



## Chapter 5: Compositional Effects of Color

**Color** (hue, chroma and value)  
*effect the perception of  
space...*

**...both 2D...**

(shapes can be made to seem larger or  
smaller by altering color)



**...and 3D**

(advancing and receding).

**The size of colored  
regions also effects the  
perceived color** (larger areas  
seem brighter).

# Aerial Perspective *or* Atmospheric Perspective



- *(both phrases refer to the same phenomena – they are interchangeable terms)*
- Several color effects can be described in terms of Aerial perspective.
- — Colors tend to be lighter and lower in chroma in the distance. *(color moves closer to sky color)*
- — Contrast in value diminishes in the distance. *(value range diminishes in distance)*
- — Sharp contrasting edge tends to bring (at least) one surface forward. *(sharp detail or edges advance forms; blurred forms recede)*



# The Space Between

- The physical cause of atmospheric perspective in nature is **dust and moisture in the air**.
- These scattered **particles diffuse light**, thereby softening the appearance of distant objects and causing their color to move closer to the prevailing sky color.

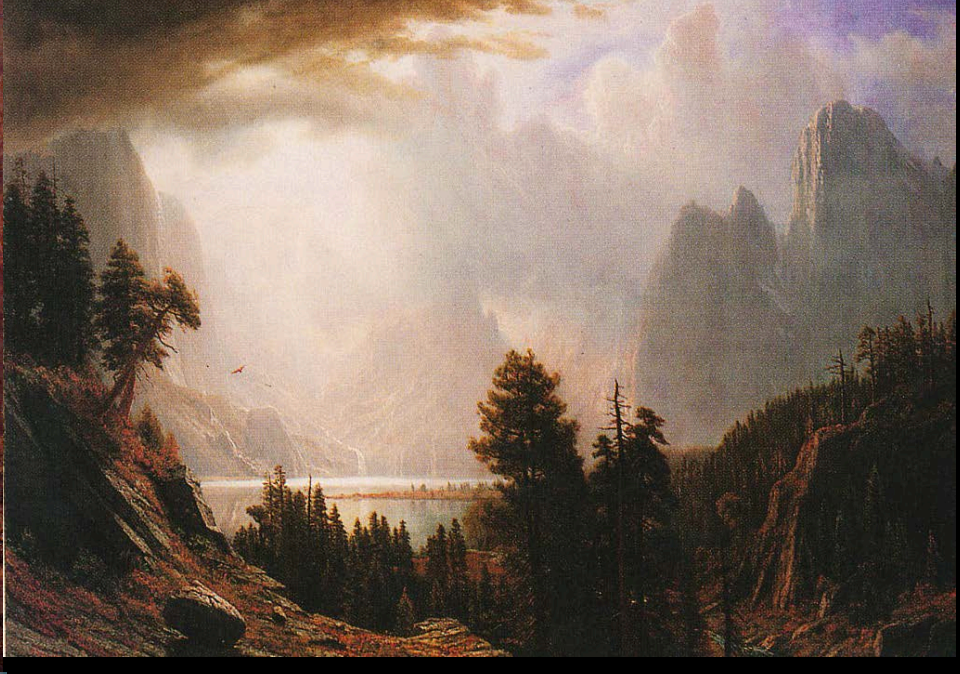


# The Moisture-filled Space Between

- Fog is an atmosphere densely filled with moisture – atmospheric perspective can be apparent at a very short distance.







- Albert Bierstadt's 19<sup>th</sup> c. paintings of the American West were composed to express the vast space open to expansion.





- Aerial Perspective
- Lighter values, reduced contrast, lower chroma all tend to establish a sense receding (distant) space.





- David Bomberg  
*North Devon Sunset* —  
*Bideford Bay* (1946)

Limited structure and detail are present — there are no linear perspective clues to structure, location, size or distance. Yet there is a definite sense of space—near regions and far regions.

Here, color relationships establish depth or distance — hue contrast *decreases* as distance *increases*.

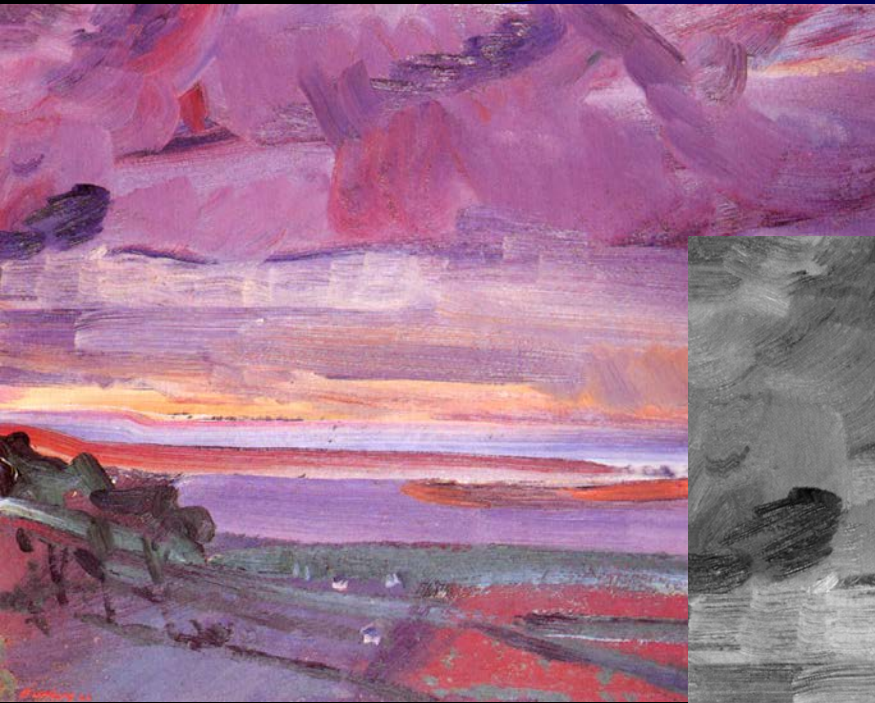
- Note prominent cool-warm contrasts in key areas.
- Note max. hue contrast in foreground.





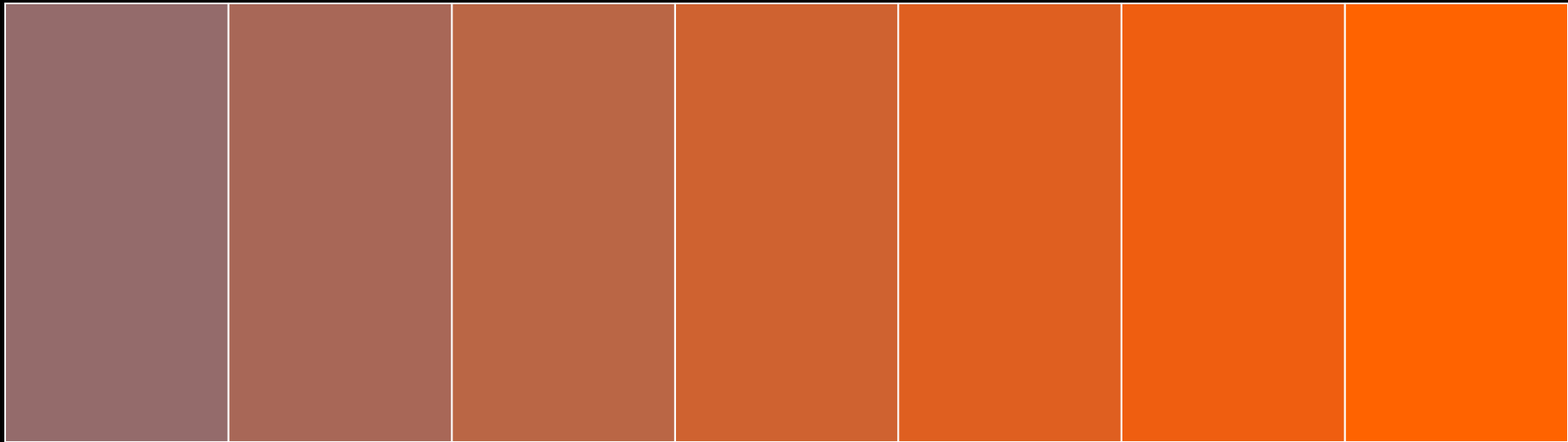


# Bomberg



- Note how much spatial quality is lost when hue/chroma are removed.
- David Bomberg  
*North Devon Sunset —  
Bideford Bay* (1946)

# Spatial effects of CHROMA



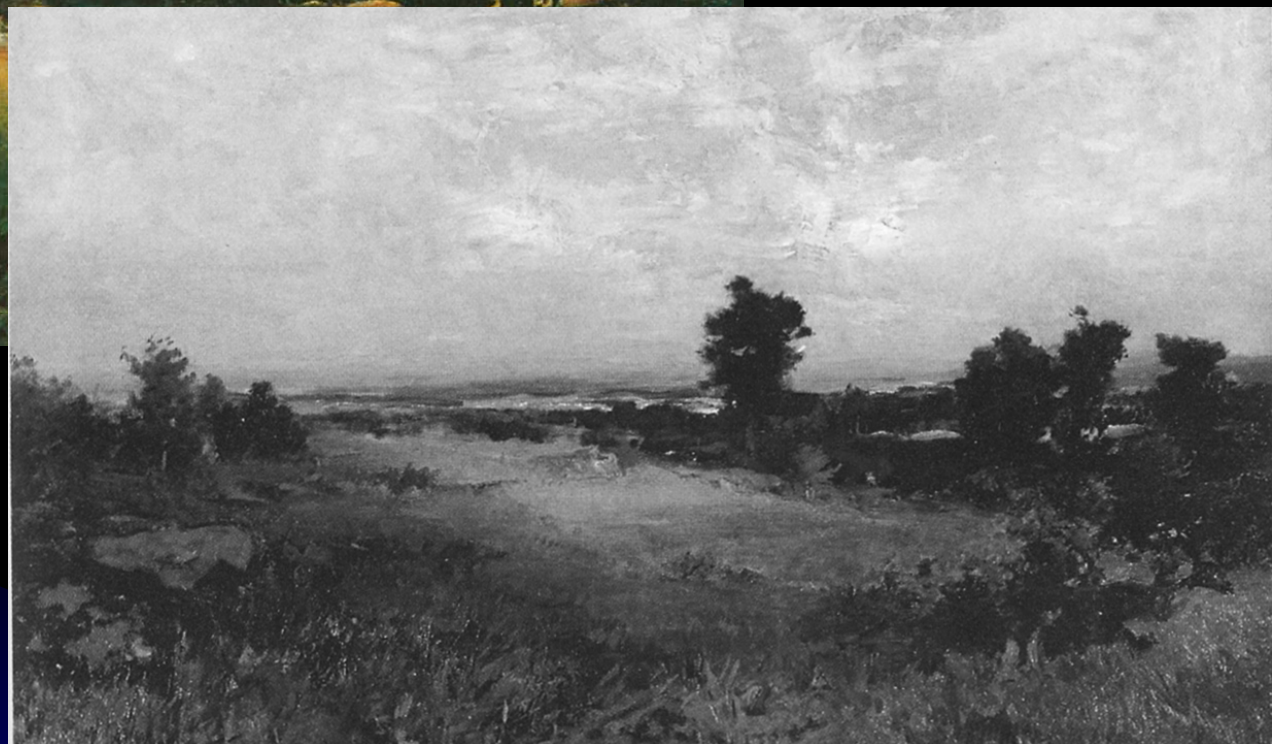
- *Generally:*
- High chroma colors *tend* to advance/expand
- Low chroma colors *tend* to recede/contract





- Lowest chroma colors tend to recede.
- Higher chromas tend to advance.
- (aerial perspective techniques rely on this)





- Note loss of depth/space with absence of chroma/hue contrast. Note also that the ambiguous forms of the sky have been given an active role creating depth — the nearer clouds have much more color-distinction, while the farther/lower clouds are much more muddled, mixed complements.



- Lowest chroma ... recedes
- Higher chromas ...advance.
- Here lowest chroma and lowest value contrast are maintained along the walls, thereby expanding this space around its users.





- Interior spaces can emphasize the people *as atmosphere*, or the designed space. Subdued walls tend to allow the action and color of people to dominate.  
(the center dominates while the periphery recedes/expands)
- Note how distant the walls seem...the room feels spacious.



- How does the sense of space and emphasis alter with fore-ground contrast lowered?





- How does the sense of space and emphasis alter with background/wall contrast raised?
- Lighting luminance, type of lighting (spots, floods, reflected..) and placement of lighting can alter the value/color contrasts of planes and surfaces.





- Regions of low contrast tend to recede.
- Areas of higher contrast tend to advance.





- In both spaces, the most intense chroma and the most vibrant contrasts activate living space, not the walls/periphery.





- White House: Dining, Red and Green rooms.
- Intense chroma brings the wall “in.”



# Tendencies moderated by context and contrast

- As usual, spatial effects depends not merely on the characteristics of the color itself, but its context – what other colors are next to it or surrounding it?
- Each of these generalities can be overcome by other factors – the designer must consider many interrelationships when planning, anticipating, and problem-solving color interactions.



# Expanding and Contracting Spaces

- Interiors that are physically small can be may optically larger by NOT using large areas of bright colors (highly saturated warm colors)-- *instead*, use light (high value), low chroma , cool hues.
- Bright red walls tend to move *into* the room, encroaching on the living space.
- A high ceiling can be made to appear lower by painting in a color that advances. (The pale blue sky, of course, recedes away from us – offering a sense of expansive, open space.)





- Hot, advancing walls/floors arguably “close in” to add a greater sense of intimacy to the space...though the hot red chroma isn’t particularly cozy.

# 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

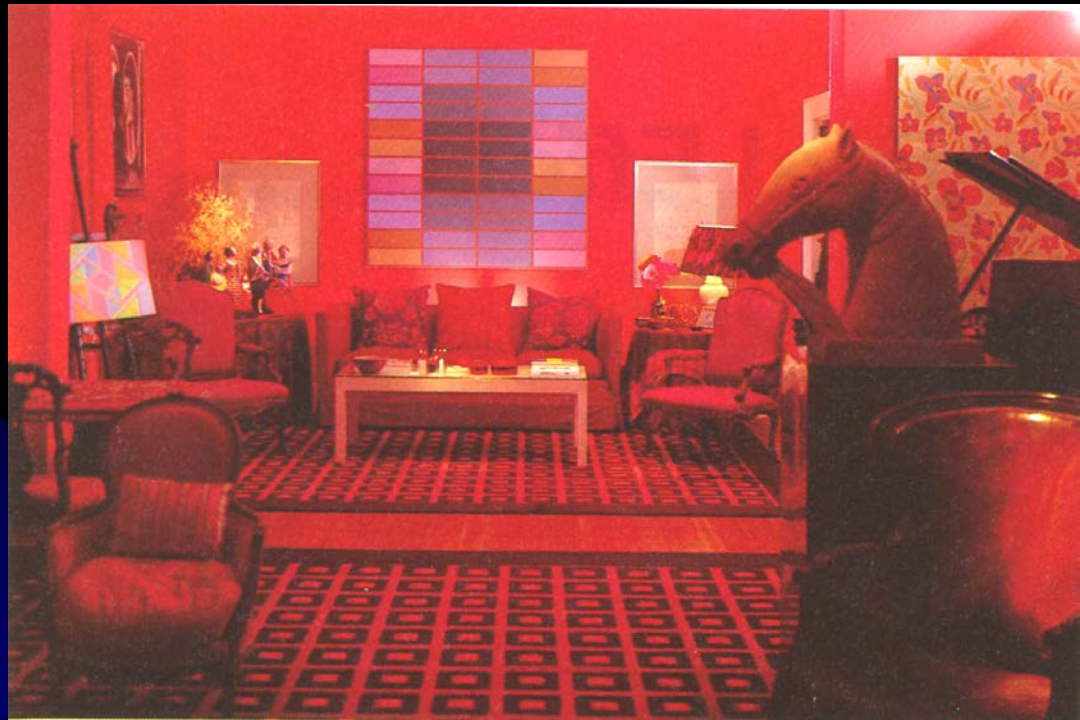


# Pictorial Illusion and Aerial perspective

- Aerial perspective is an effective technique in landscape painting for creating an illusion of very deep, open space.
- However, graphic designs and interior designs may also use subdued colors and contrasts to create a sense of depth or openness.



