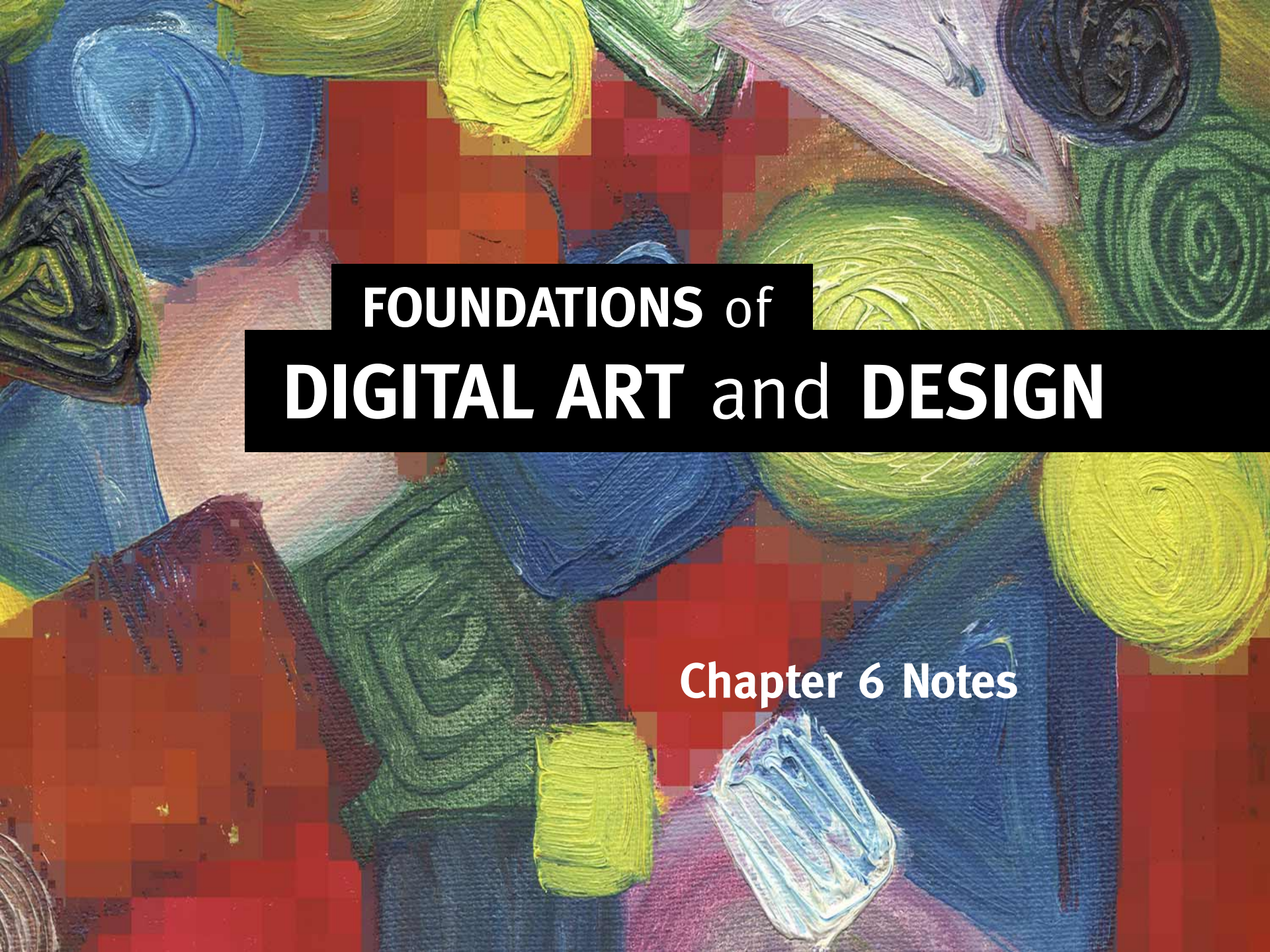


FOUNDATIONS of DIGITAL ART and DESIGN

Chapter 6 Notes

CHAPTER 6

COLOR MODELS

CHAPTER 6 Notes:

Subtractive and Additive Models:

