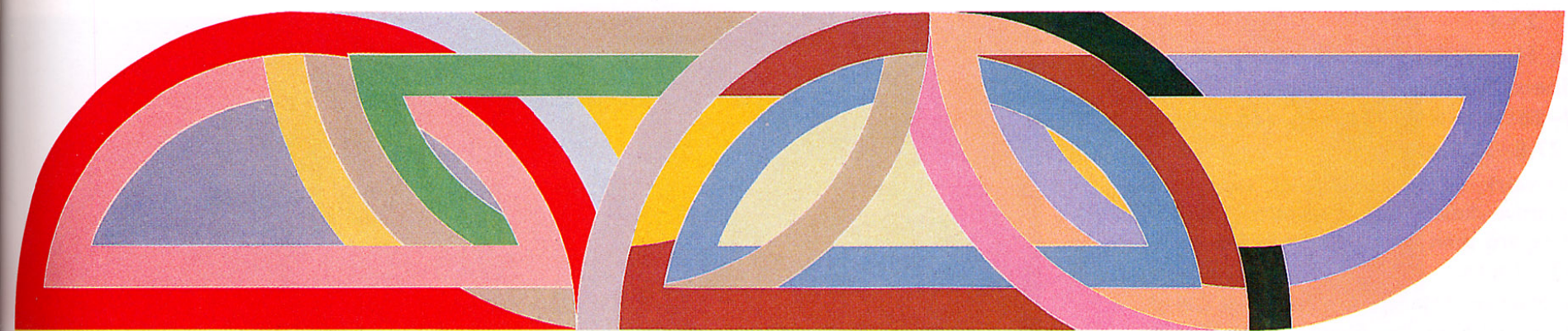
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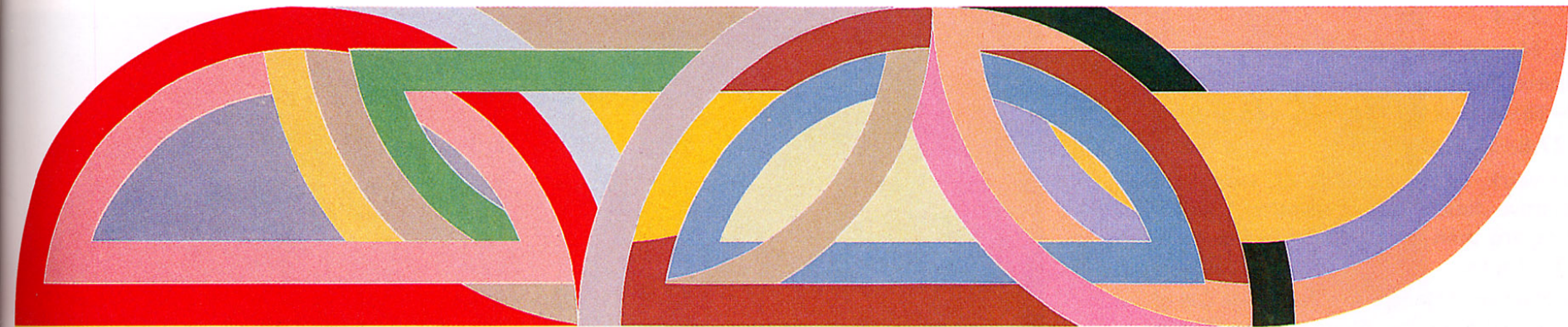
Here chroma-contrast is strong, but value contrast low.

The weight, or breadth of shape, is needed to create adequate contrast for decent readability. (note how narrow strokes get lost — value contrast is too low!)

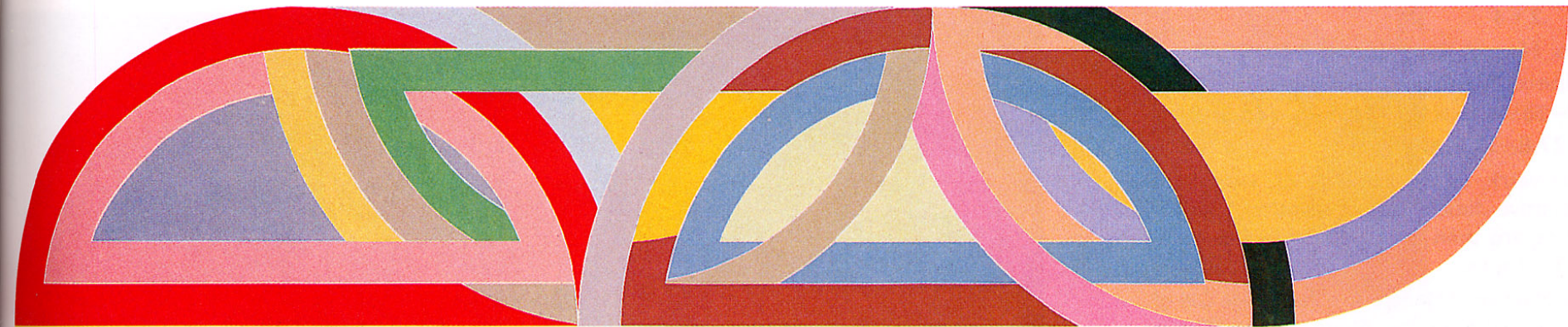
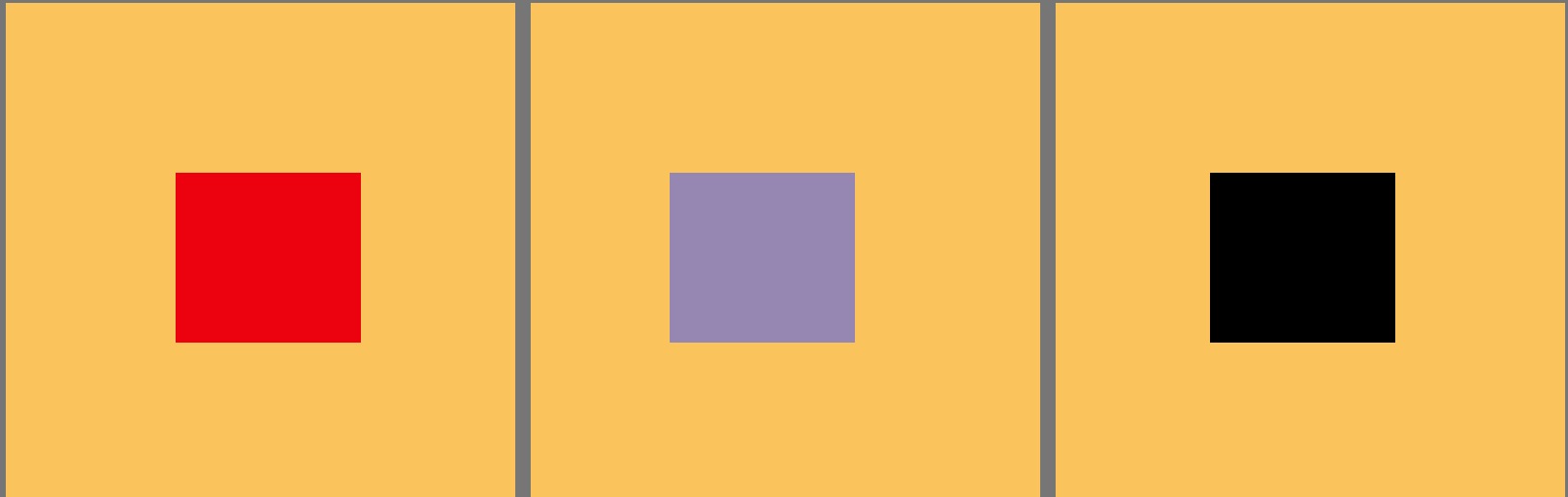
- In general, colors that expand or appear larger than they are, *also* tend to advance (see spatial depth issues).