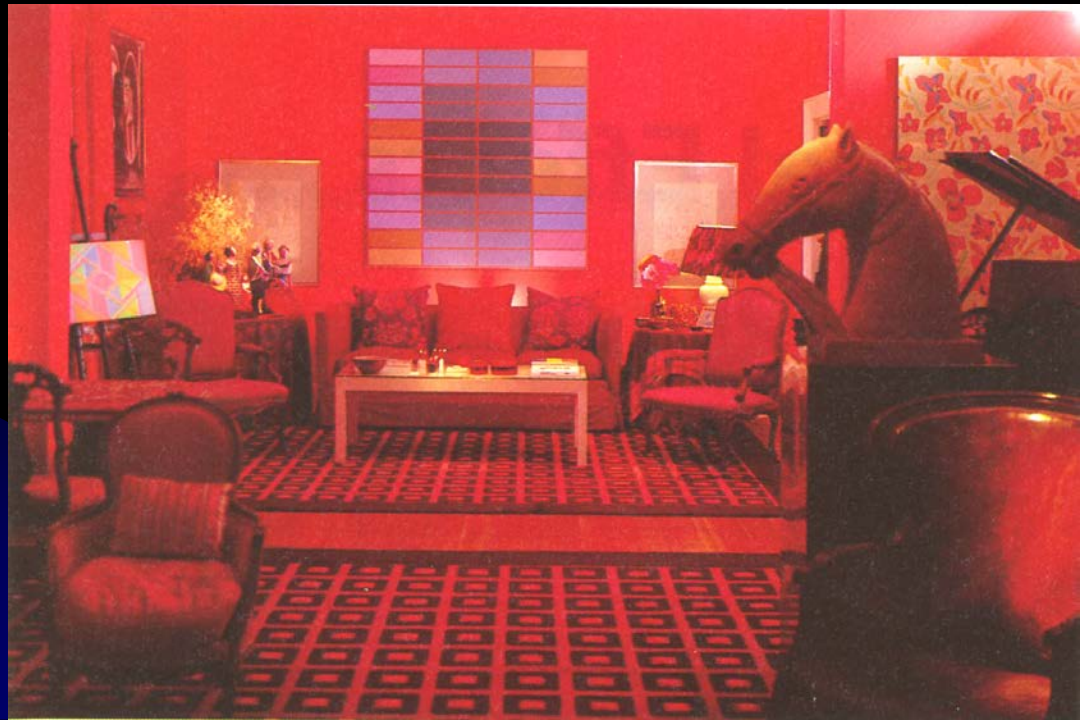
- Differences?
- Dominant Chroma
- Dominant Value
- Dominant Hue







- Differences?
- more open?
- more relaxed/calm?
- Warmer?







- Cool with warm near-neutral walls/floors.
- Limited vibrance via either chroma or value contrast. Calm. Meditative.
- Objects/decorations can easily establish their own emphasis--objects are not overwhelmed by the environment.



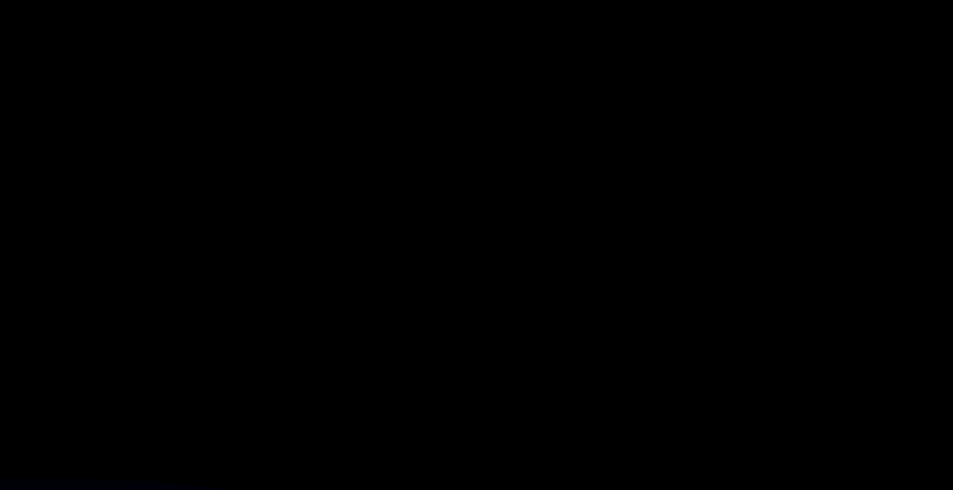
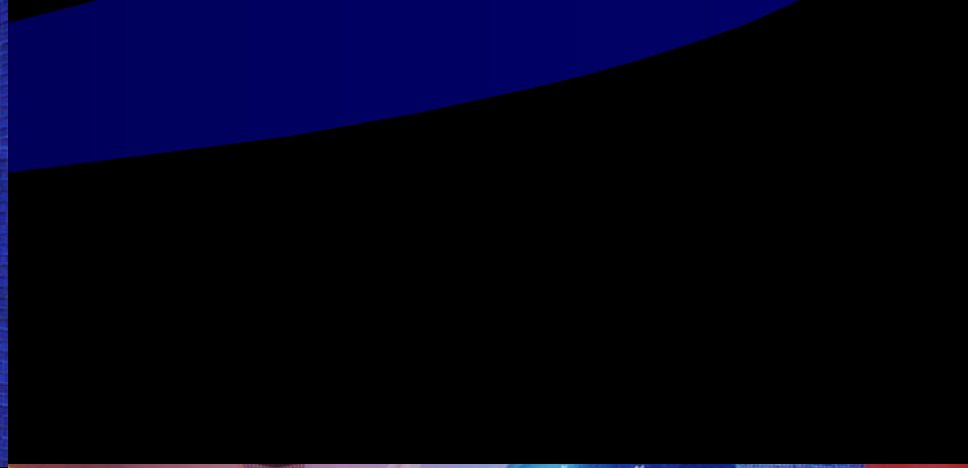




- Hot, advancing walls/floors.
- Objects in room must pose dramatic contrast to “stand out” at all.

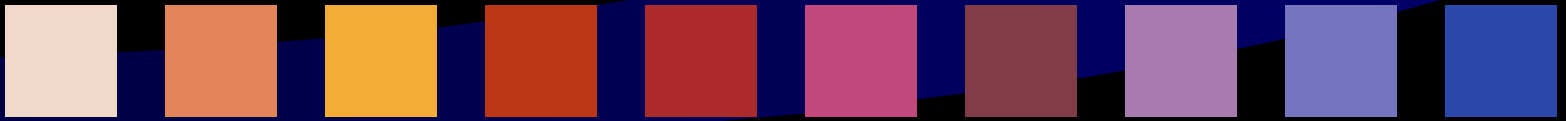






• Which will dominate  
-- *environment* or  
*people*?



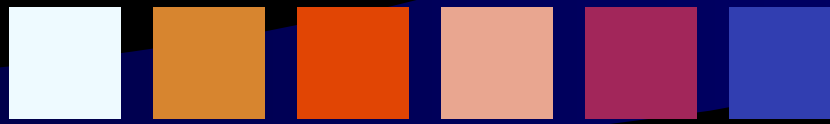


Designers: Rockwell Group  
Project: Rosa Mexicano



Designers: Rockwell Group  
Project: Rosa Mexicano





Designers: Rockwell Group  
Project: Rosa Mexicano





Which will  
dominate --  
environment  
or people?





Designers: Rockwell Group  
Project: Ruby Foo's



Designers: Rockwell Group  
Project: Ruby Foo's



# Value Massing

- Group or ‘cluster’ values so that large regions or ‘masses’ have a very similar value.
- The result is a composition with a simplified underlying structure — an arrangement of basic shapes that can, in practice, be made of many details, textures, colors and patterns.

# Value Bracketing

- Reduce the values used in a composition to only a few values.
- These bracketed or limited values enable clear distinctions of shape to contrast well with each other, generally simplifying the gestalt of the image into well-defined forms, thus tending to unify the image.



# High key

- “High value” - a composition DOMINATED by high (or lighter) values.
- Also, a surface or color that is high in value.
- The French Impressionists typically worked in high key compositions.  
(Degas was an exception)

Claude Monet



Eugene Boudin

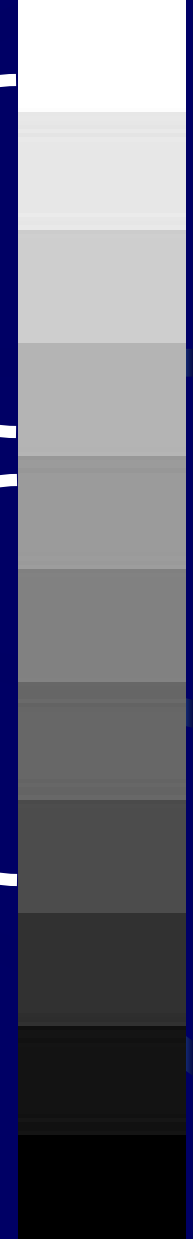
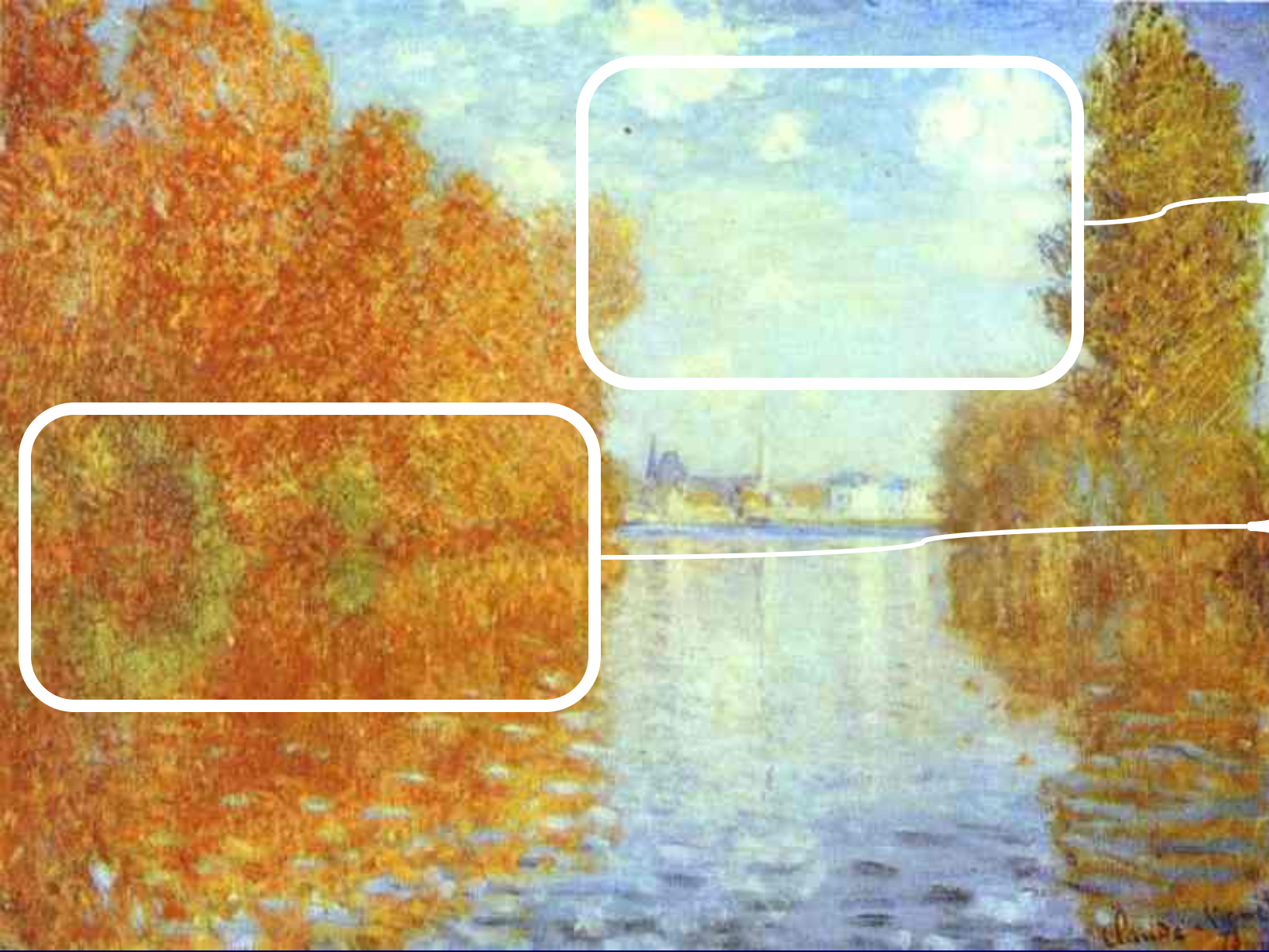