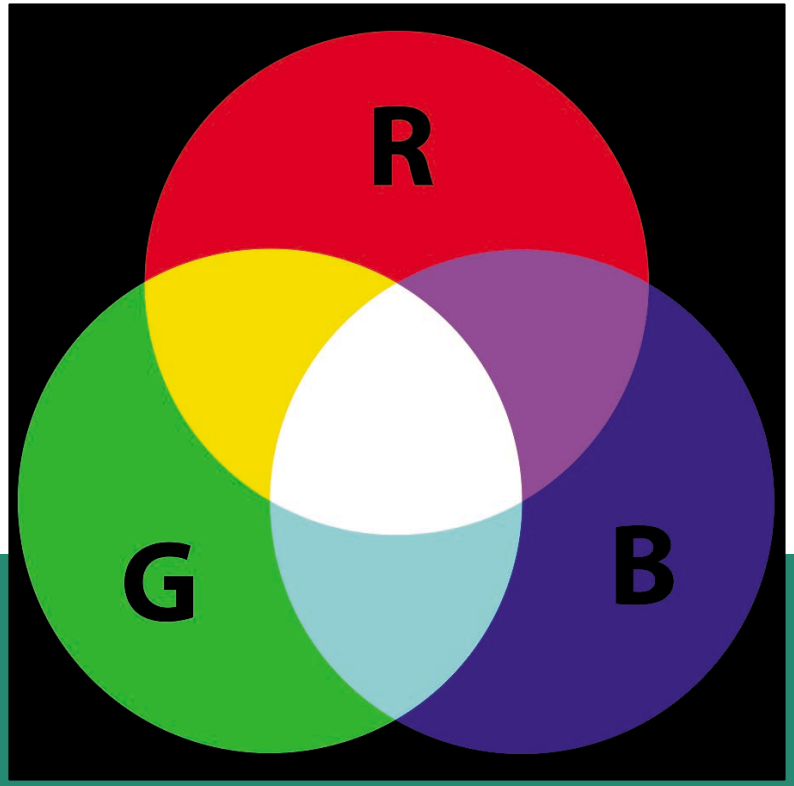
- Accounts for how color is perceived by the viewer
- Depends on whether light is being reflected or projected to the eye

Different hues of light are absorbed (subtracted from the surface) to created the “color” perceived by the viewer. No hues present? White! Add all of the hues together to get murky brown (near black).

Subtractive Model

- Light is reflected from a surface (paper, canvas, a wall, and so on) to the eye
- RYB (red, yellow, and blue) are the primary colors
- This model is used in analog processes such as painting, drawing, and sculpture

Different hues of light are added together to created the “color” perceived by the viewer. No light? Black! Add all of the hues together to get white (R=255, G=255, B=255).



Additive Model

- Light is projected from a source (computer monitor, smart phone, film projector, and so on) to the eye
- RGB (red, green, and blue) are the primary colors
- This model is used in digital processes that result in viewing media on a screen

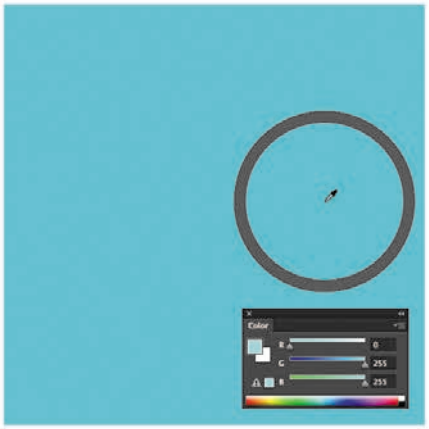
CHAPTER 6 Notes:

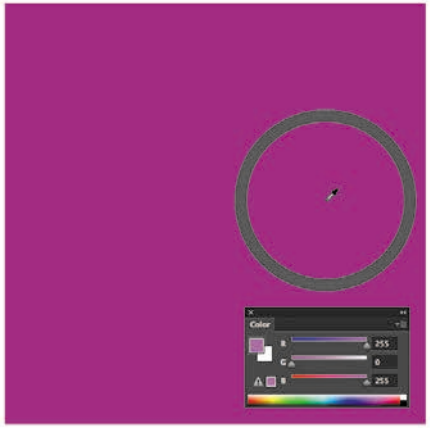
The perception of color is

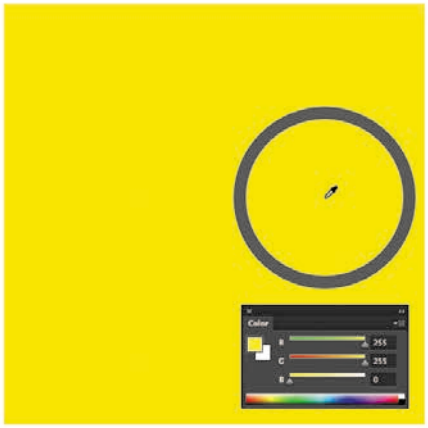
relational

Complementary hues are opposite the primaries on the color wheel. In the RYB model, orange is the complement for the primary color, blue. In this painting, the yellow background and orange vase and table demonstrate contrast via complementary hues with the blue irises.

Vincent van Gogh
Irises, 1890







Complementary hues are seen here via the Color panel and RGB sliders in Adobe Illustrator. When two of the primary hues are present and one is absent, you will mix the complement to the absent color.

Complementary RGB Hues

CMYK

Digital color space for printing

- Commercial printers use the CMYK model
- Cyan, Magenta, and Yellow are the primary colors
- Black is an additional color plate that defines shadow areas in the image
- Hues in the image are separated into areas of value for each primary, then paper is passed through a four-plate process.