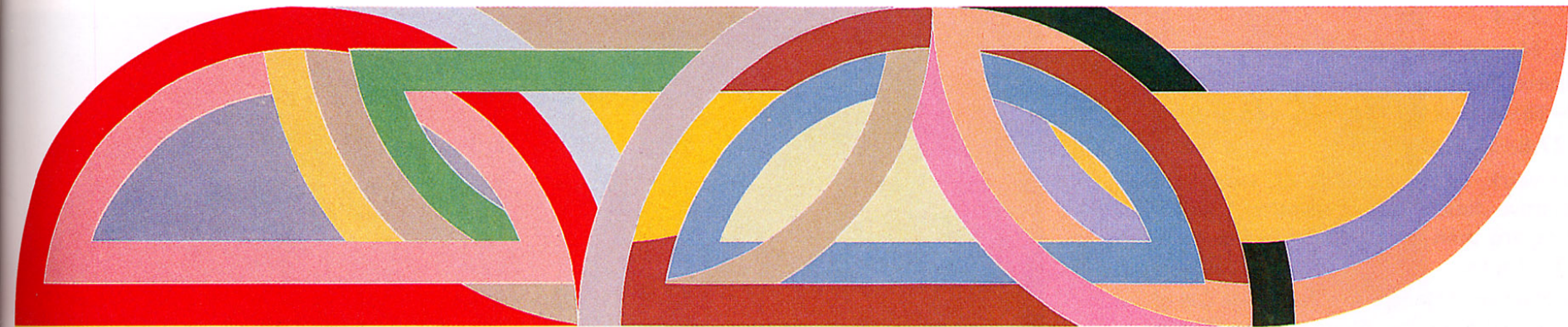
- In general, colors that expand or appear larger than they are, *also* tend to advance (see spatial depth issues).
- Which colors “advance”? Which create “holes”? Which “lay flat?”