Berthe Morisot

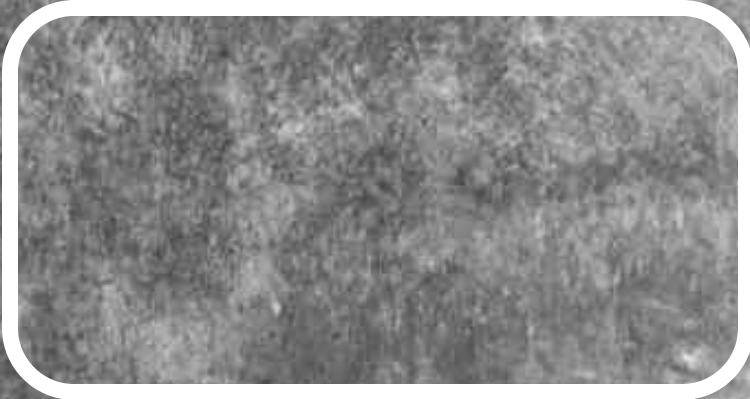
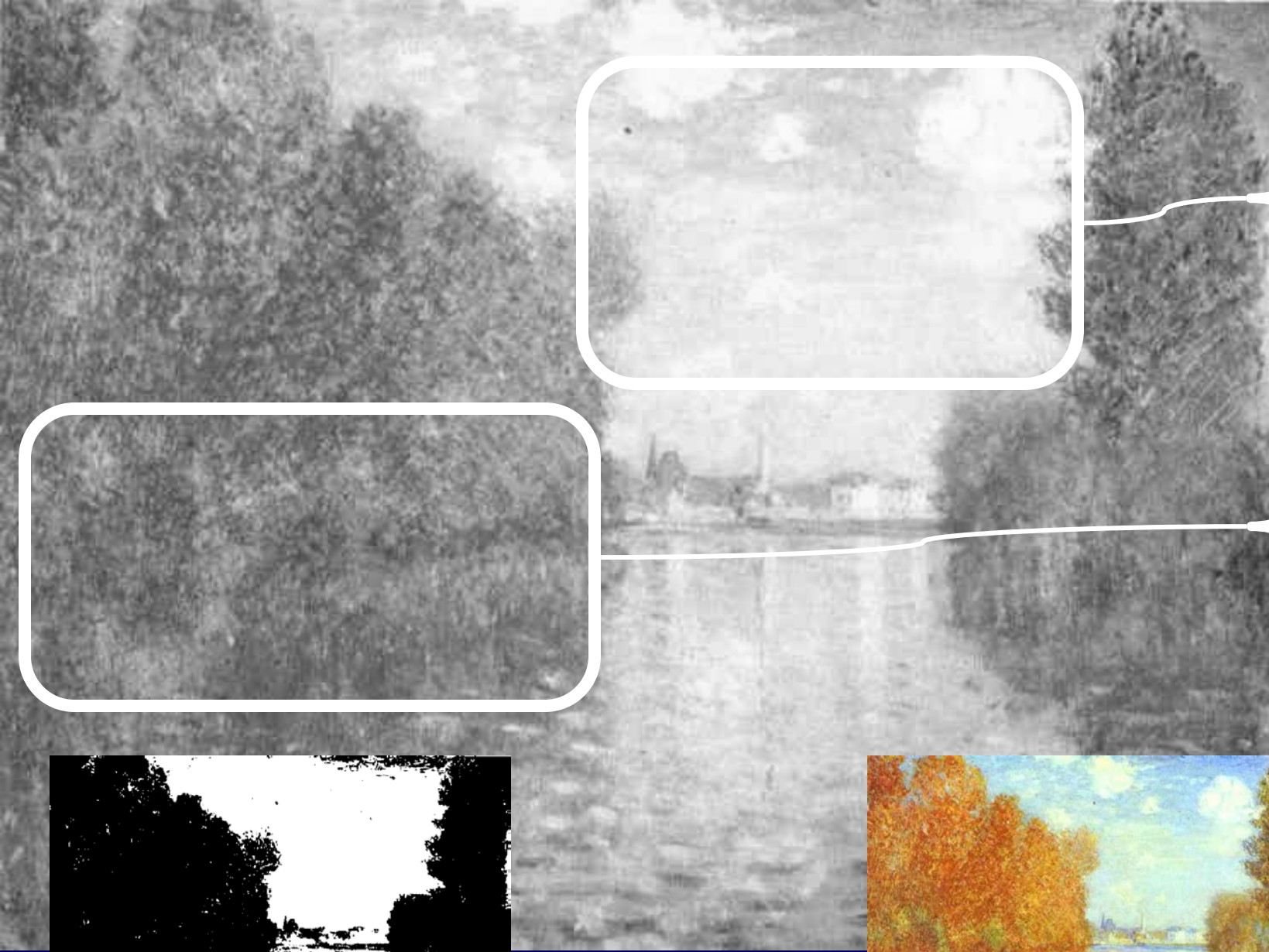








All values are in upper 2/3 of value range







Monet has “***massed values***” into a few simple shapes or regions — thus simplifying and unifying the composition.



Monet has “***bracketed values***” into a few simple value ranges — thus simplifying and unifying the composition.

Note: the term “massed values” or “value massing” is more common, and sometimes refers to the practice of bracketing as well as massing.

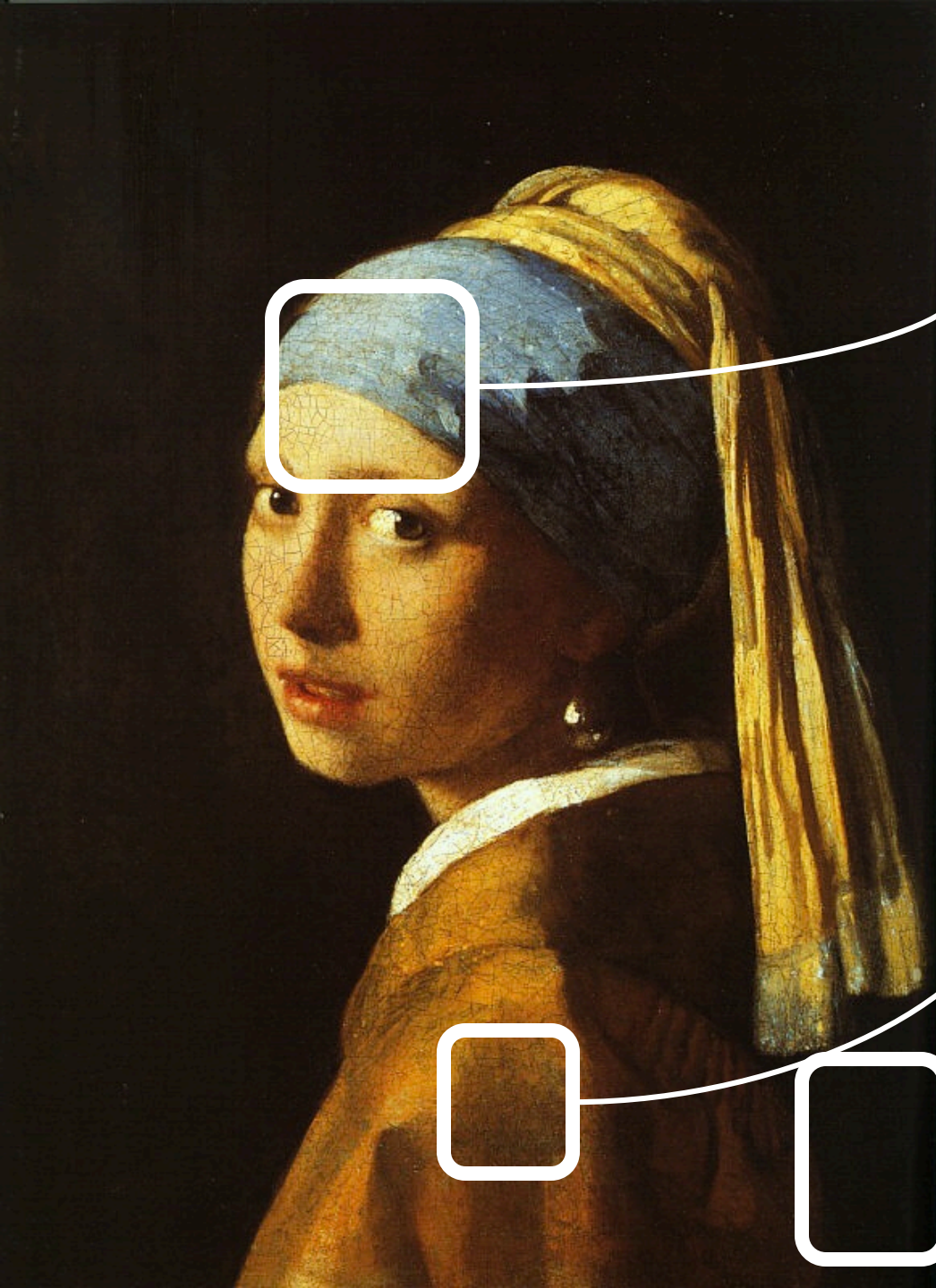


Vermeer is a master of  
Light and value.  
Here virtually the  
entire  
Composition is  
bracketed  
Into only three value  
ranges.

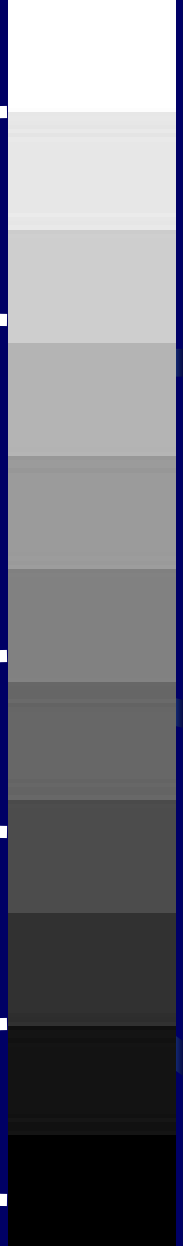


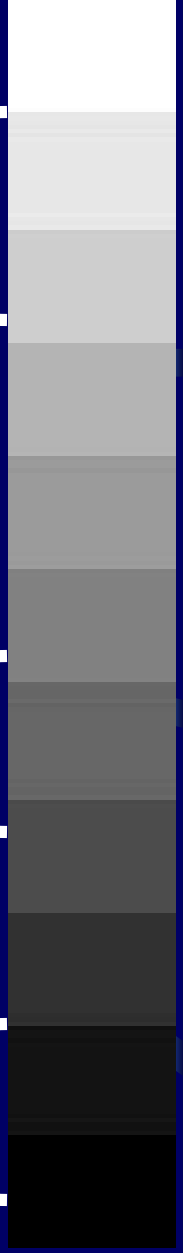
Jan Vermeer — *Girl with the Pearl Earring.*





Jan Vermeer — *Girl with the Pearl Earring*.







## (NON) Massed Value

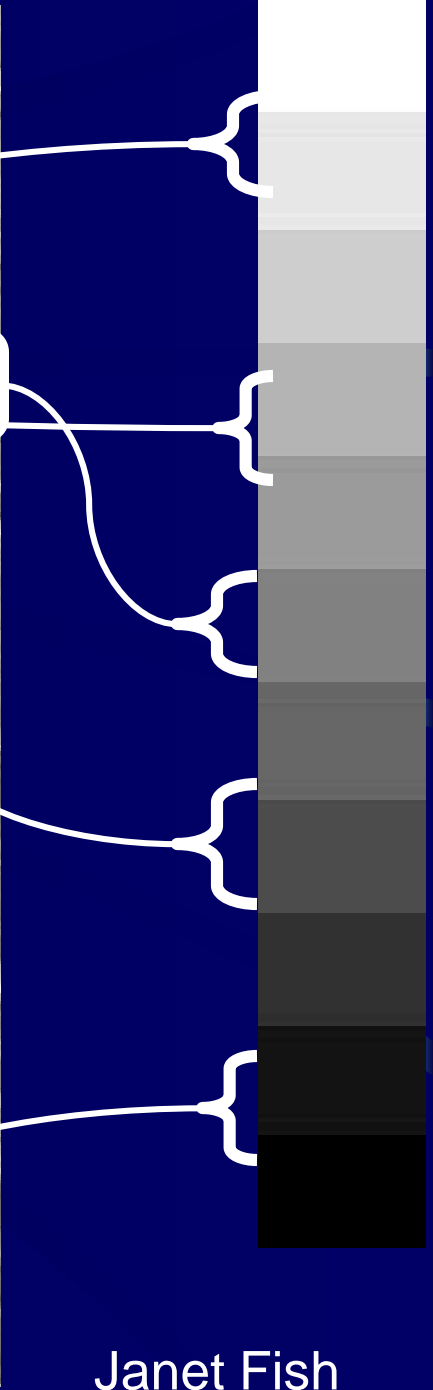
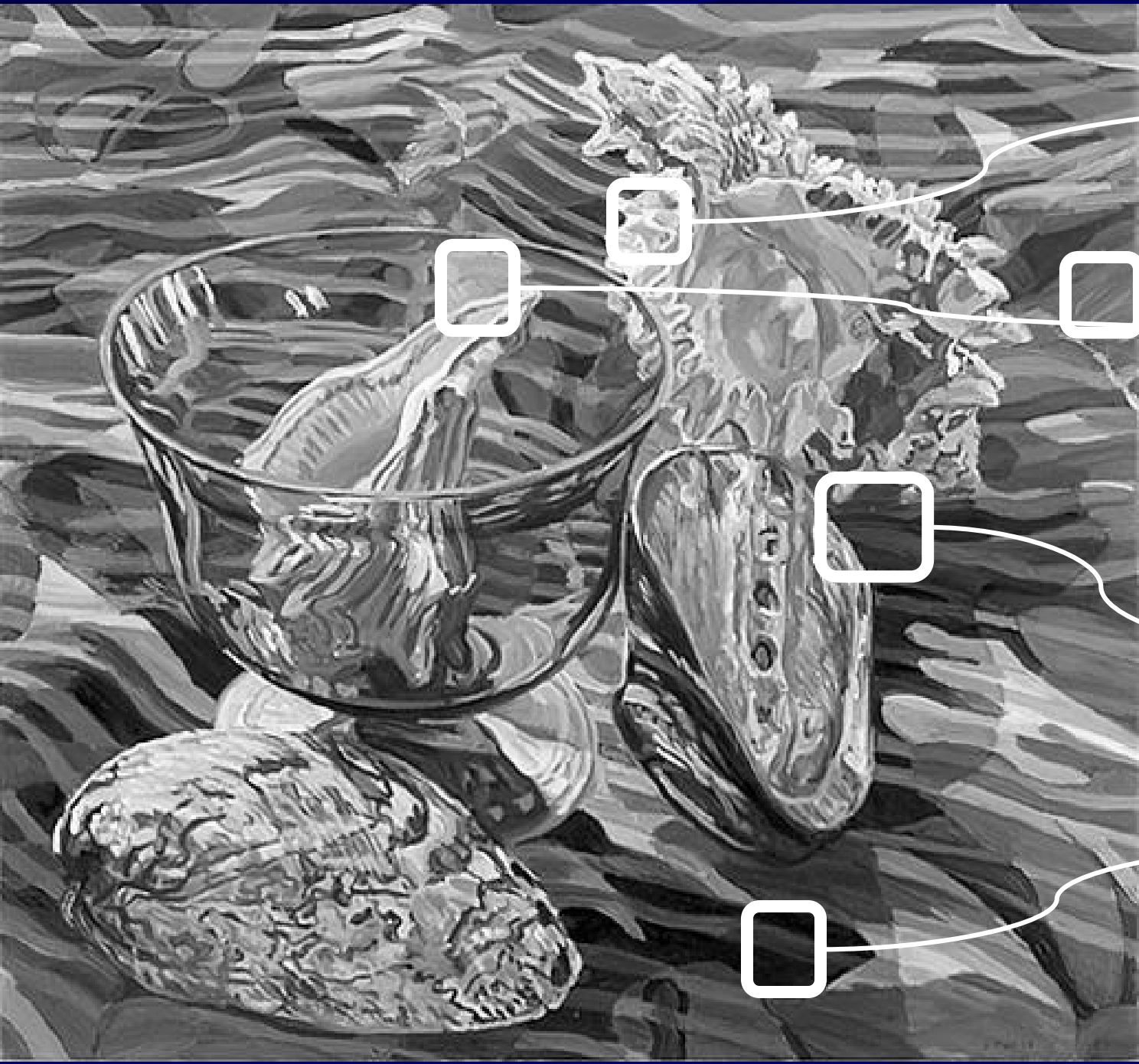
Current trends in imagery include strategies that fragment and de-solidify both the imagery and the composition.