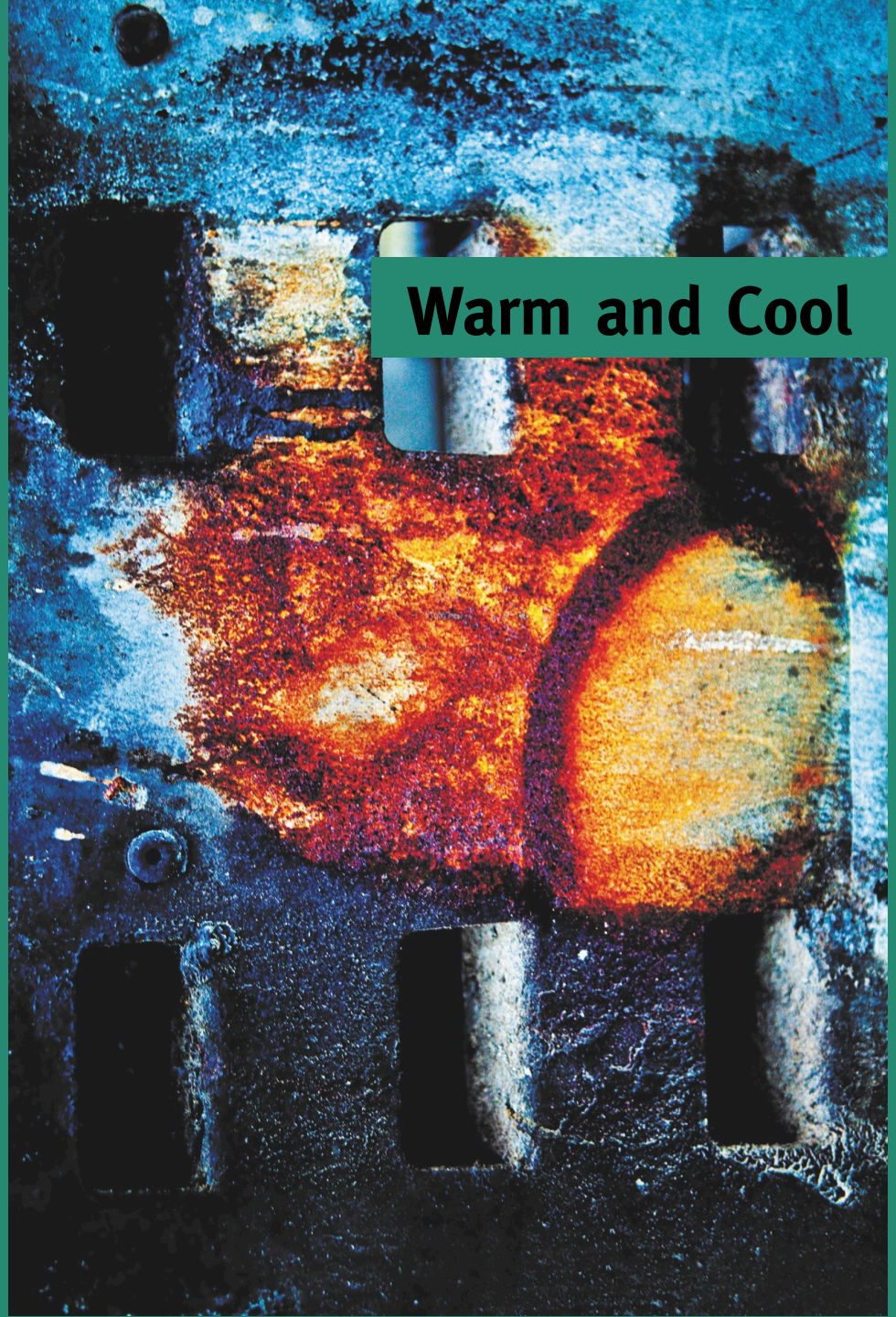
CMYK

Digital color space for printing

Grand Tetons Barns: The John Moulton Barn on Mormon Row at the base of the Tetons

Jon Sullivan

From the CMYK page on Wikipedia

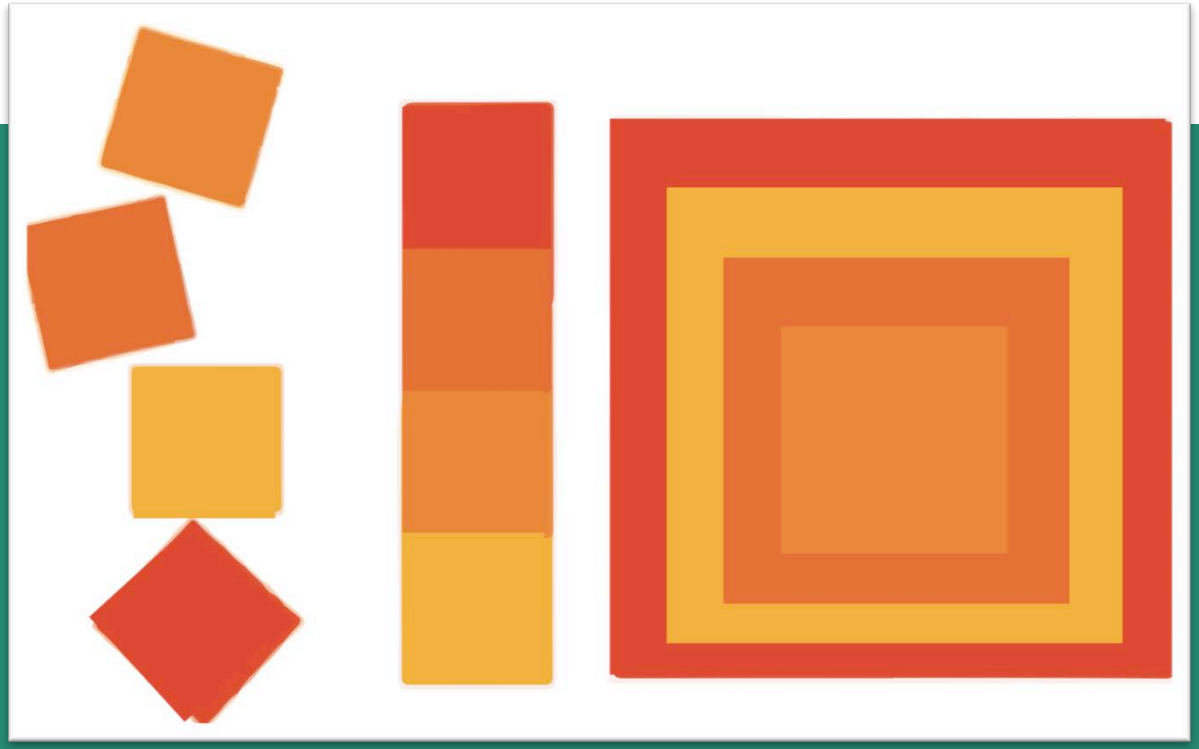


Warm and Cool

Cool colors recede into the background while warm colors seem to pull forward.

Tiffini Myers, 2013

Color Field Studies



Josef Albers demonstrates how colors are relational in his many paintings of nested squares. See Richard Nelson's *Albers Homage to the Square: An Explanation* on Vimeo.