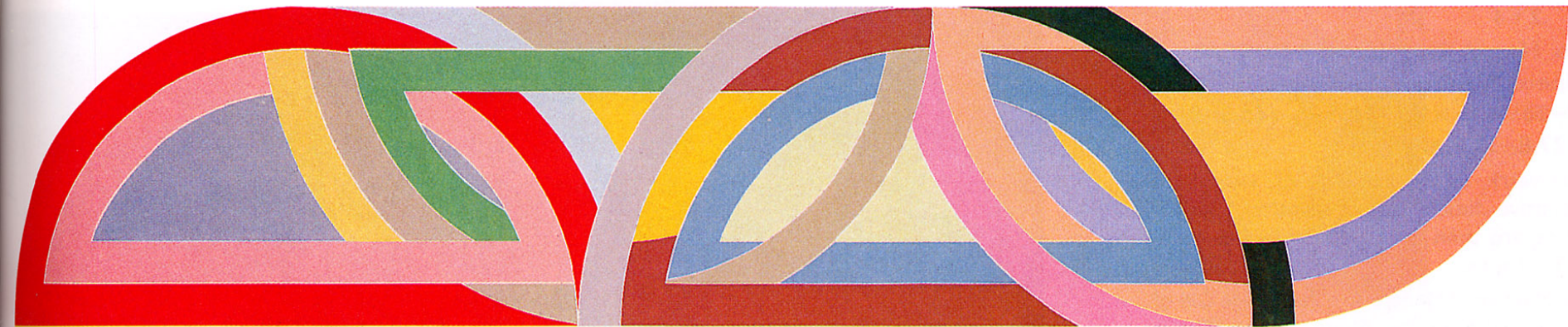
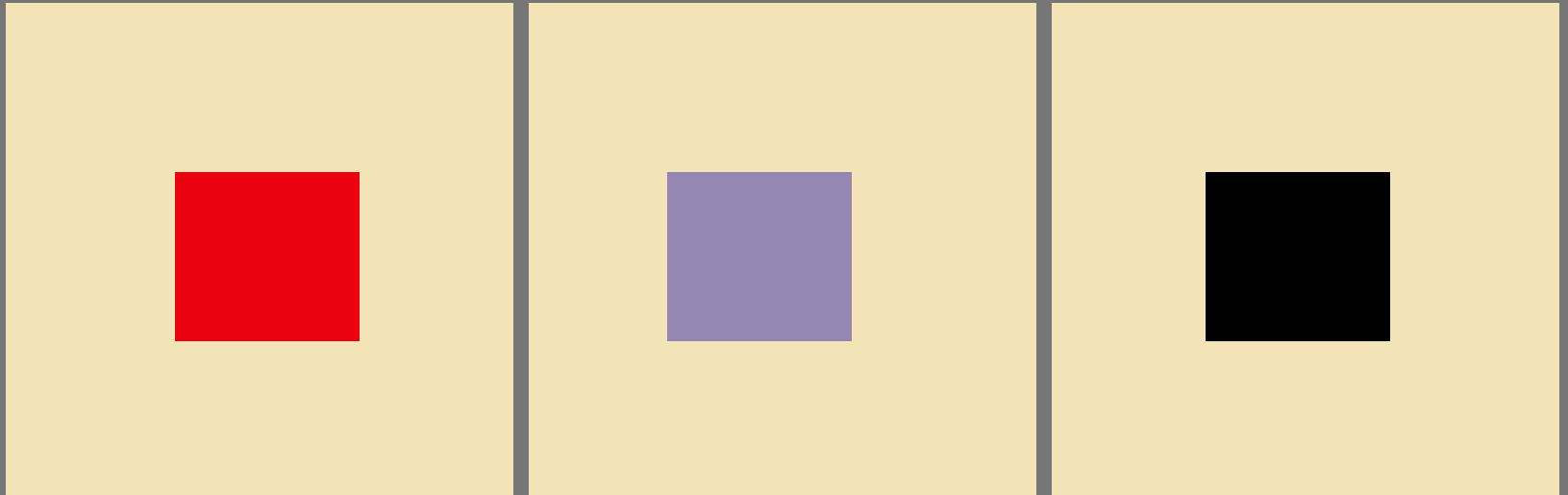
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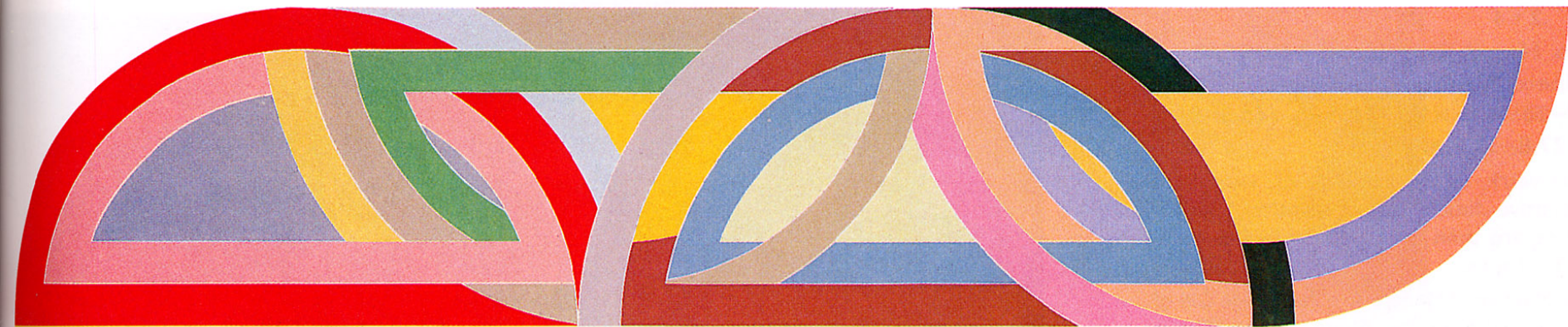
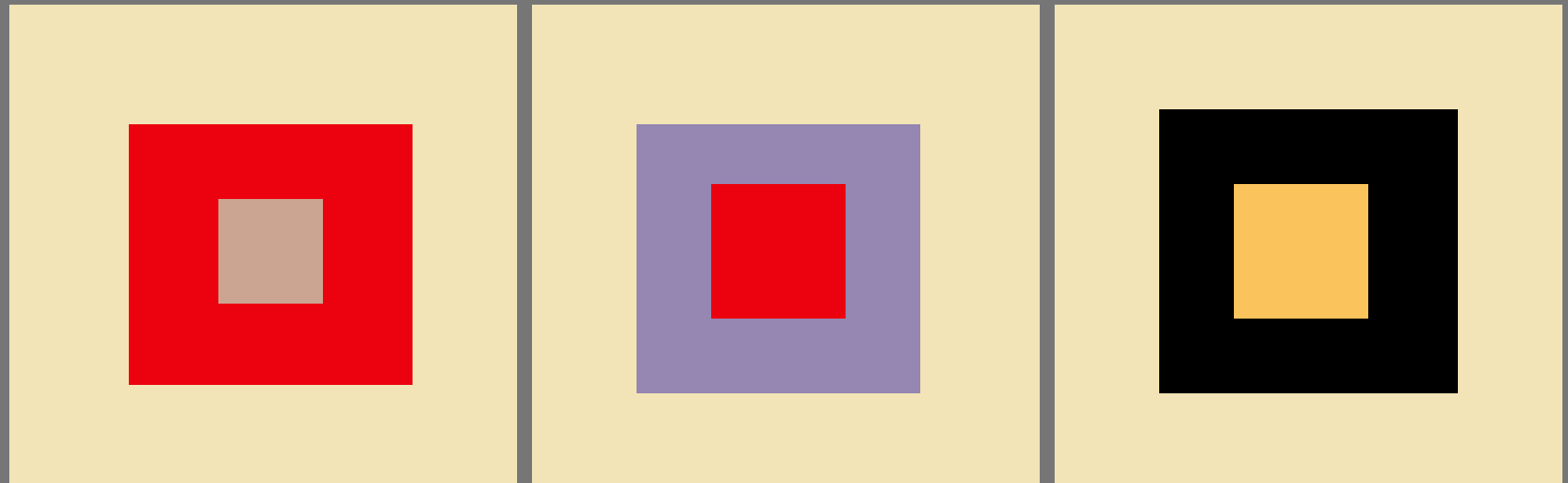
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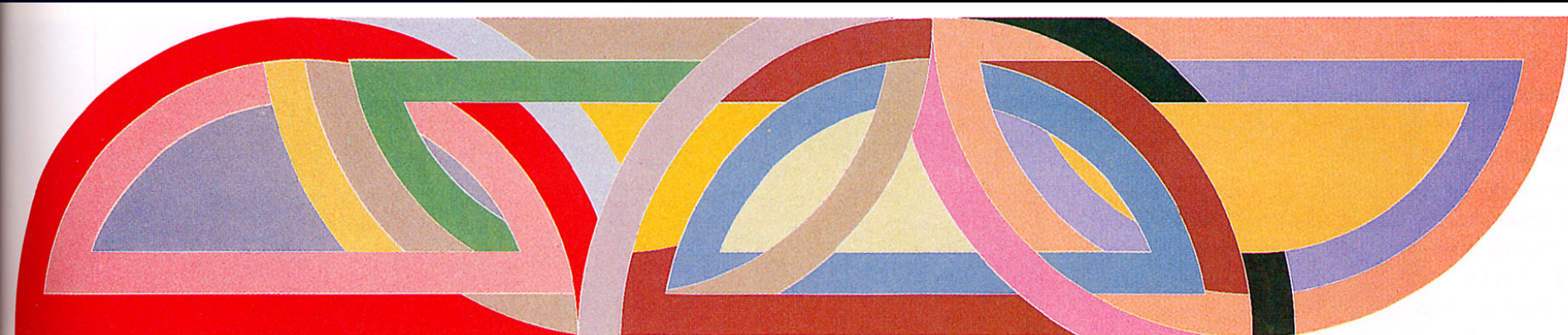
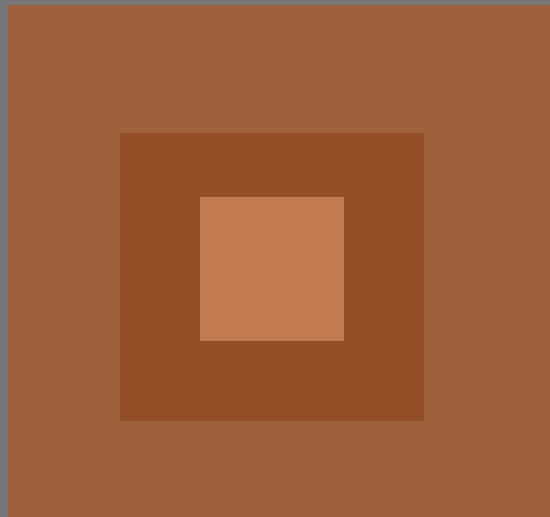
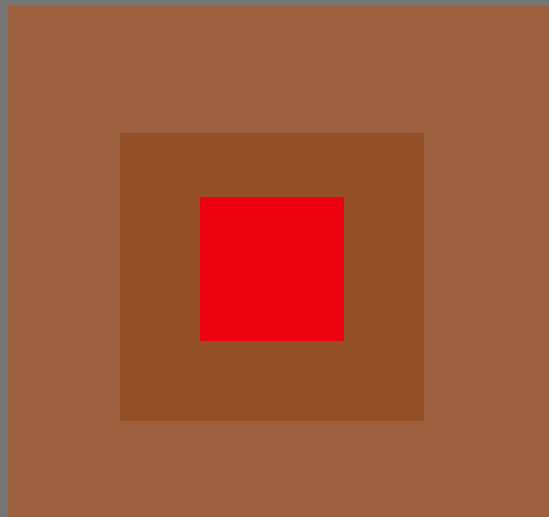
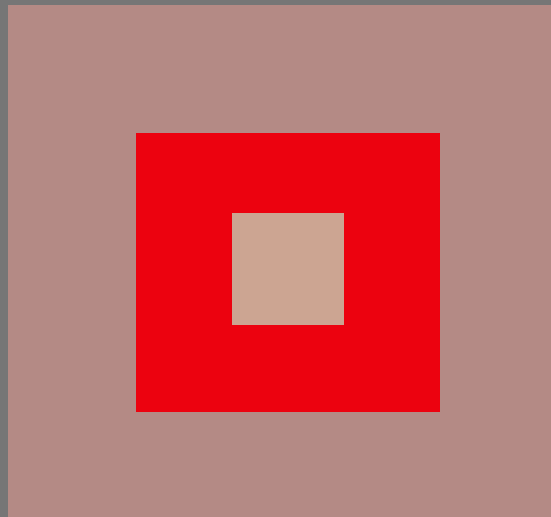
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Pictorial Illusion and Aerial perspective