Janet Fish's tactics often involve many small regions of color/value that are juxtaposed with small regions of abruptly contrasting color and value.

The net effect is to create a kind of fragmented, busy visual experience, unified by the consistency of that busy, contrasting pattern.

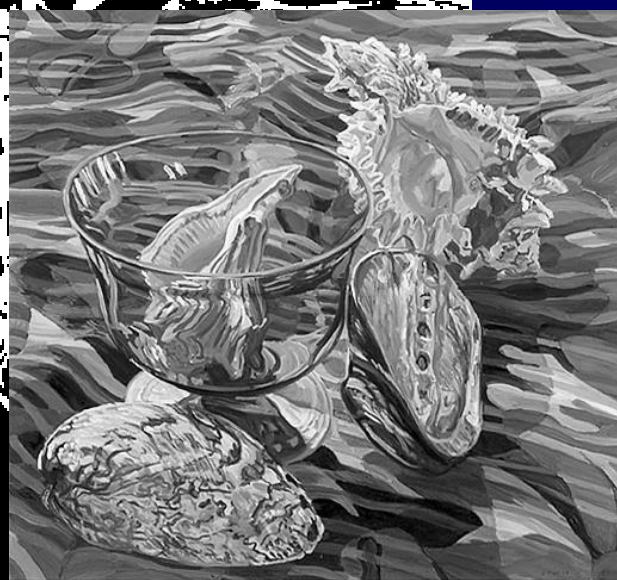


- Janet Fish
- Contemporary Realist



Janet Fish





Janet Fish

# Low key

- “Low value” - a composition **DOMINATED** by low (or darker) values.
- Also, a surface or color that is low in value.
- Carravaggio and Rembrandt typically worked in low key compositions with brilliantly contrasting, high-key focal regions.

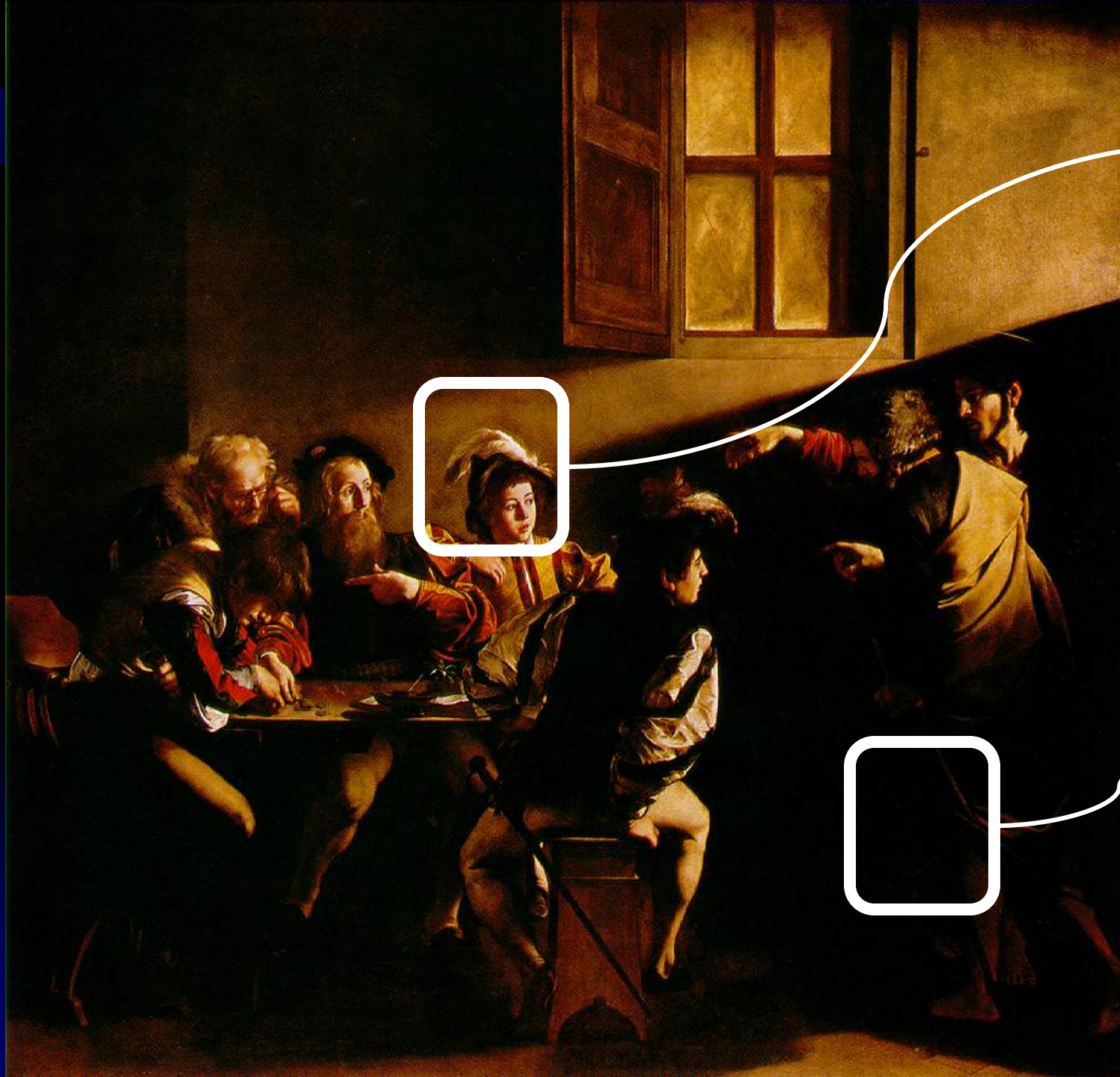




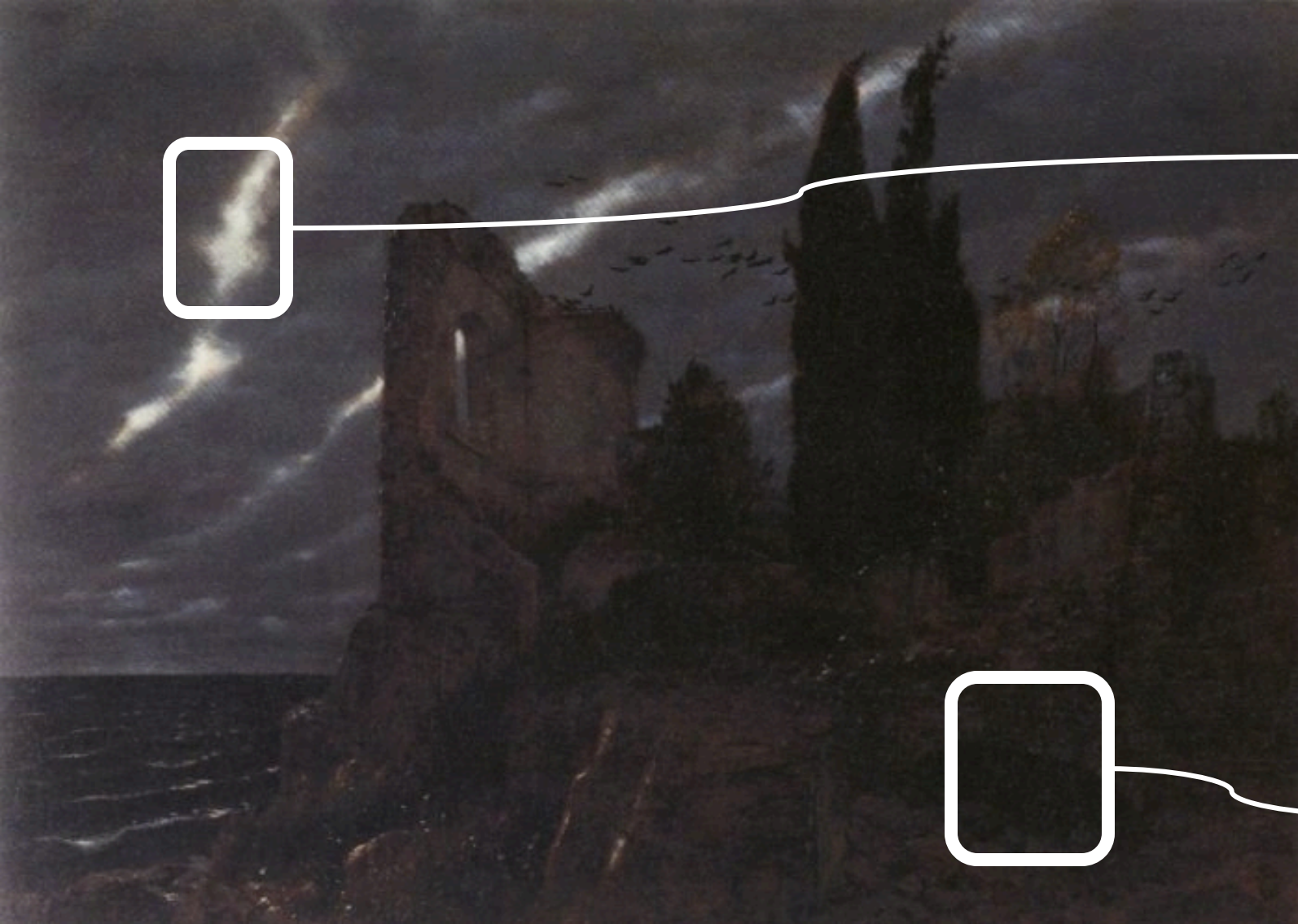


**All values are in a very dark range -- except accent areas. Image dominated by dark values, so high values have strong impact.**



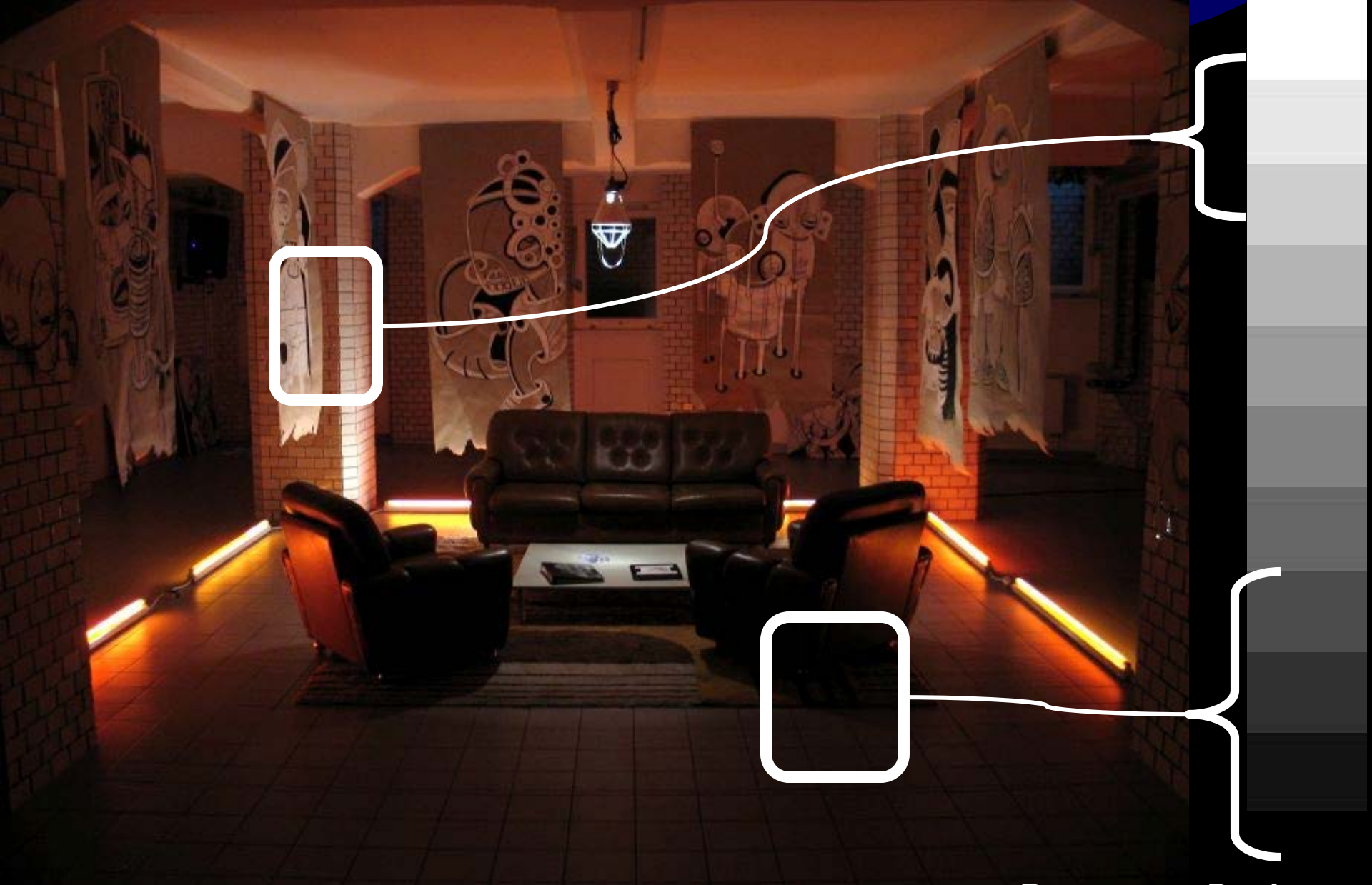


**Caravaggio**  
*Calling of St.  
Matthew*



**Bocklin**  
*Ruins by the  
Sea*





Low key primarily via low and selective illumination.  
Note that few surfaces are mid-tone — space's values are mainly very light or very dark.