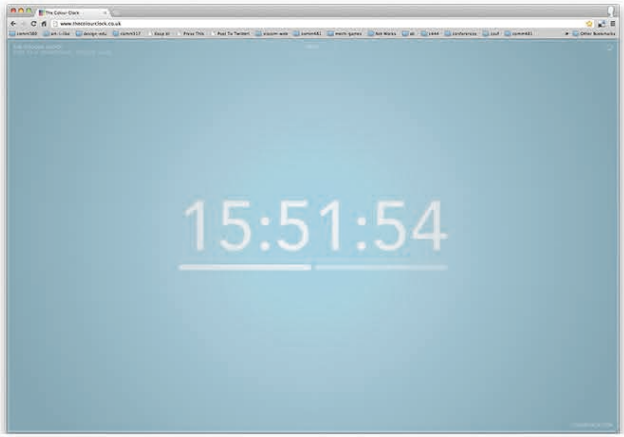
Simultaneous Contrast

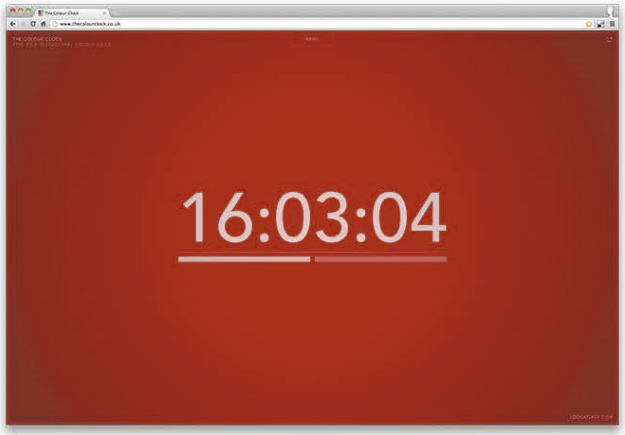
Josef Albers illustrated his idea of halation, or simultaneous contrast, when complementary colors are juxtaposed. Notice how the edges where the blue and orange hues meet seem to vibrate in this image.

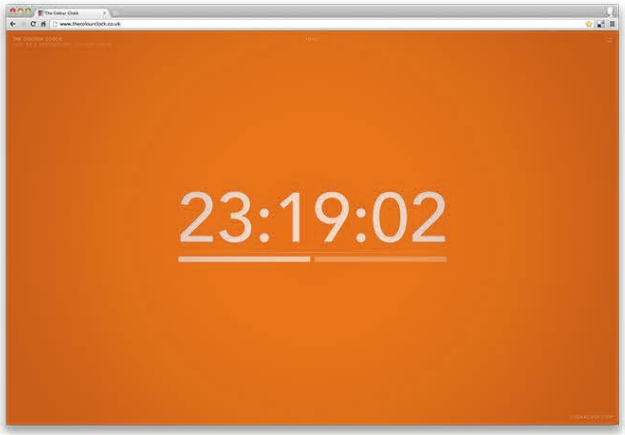
Tweeting Colors

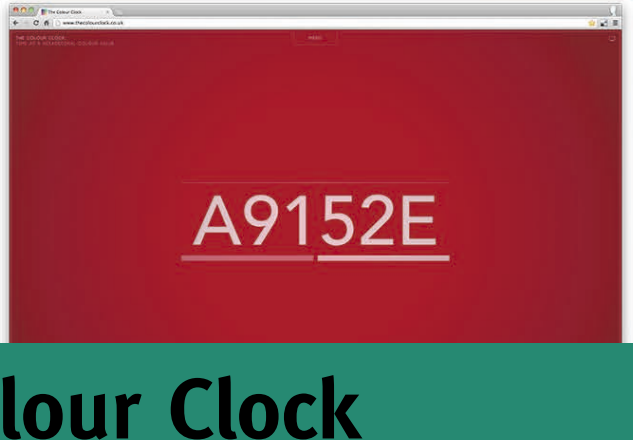
Brian Piana

Twitter messages are transformed into a series of colors in this work of net art where color is the subject of the art work.









Colour Clock

Jack Hughes

The time of day is translated into a series of colors in this web designer's color project.

Download work files from www.digitalart-design.com

You'll create harmony and simultaneous contrast using Hue adjustment layers. You'll also learn about correcting colors using Levels and Hue adjustments on a digital photograph. Finally, the screencast for this chapter demonstrates applying color to a black and white image.

WHAT YOU'LL MAKE

Chapter 6