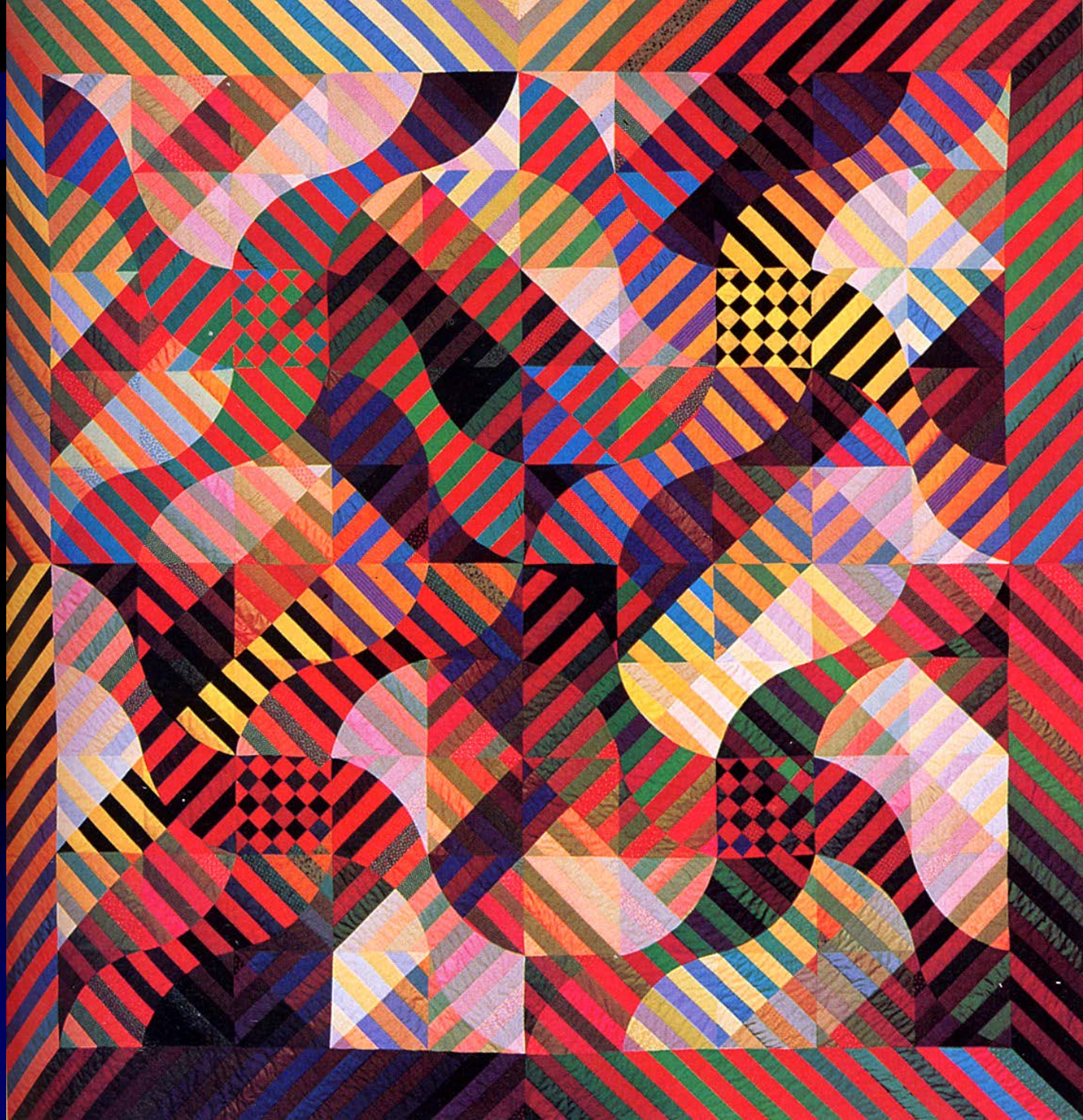
- Entirely non-objective images and designs can establish a sense of depth solely by color and contrast selections.
- We naturally and intuitively “interpret contrasts in hue and value as having spatial meaning.” (p. 47)