**Pentagram Design**  
*Berlin Swatch  
Offices*

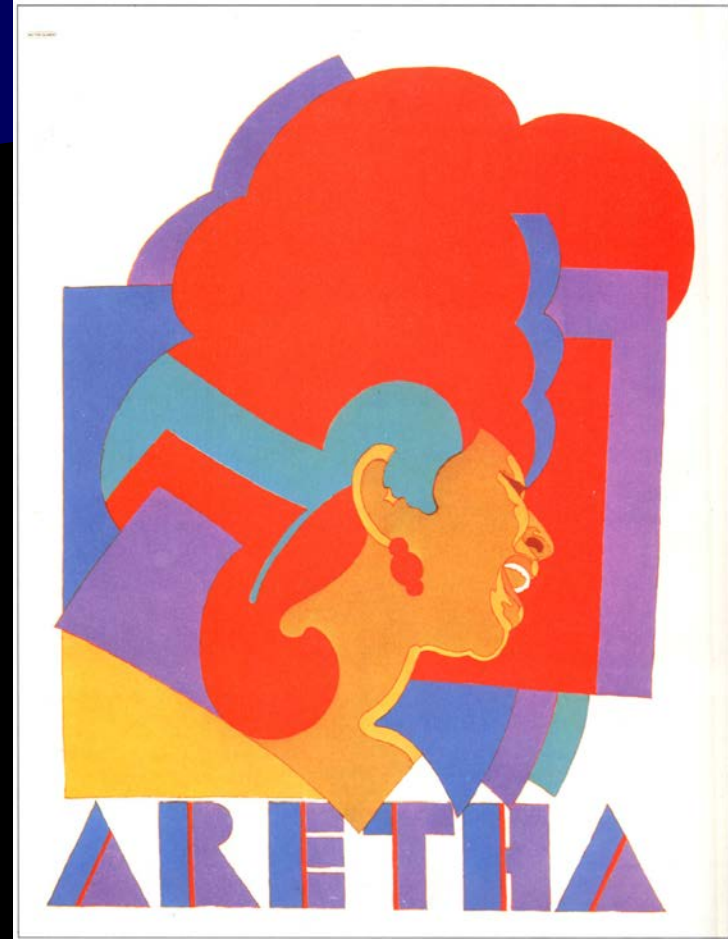




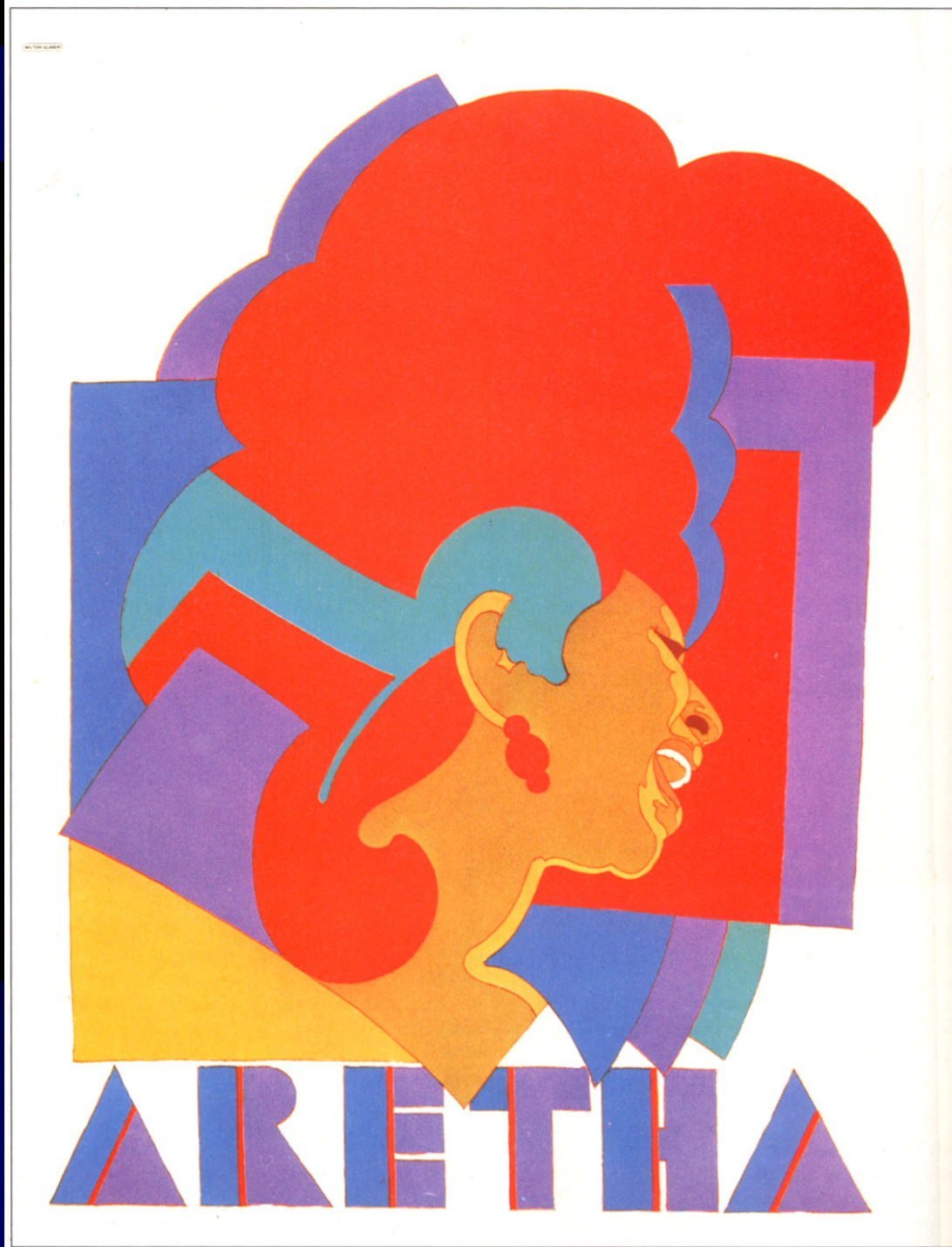


# Glaser's Aretha: anomaly trumps high chroma

- Note that Milton Glaser's *Aretha* design is *dominated by colors of similar chroma and value, except where he wants special attention* – the face is distinctive because of a region of lighter value and of lower chroma than elsewhere.
- Normally we expect brilliant chroma to command our attention – to draw the viewer's eye. But when high chroma *dominates*, low chroma offers distinctive and eye-catching *contrast*. Also, the value contrast provides the only modeled form – all other forms are quite flat.

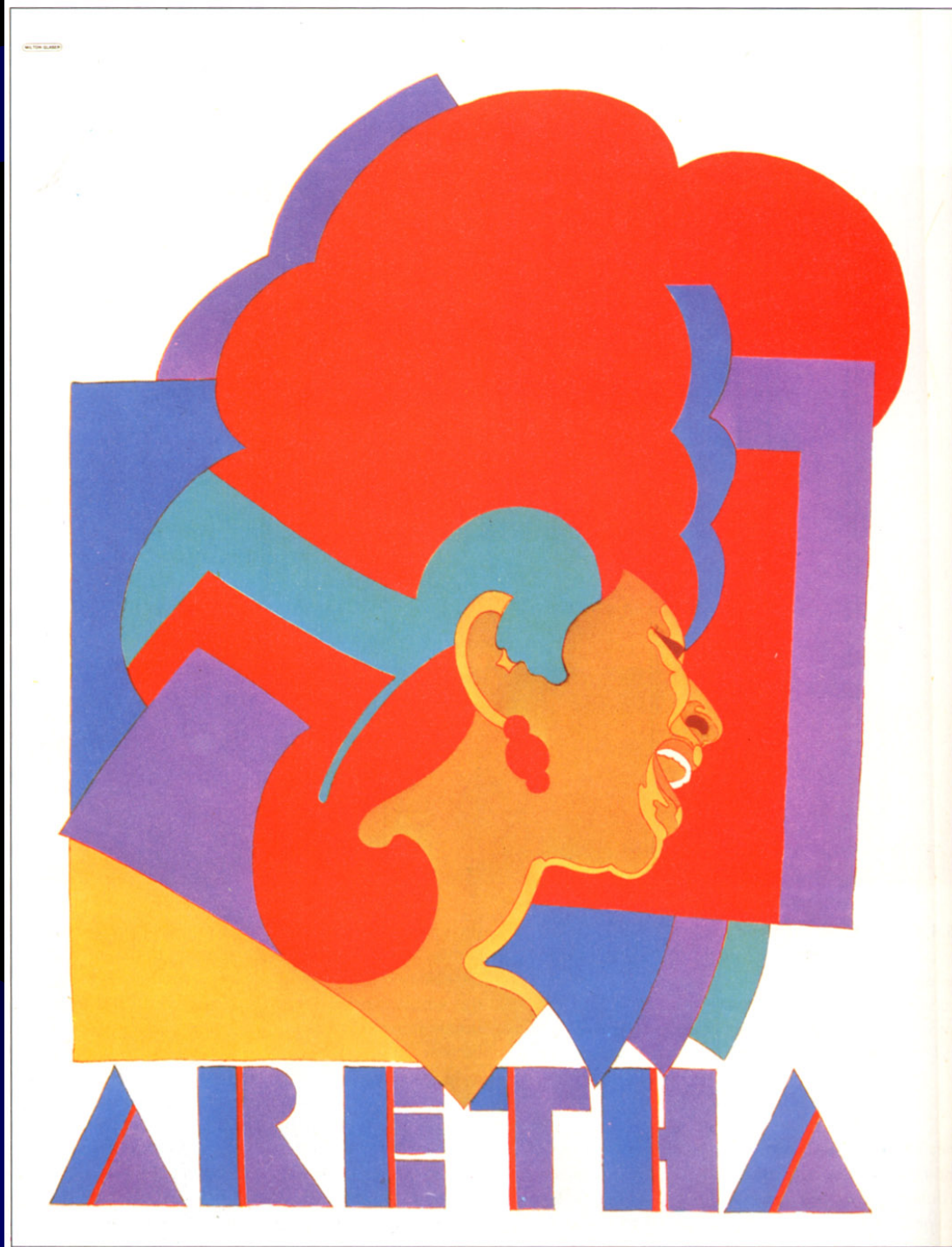


- Milton Glaser
- Aretha Franklin Poster
- Lower Chroma and simple color modeling of face offer distinctive traits within *this composition* — and so draw the viewer's eye from bold flat color elsewhere.





- Milton Glaser
- Aretha Franklin Poster
  
- NOTE: the usual “rule” — high chroma attracts.
  
- Here:
  - a) dominant chroma is high
  - B) low chroma is rare,
  - C) Therefore, lower chroma areas stand out--*low* chroma has graphic impact.





- What happens when chroma is raised in the focal region (face)?





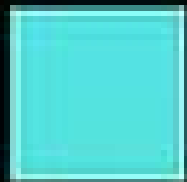
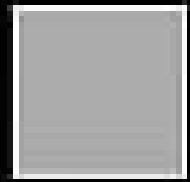
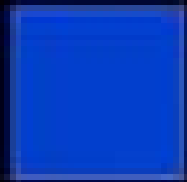
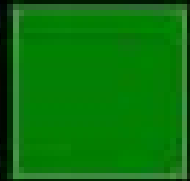
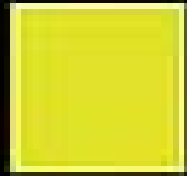
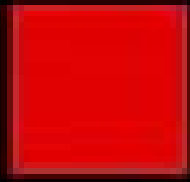
## Balance: warms vs. cools

- The text states that some color theorists believe that compositions can be pleasingly balanced by making sure that ***warm colors fill roughly the same area as cool colors.***
- Other theorists (of the Triadic Color System – John Goodwin), recommend a balance between warm sunlight hues (yellow and red) and cool “shadow” hues (blues) in *proportions of roughly 3:5:8 ratio.*
- handy formulas, maybe – but not generally reliable.

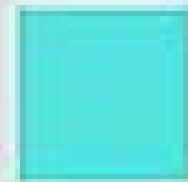
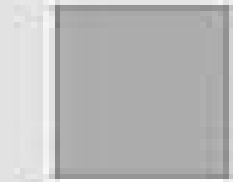
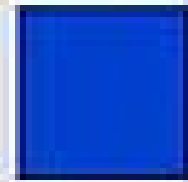
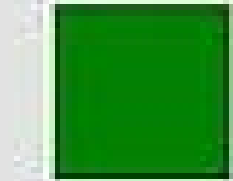
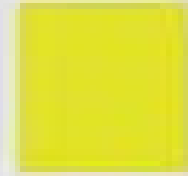
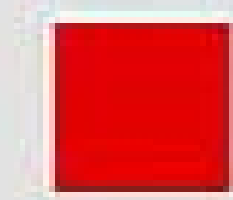
# Emphasis by contrast

- Emphasis, generally, is created by *distinctive contrast* – any part of the design that is distinctly different than the rest of the design, stands out.
- The designer selectively emphasizes some areas, while subduing others.
- *Contrast, however, cannot be established unless there is a dominant condition to contrast with.*
- There are many strategies by which contrast can be established.





The graphic impact of a particular color depends more on figure-ground contrast, than the color itself.



# Open Palettes

vs.

# Limited Palettes



- Hue schemes can be generally divided into open palettes and Limited palettes.
- *Open palettes* allow *any* hue to be present — either randomly selected hues or expressive/intuitively selected hues are used.
- *Limited Palettes* confine the hues used to some pre-planned strategy. Structured hue schemes (e.g. analogous, complementary, triadic, etc.) are hue-plans that confine colors to only a few, selective hues.



# Open Palette- vs.- Limited Palette vs. Structured Palette



- **Limited Palette** concept simply acknowledges that only a small selection of colors are used. Typically, but not always, involving a structured palette.
- **Structured Palette** concept refers to the usual “color schemes” — that is, a “structure” of monochromatic, or of Complementary, or split complementary hue selections. The hues that are used in the palette are selected according to some scheme, plan or structure.
- **Open Palette** is an un-structured palette. Hues may be selected from any region of the color wheel. No structure is intentionally planned or imposed. Colors are most often applied intuitively, rather than analytically.

# Open Palette



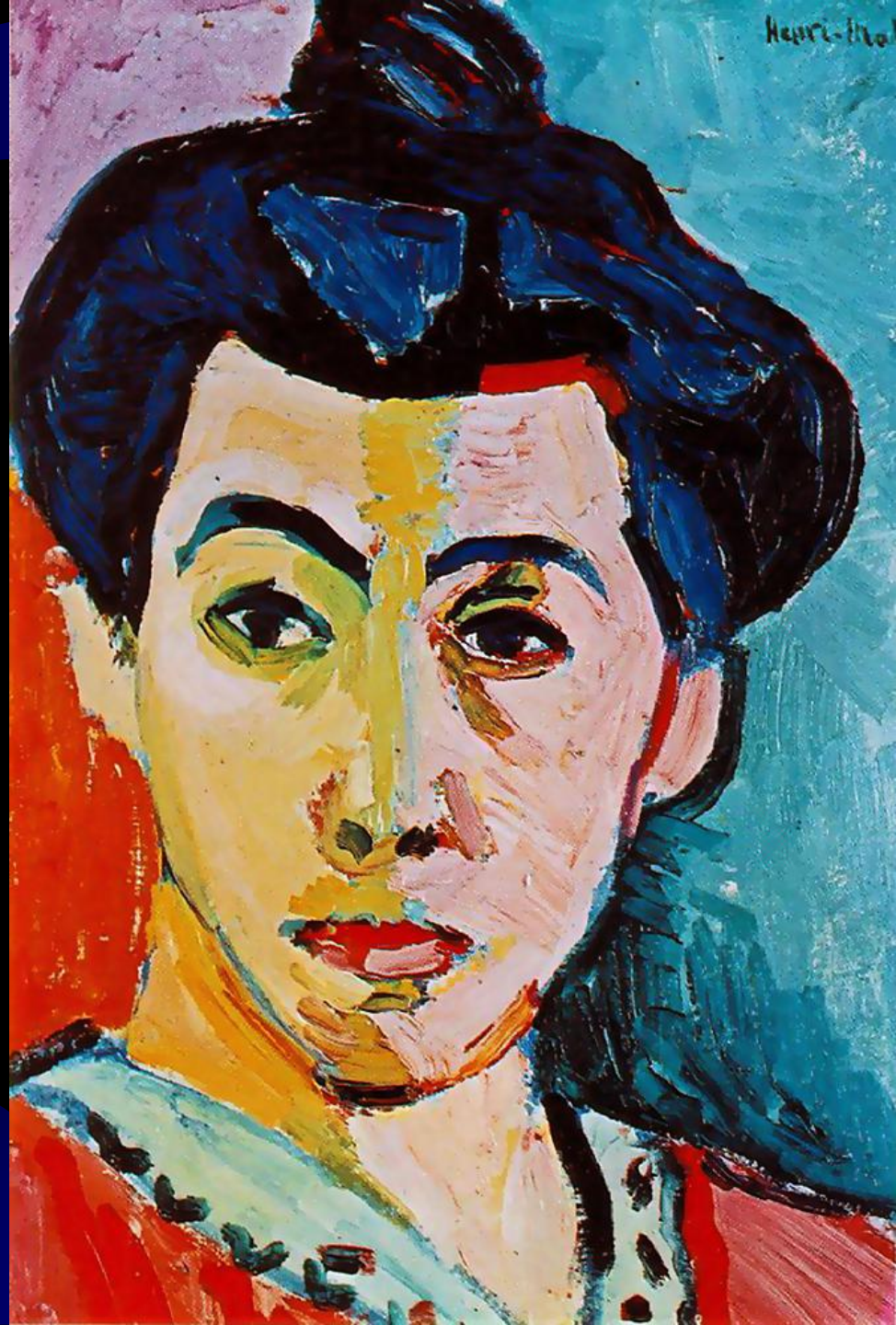
- (p. 53)  
*A color scheme that uses hues from all over the color wheel.*
- Potentially chaotic, but visually dynamic.
- When an open palette is daringly used, some other characteristics of the design must provide unity – to hold it all together.  
[see Matisse and the Fauves]





## Open Palette

- Henri Matisse
- *Woman with a Green Stripe*  
(Portrait of Mme Matisse)
- Fauve (wild beast)
- *Though hues are clustered in generally complementary groups, the range is beyond that of a tight, structured complementary scheme.*





# Expressionism

French  
Academicism

Impressionism  
Monet, Manet, Degas...

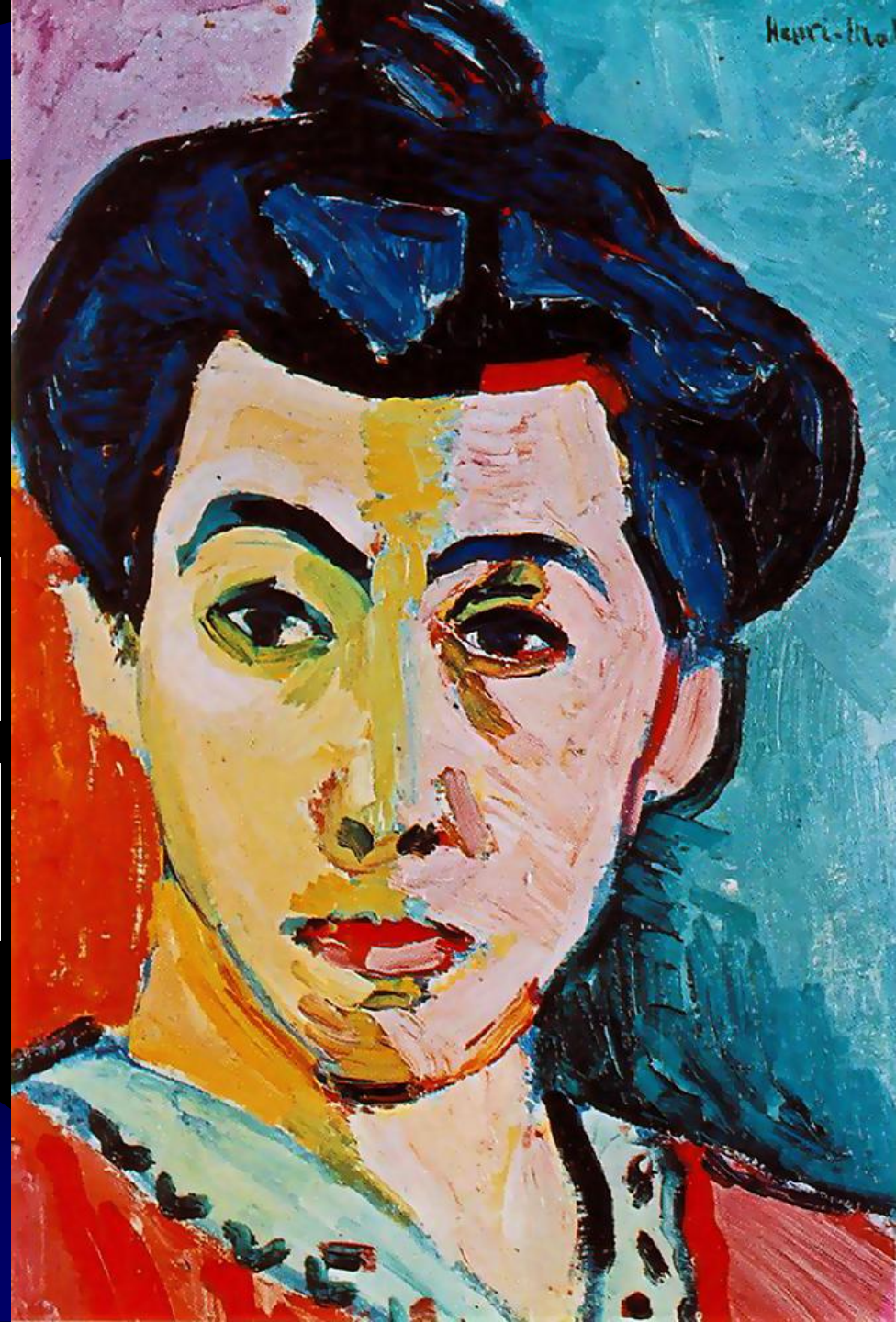
Analytic  
Post-Impressionism  
Seurat, Cezanne

Expressionist  
Post-Impressionism  
Van Gogh, Gauguin

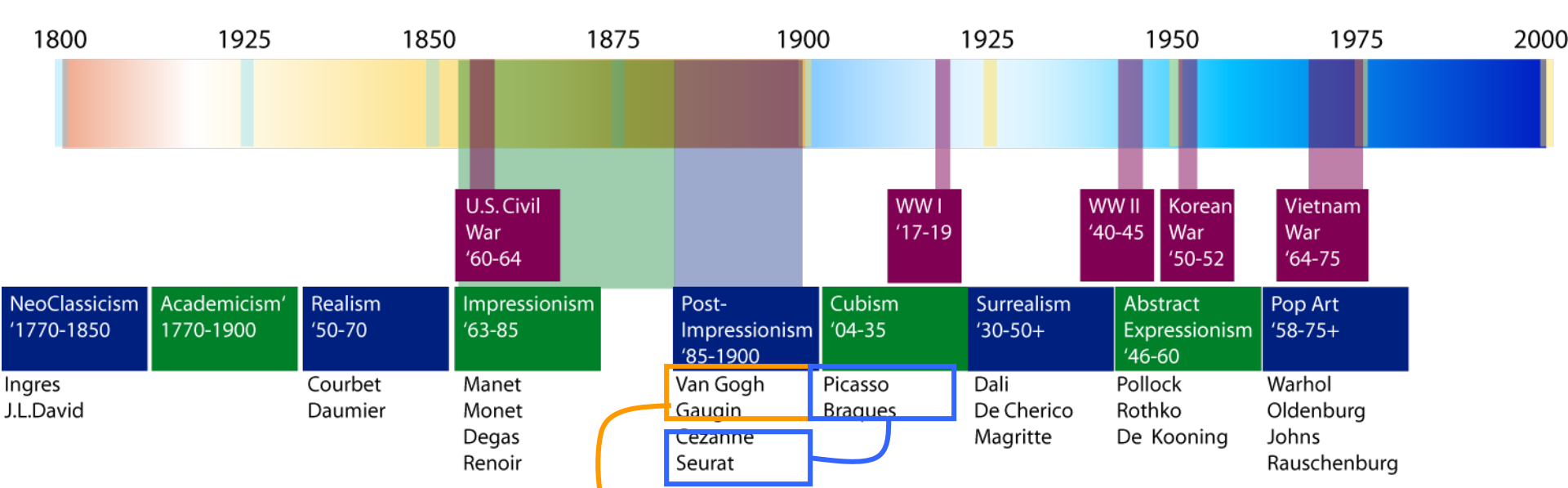
Cubism  
Picasso, Braque

Matisse, Derain,  
Fauves,  
Expressionism

- Henri Matisse
- Expressionist color — colors selected for *emotional impact*, not for representational illusion.







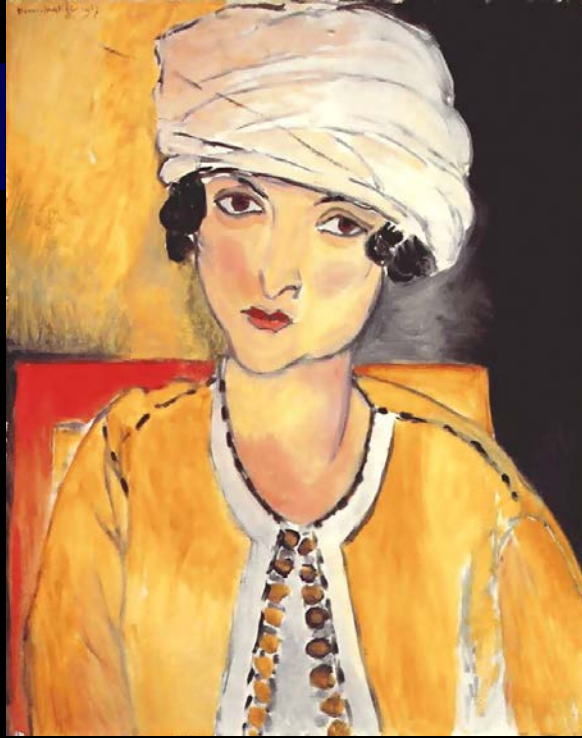
# Expressionism Fauvism

Expressionists  
Fauves  
German Expressionists

- Expressionist color —colors selected for *emotional impact*, not for representational illusion.
- While Picasso and Braque explored the logic of analytic Cubism, Matisse & Derain & friends explored unrestrained, emotion-driven color — thereby creating the expressionist/romantic branch of early Modernism.