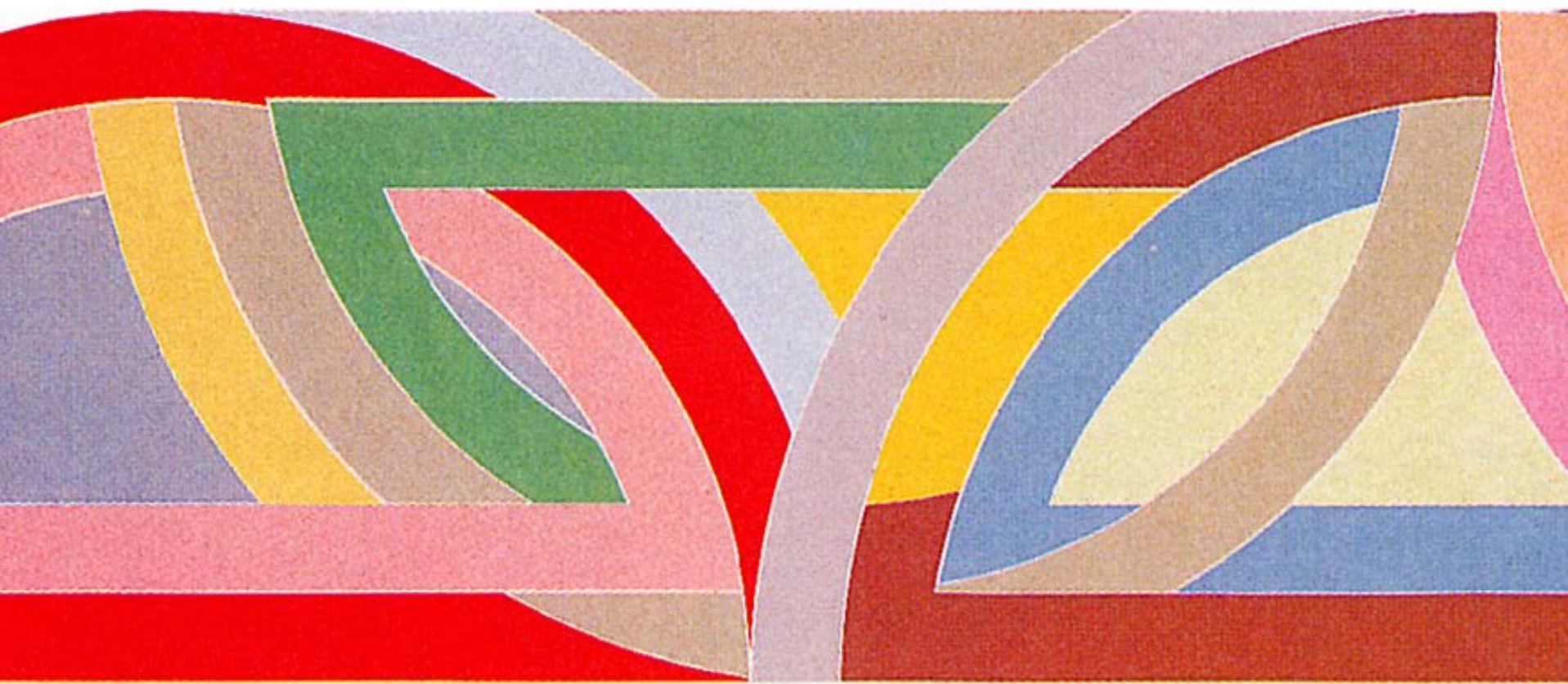
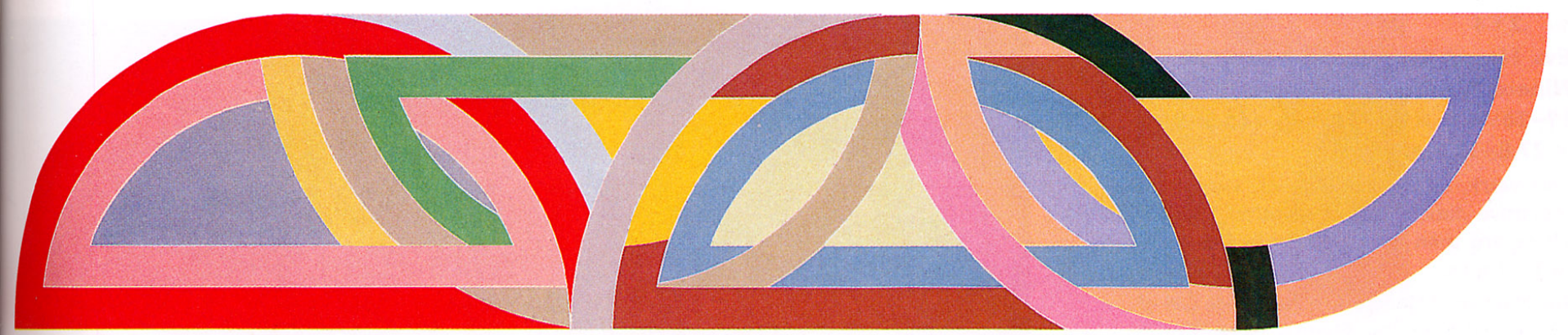