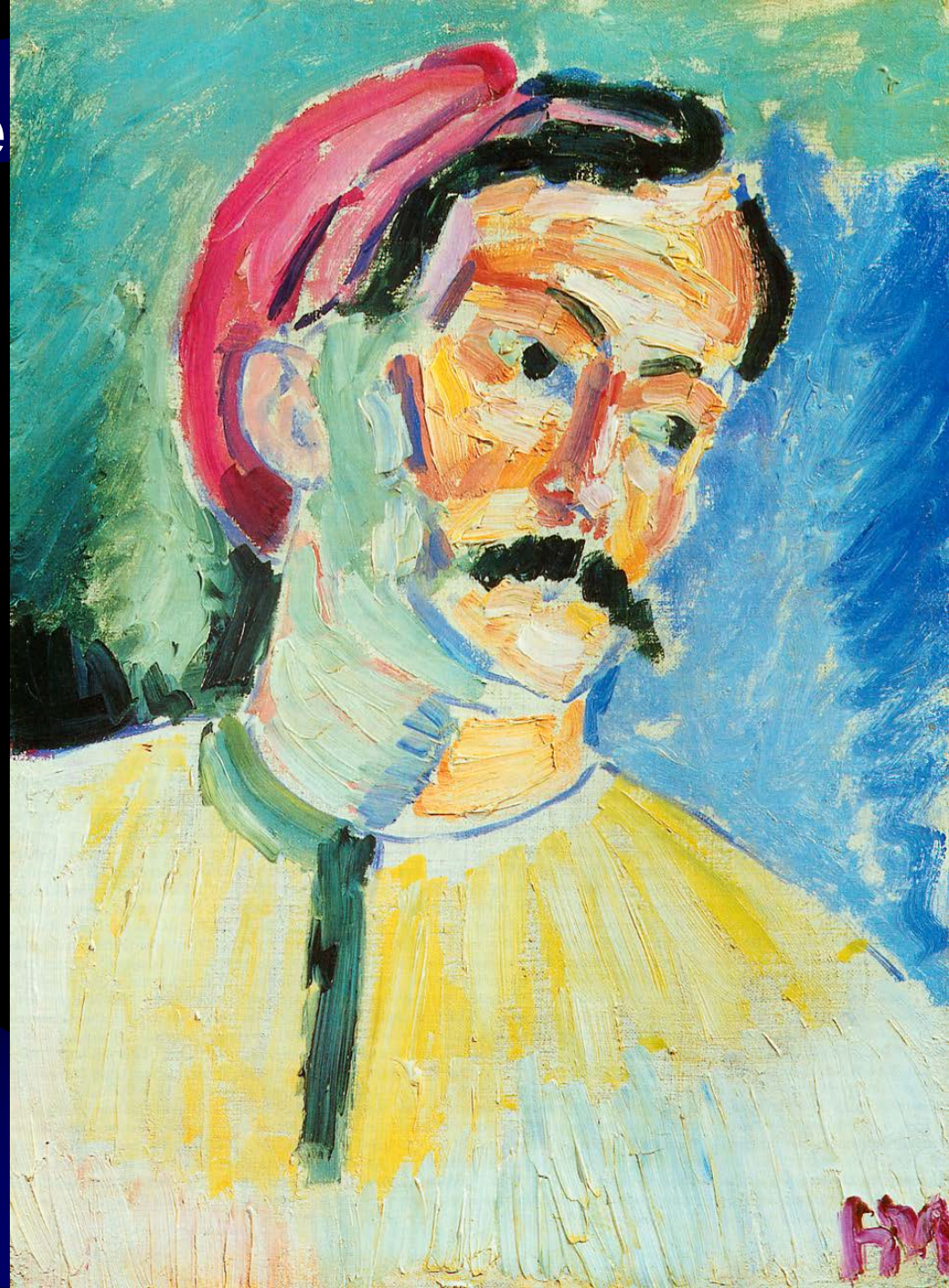
- Henri Matisse
- Fauve



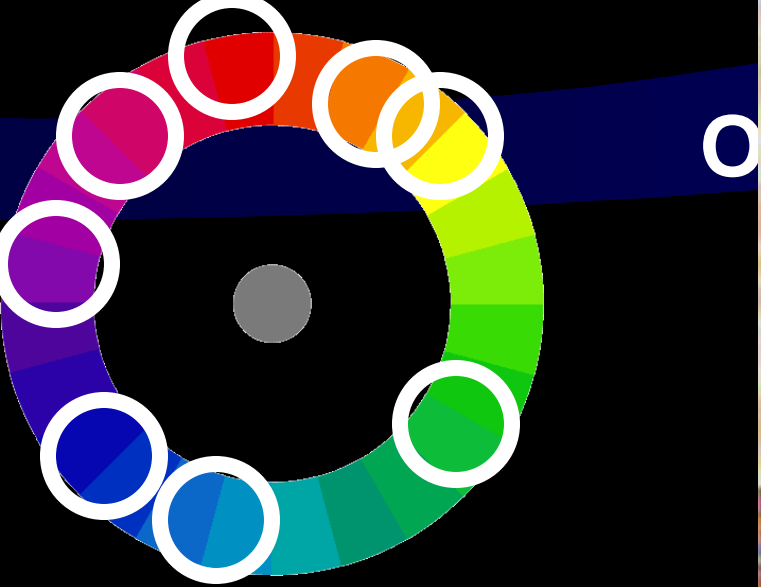


Ope

- Henri Matisse
- *Andre Derain*
- Fauve



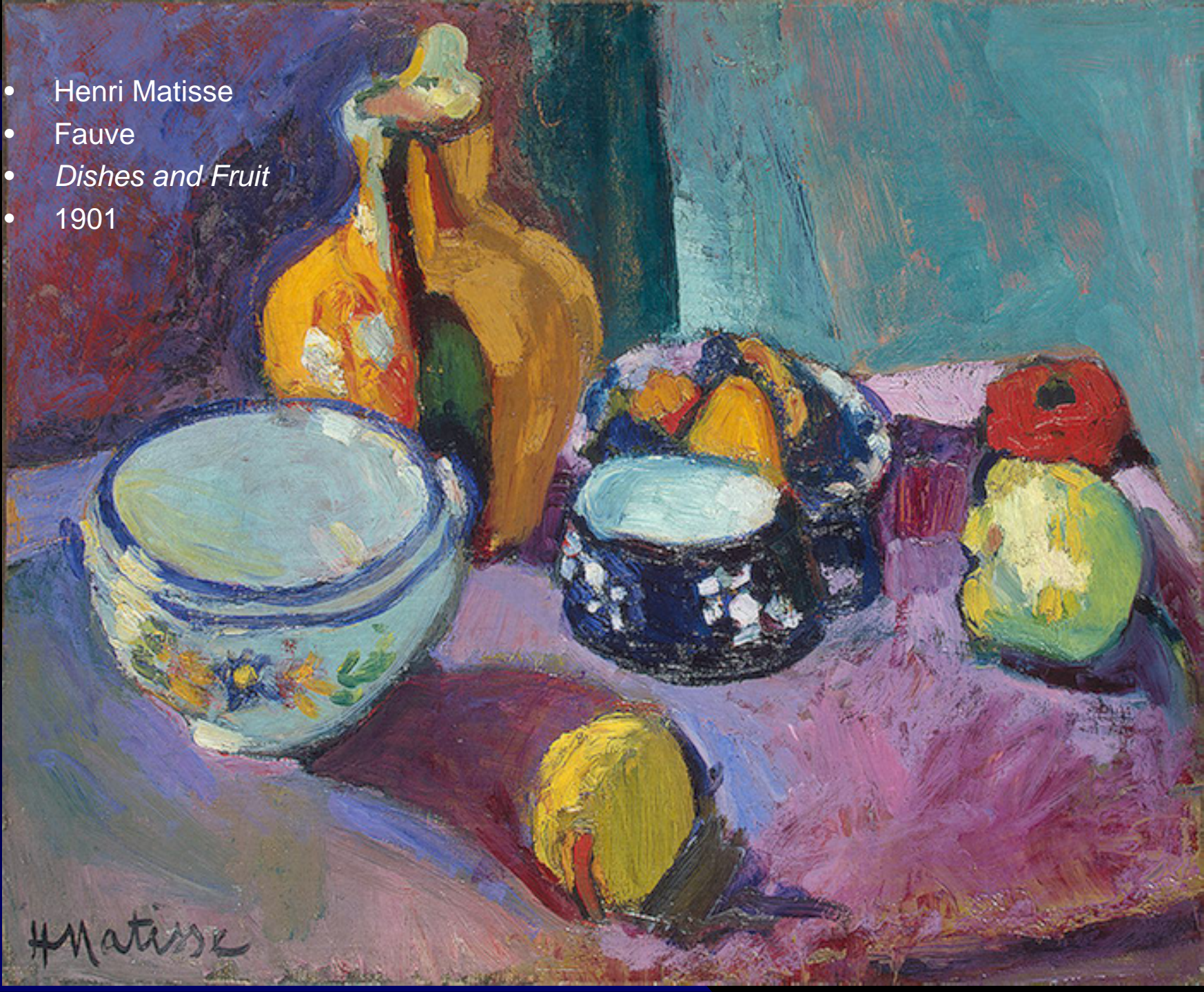




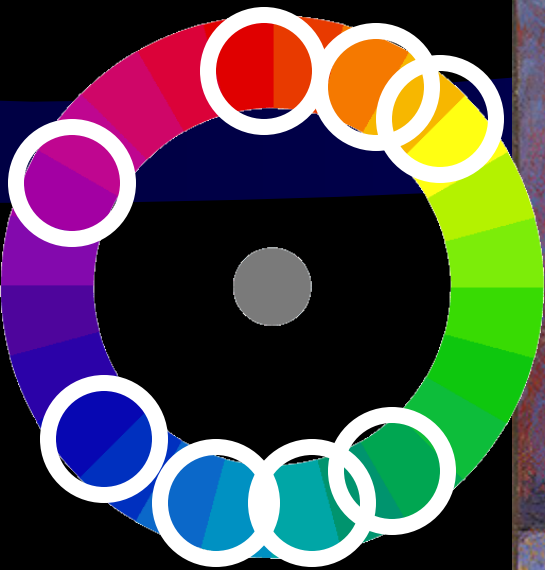
- Henri Matisse
- Fauve



- Henri Matisse
- Fauve
- *Dishes and Fruit*
- 1901



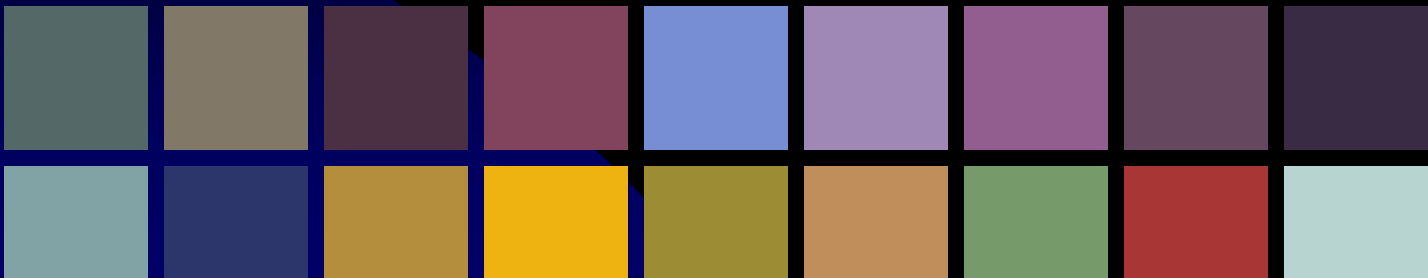




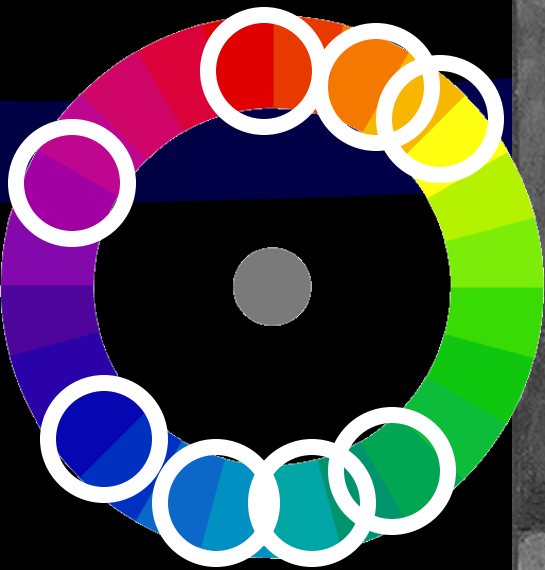
Henri Matisse

Fauve

Note value structure  
— massed values and  
carefully placed  
contrasts organize the  
composition.







Henri Matisse  
Fauve

Note value structure  
— massed values and  
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- Henri Matisse
- Fauve
- *Dishes and Fruit*
- 1901



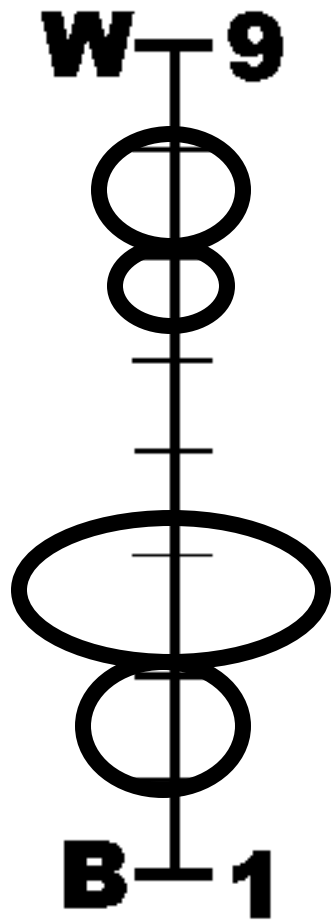






- Henri Matisse
- Fauve
- If a well-established hue-structure is NOT unifying this, then what is?
- Explore the *value* structure.





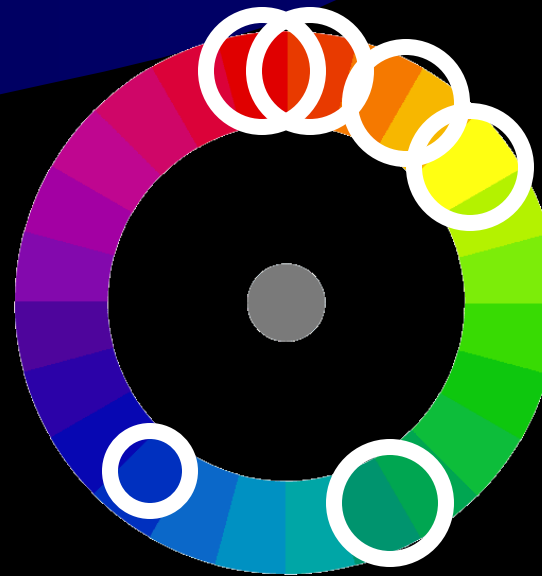
- Explore the value structure.
- Two value ranges--
- dominant value 3,
- subordinant value 7





• Henri Matisse





• Henri Matisse



# Open Palette



Andre De



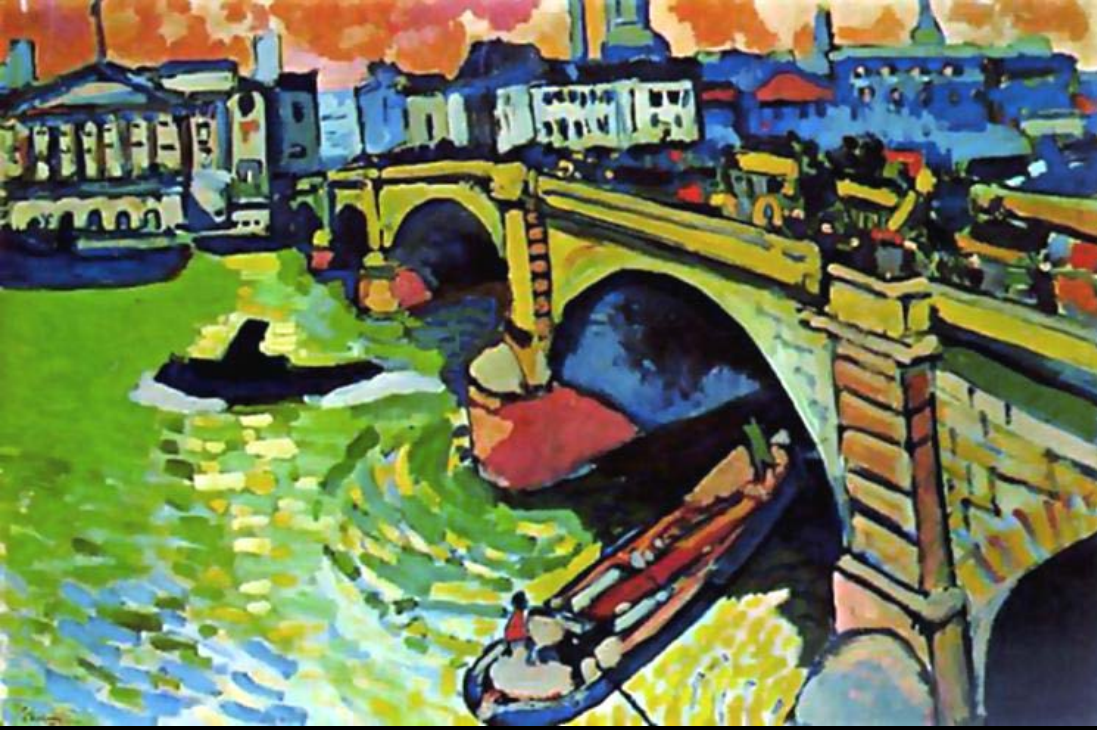
# Open Palette



Andre De



# Open Palette

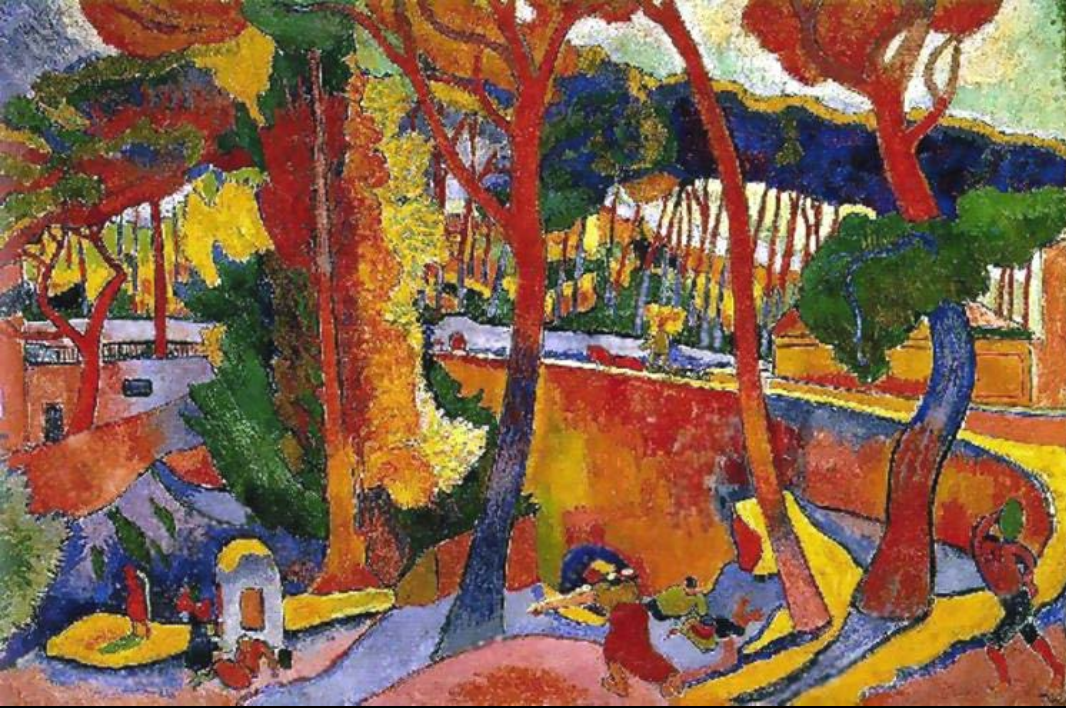


Andre Derain, Fauve





# Open Palette



Andre Derain, Fauve





# Open Palette



Andre Derain, Fauve

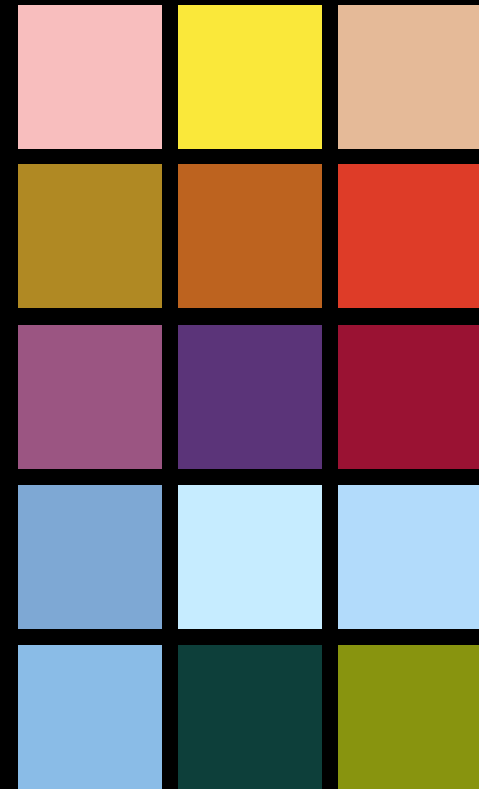
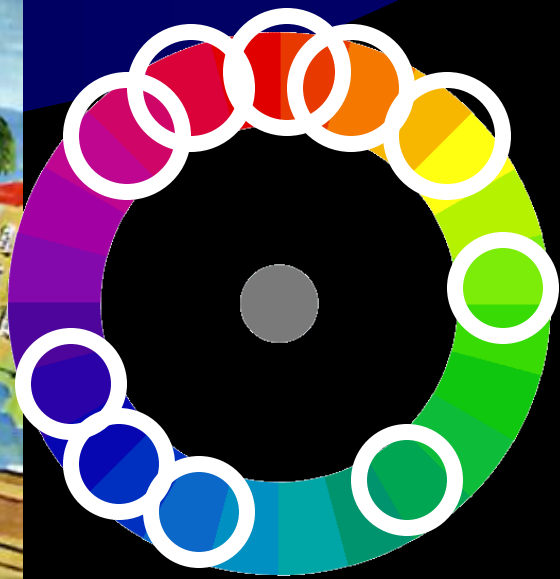




Raoul Dufy, Fauve



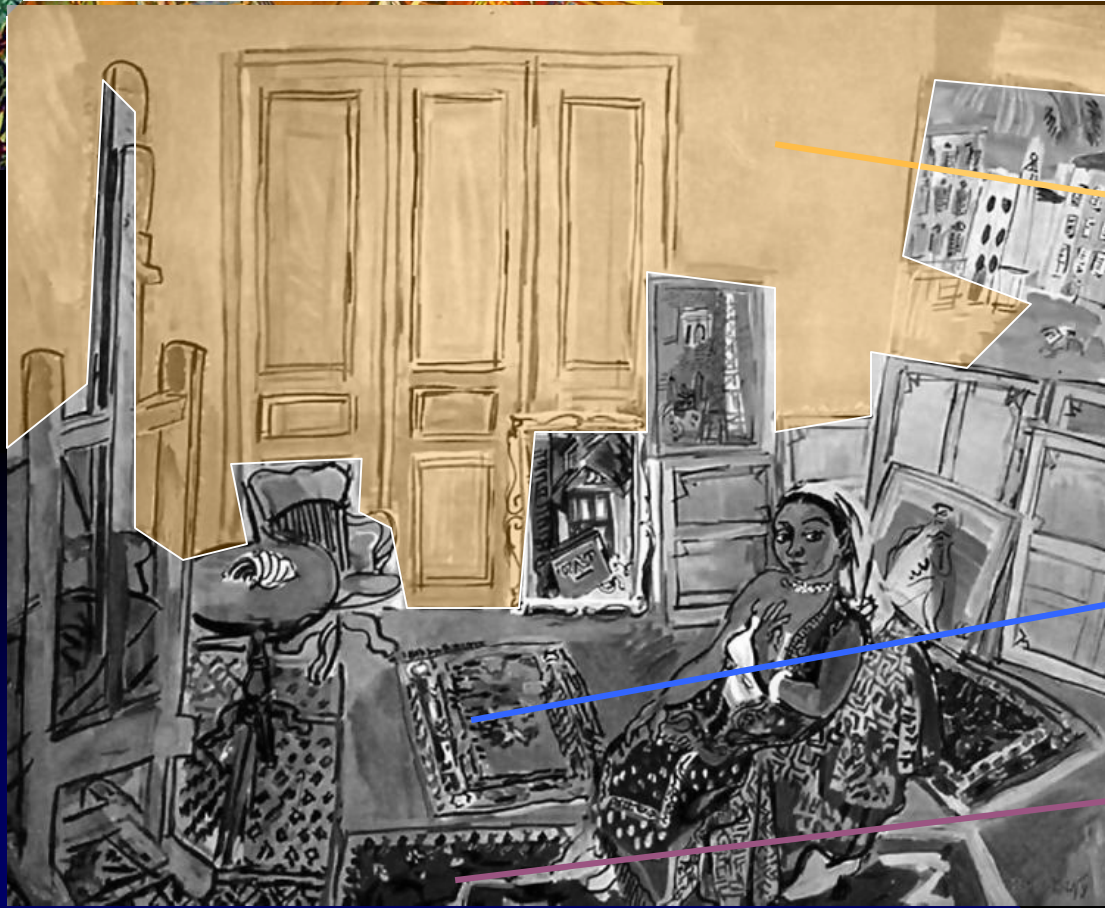




- Raoul Dufy
- Fauve

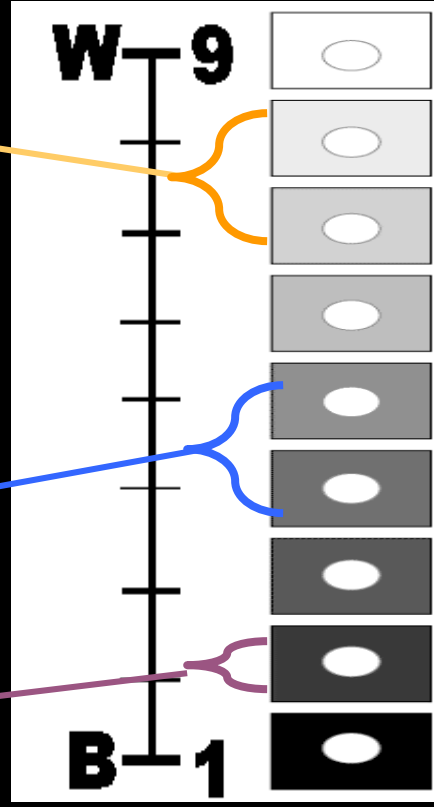


Raoul Dufy, Fauve



## Massed and Limited Values

Note how few values are present — the major, massed values are quite limited, bracketed into two narrow ranges, plus some dark and light accents. This simplifies the visual busyness that varied hues offer.







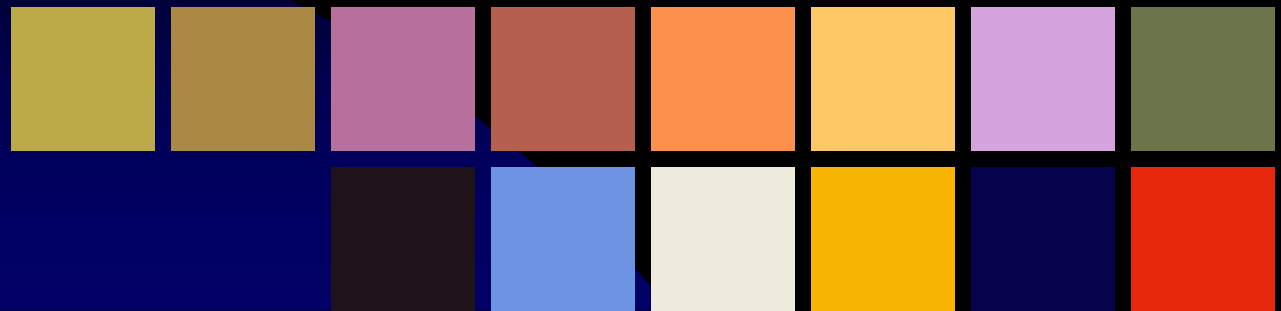
George VI the coronation

Rachel Taylor



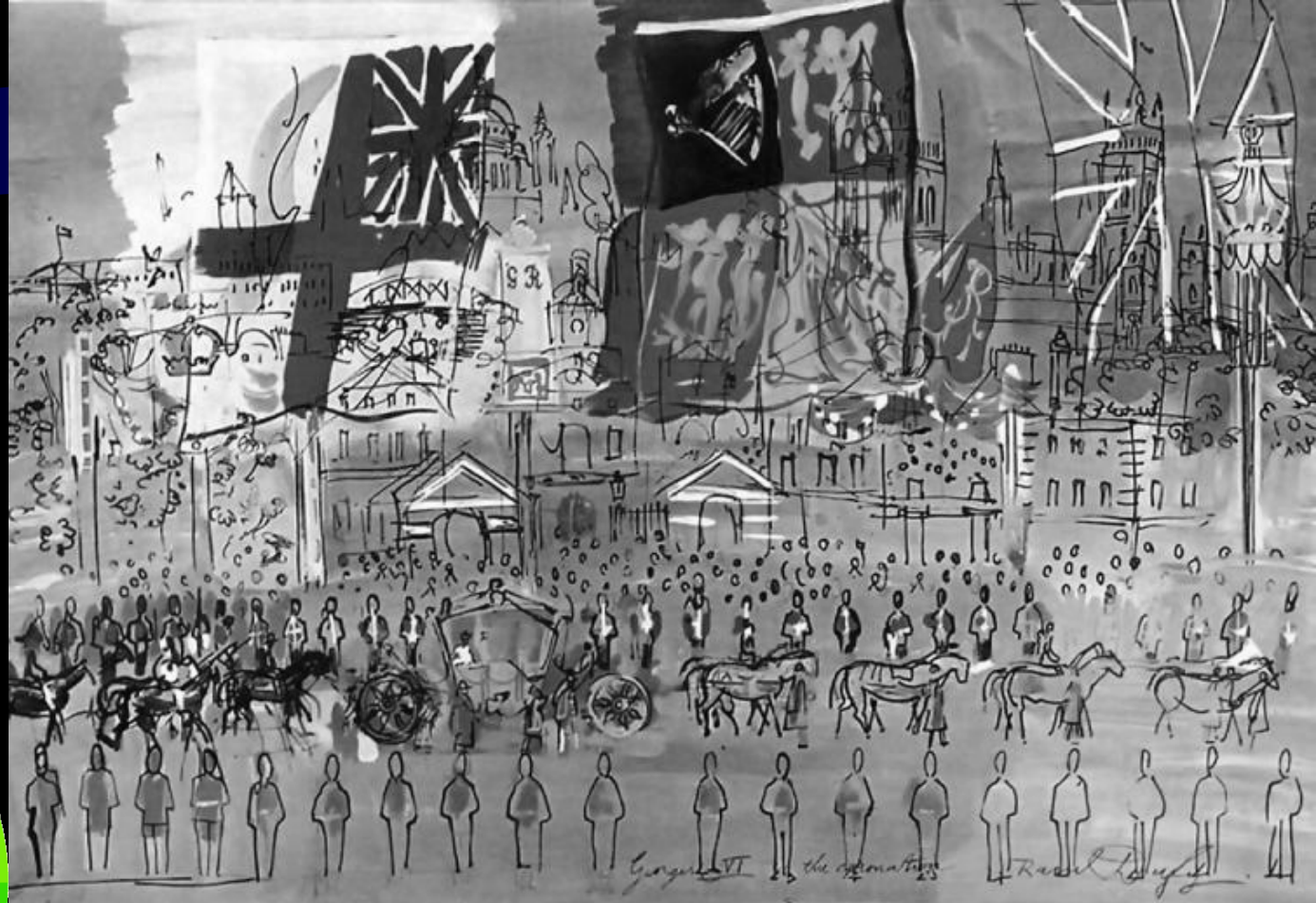
# Open Palette

Raoul  
Dufy  
Fauve  
Coronation  
of King  
George





Raoul  
Dufy  
Fauve  
Coronation  
of King  
George





Raoul  
Dufy  
Fauve  
Le Moulin  
(1943)





- Raoul Dufy
- Fauve
- Le Moulin (1943)

# Open Pa



# Variety, Chaos, & Fragmentation – dissolving unity

- Some designers choose to let go of any planned or structured color scheme. Either because they trust intuition rather than a rational system, or because unity is not an acknowledged goal.
- In both of these cases, a philosophical choice is being made regarding what to trust, and what to aim for.
- Modernism in art and design has intentionally challenged every “system” of art-making—including a reliance on structured hue schemes. Each generation tends to test the formulas derived by the prior generation — picking and choosing what to keep, what to discard and what to revise.



# Structured color harmonies emphasize controlled, planned unity

- We make use of structured color schemes not because it is the *only* way to use color well, but because it offers an *efficient way to explore* what color can do – or what we can do *with* color.
- Structured color harmonies offer a *foundation* – but the designer can build many different schemes on top of it.

# Compositional Issues of Color

- Apparent Size
- Spatial Depth
- Balance and Visual Weight
- Graphic Emphasis
- Harmony, Unity and Variety
- Rhythm/Correspondence



# Color Tactics for Unity

- Establish a dominant value
- Establish contrasting subordinate values(s) - confine to a fairly narrow range.
- Establishing dominant hue
- Select subordinate hues by *analogous relationship* to dominant hue, by *complementary relationship* to dominant hue, or by a series of *hue intervals*.
- Establishing dominant chroma
- Repeating a color (or colors) throughout a composition.