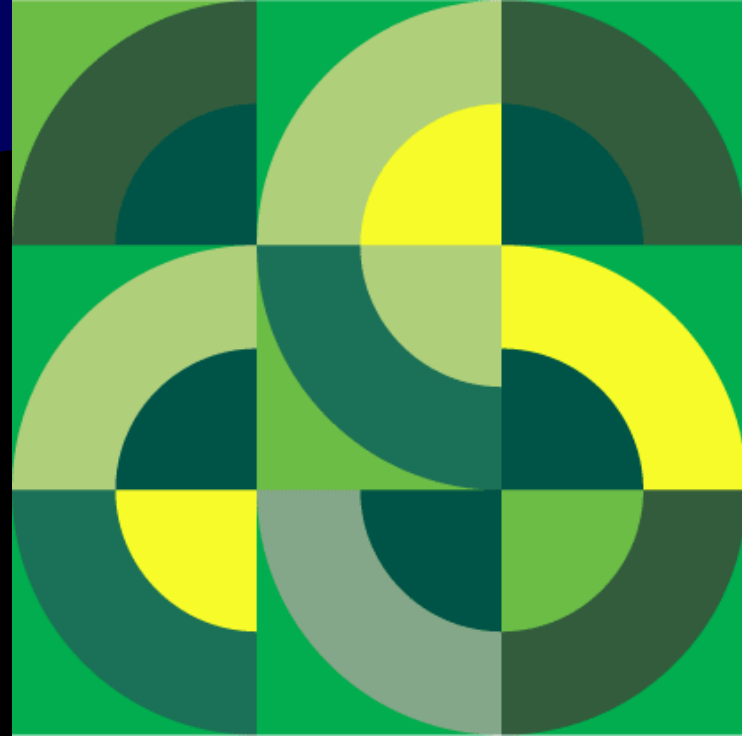
- Gene Davis
- Diamond Jim (1972)
- Each color gradually establishes its own depth or distance

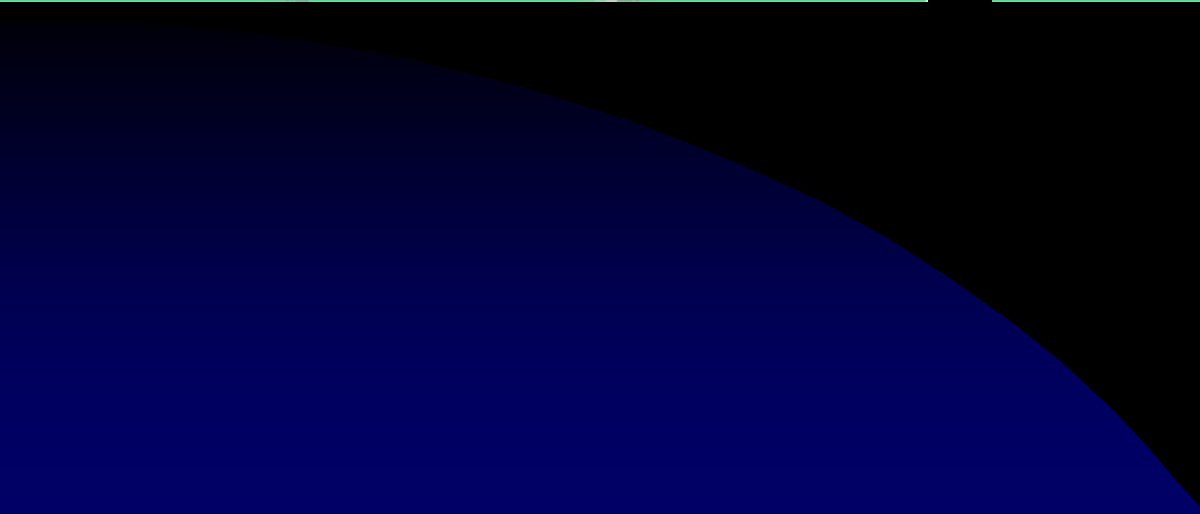
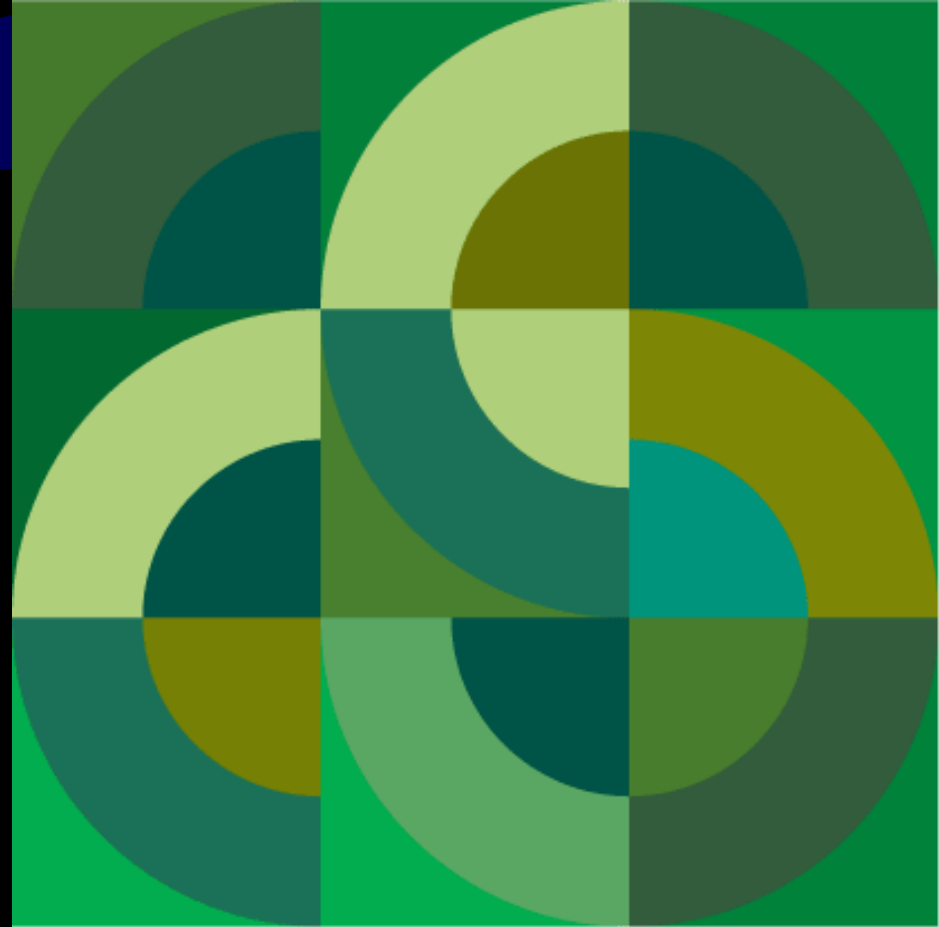
- This quilted design manipulates space freely using value and hue contrasts.
- Notice which passages pull forward and which settle back onto the picture plane.

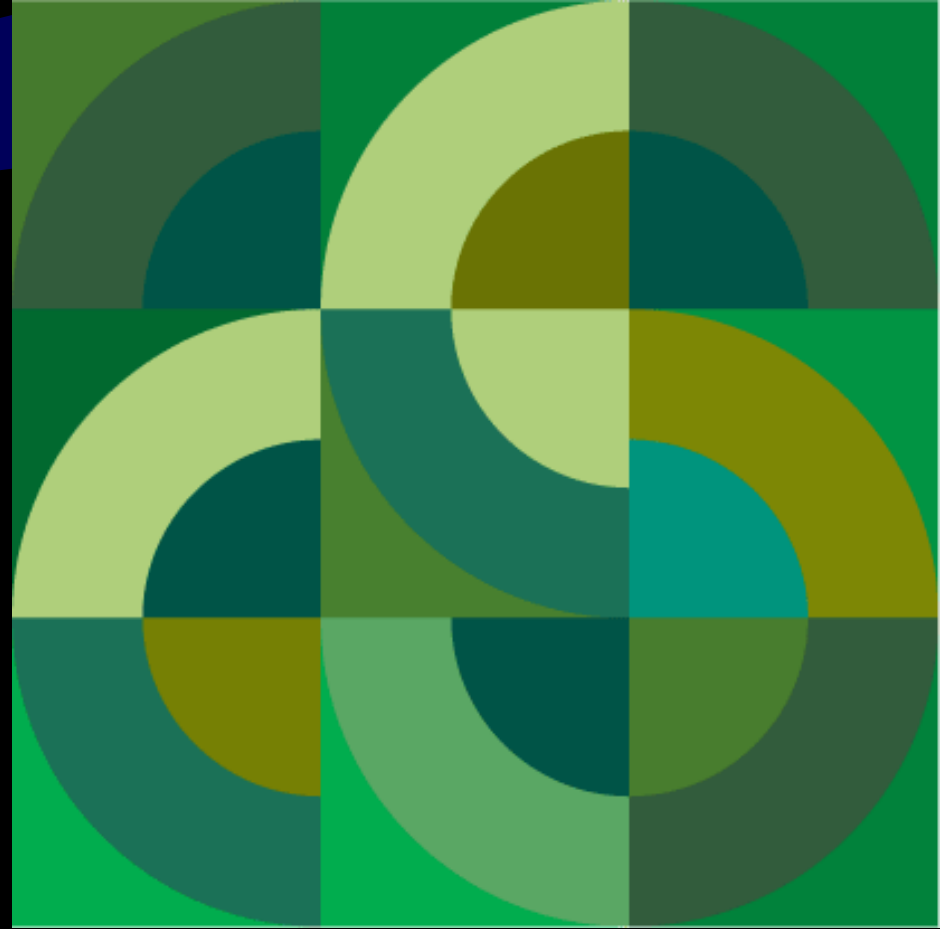
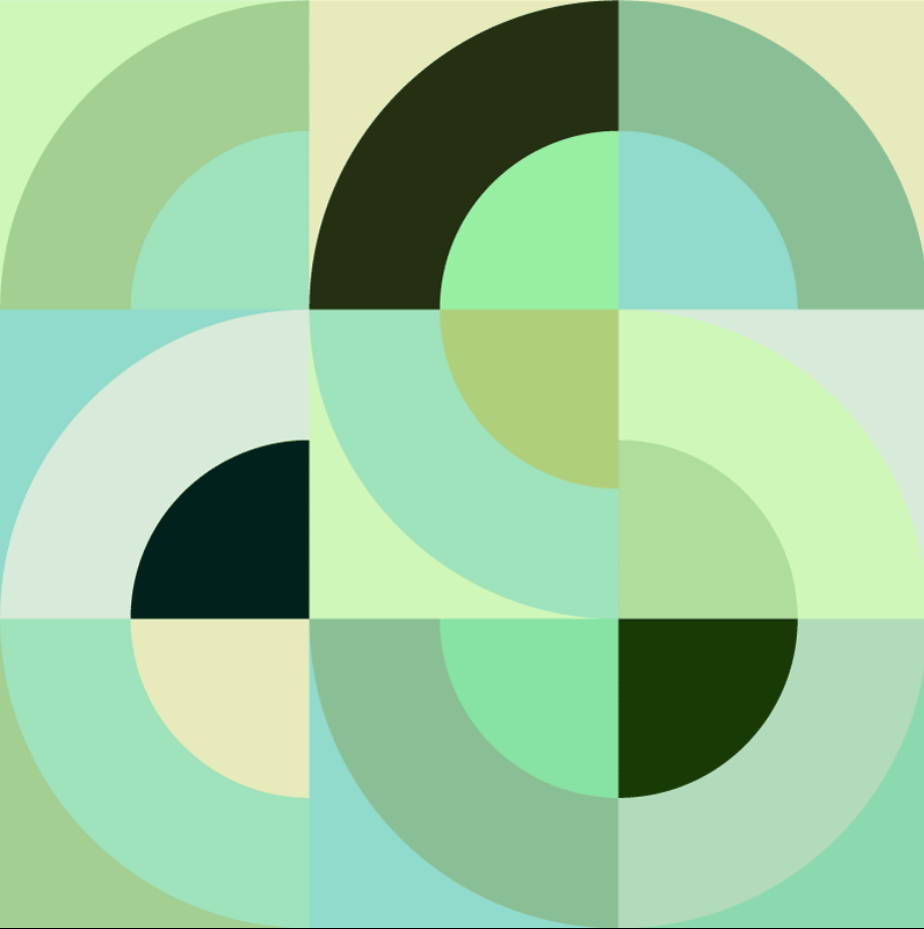












Extreme contrasting value/color, against an arrangement of moderate or limited contrast, we “separate” dramatically — either receding back, or advancing forward. Either way, the prominent separation is established.

- **AI Held**
- High Chroma advances foreground elements.
- Shades are used to create a deep background region
- Tints are used to create distant space.



- AI Held.



Practical Issue:

- If I want something in a composition to seem *more important or more prominent*, I can use colors that
 - a) expand the apparent size or
 - b) advance the form towards the viewer.
- ...or **contrast** from the norm.

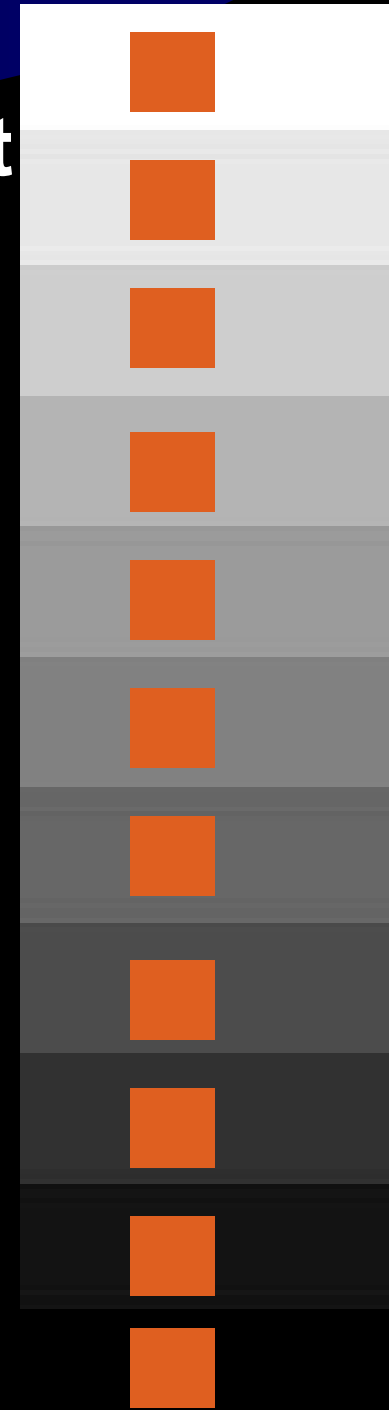


Spatial Effect: *Does the color tend to advance or to recede?*

- “Advance” and “Recede”
- Forms or colors that *advance*, tend to feel as though they are *closer* to the viewer than they actually are.
- Colors that *recede*, feel as though they are *farther* from the viewer than they actually are.
- Thus the viewer’s sense of space, her perception of being crowded or being open is influenced by color, as well as actual physical crowding or openness.

Spatial Tendencies: Value Contrast


- ... warm colors tend to advance and cool colors tend to recede.
- ... high chroma colors tend to advance, and low chroma colors tend to recede.
- **But value contrast effects this too...**



Spatial Tendencies: Value Contrast

- ..figures juxtaposed with grounds that contrast dramatically in value, will tend to “separate” in space — the figure advancing.
- Colored figures juxtaposed with colored grounds of subdued value contrast will tend to feel close/near to each other in space. (see aerial perspective)





Spatial Tendencies: Chroma, Value and figure- ground proportion.

Compare the top color samples to the bottom. Which are most clearly “forward” or advancing?

Both may “feel” forward, but likely the bottom light-on-dark samples feel more so. The dark-on-light samples have some tendency to read as holes in a wall—as receding forms.

However, the *small size* of the bounded/surrounded color encourages the viewer to interpret it as a positive figure—advancing.



Compositional Issues: Visual Weight/Graphic Impact

Visual Weight & Graphic Emphasis

(how **prominent** is this color/element to the viewer...to what extent **does it stand out** or **draw attention**?)

- Due primarily to contrasting juxtapositions and contrast with dominant traits.

Harmony:

A balance of Unity and Variety

- Unity is a sense of relatedness, similarity, cohesion -- a sense that all of these 'parts' rightly belong to a single 'whole.'
- In general, establish unity via dominants and repetition, then introduce variety and emphasis.

Unity: strategies of repetition

- Unity be established by repeated use of
 - a) the same color
 - b) a particular hue,
 - c) a particular value,
 - d) particular chromas,
 - e) particular types of contrasts
 - f) groupings of a set of colors