


## Color for Designers

## Ninety-five things you need to know when choosing and using colors for layouts and illustrations

Jim Krause

## New Riders

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## COLOR FOR DESIGNERS

## INTRODUCTION

Say you pull into a service station with an engine problem. And that it's your lucky day. A mechanic with an unmistakable air of mastery strides out of the garage, opens the hood of your car, listens briefly to the engine, asks you a couple questions about its behavior, nods knowingly, and gives a wink as if to say, Not to worry, I'll have you on the road in a jiffy. Clearly, the expert mechanic's intuition has already zeroed in on the one or two fixes that will almost certainly handle the issue.

Relief fills your mind, and also the questions, What, exactly, fuels this expert mechanic's problem-solving, mystery-dissolving, and confusion-absolving intuition? And why can't I even begin to figure out a problem like this on my own? This answer, of course, is simply that the skilled mechanic has an abundance of two things that most of us lack completely: knowledge and experience related to the inner-workings of automobile engines.

Engines and color, as it turns out, have something in common. Both seem mysterious, complicated, and often troublesome to those of us who have not yet learned how they operate. And while this book (as you probably suspect) won't help you one bit when it comes to dealing with under-the-hood automotive issues, it is specifically designed to do away with the sense of complication, intimidation, and befuddlement many artists feel when working with color—graphic designers, Web designers, illustrators, photographers, and fine artists included. And we're not just talking about beginner- or intermediate-level practitioners of the visual arts here: Many are the experienced art professionals who demonstrate great proficiency in nearly all aspects of their craft, but still claim only a tentative feeling of know-how when it comes to choosing colors for-and applying colors to-their creations.

In a nutshell, then, I created Color for Designers as a book that aims to replace mystery, intimidation, and befuddlement with knowledge, confidence, and the intuitive prowess necessary to accumulate the experience you'll need to achieve true creative poise and proficiency when working with color. And I should point out, right here, that competence with color requires a good grasp on only a few easily understood fundamentals—basic principles that can be applied far and wide to create aesthetically sophisticated, visually engaging, and communicatively effective palettes for layouts, illustrations, logos, and works of fine art. In fact, once you make it through the first three chapters of this book-chapters dealing with the three components of color (hue, saturation, and value), the crucial importance of value (the lightness or darkness of a color), and a handful of color-wheelbased palette-building strategies-you should be well equipped to understand the rest of the book's content and to begin applying what you've learned to projects of your own.

Color for Designers presents each of its 95 topics on spreads of their own. To me, this sets a nice, even pace for the flow of the book's information and ideas while also making it possible for readers to either sit down and studiously read the book from beginning to end, or to pick it up on a whim and thumb through stand-alone subjects presented on randomly selected spreads. (That said, readers who are relatively new to the subject of color may want to approach the book in the traditional beginning-to-end manner-at least the first time through-since material covered early on tends to be referred to and expanded upon as the book progresses.) If you want to give yourself a good idea of how this book's subject matter is organized and how broad its coverage is, the table of contents, on pages 4 and 5 , does a good job summing things up.

Once you've had a chance to look through a few spreads of Color for Designers, you'll see that its content is generally presented as more or less equal
parts text and imagery. The text is as straightforward and easy to understand as I could make it (there's a glossary at the back of the book that you can refer to if you do come across unfamiliar terms). And, as with this book's Creative Core companion volume, Visual Design, the text strives to be pertinent and practicalthough not without the occasional ironic or cheeky insert. As far as the images go, I hope you'll find these to be as informative, concept enforcing, and idea sparking as they are varied and enjoyable to look at. In any case, I thought it was important to include lots and lots of images to go along with the book's textual info since, after all, this is one book that's aimed squarely at a demographic of visual learners.

The illustrations in Color for Designers-as well as the digital documents for the book itself-were produced using the same three programs most designers, illustrators, and photographers use to create their own
works of design and art: Adobe InDesign, Illustrator, and Photoshop. Few step-by-step instructions on how to use these programs are offered in this book, and the reason for this is simply that the specifics of how any particular version of a program performs its functions will likely change during what I hope will be the shelf life of Color for Designers-a book filled with colorrelated principles that began taking shape as soon as cavemen were able to find enough different berries to smash and stones to grind to fill a color wheel with hues. So, if you come across a software tool or treatment in Color for Designers that you'd like to try out on projects of your own, take a lookif necessary—at your program's Help menu and find out how things work (none of the digital tools and treatments mentioned in the pages ahead are overly complex, so learning them shouldn't be too much trouble).

Thank you, very much(!), for taking a look at Color for Designers. This is my fifteenth book on subjects dealing with design and creativity, and color is something I never get tired of exploring, experimenting with, applying to my own works of design and art, and writing about. I hope you enjoy this book, and that it goes a long way in clarifying and expanding your understanding of how colors can be selected and applied to both personal and professional projects.

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## CREATIVE CORE B00K02

Color for Designers is the second book in the New Riders Creative Core series.

The first book in the series, Visual Design, deals thoroughly with principles of aesthetics, composition, style, color, typography,
and production.

A third title, Lessons in Typography, is due
on the shelves in 2015. Keep your eyes open for more offerings from this series in the future.
${ }^{62}$ CHAPTER 4

# Practical Palettes <br> for Designers 

## PRACTICAL PALETTES FOR DESIGNERS

## 24 SINGLE COLOR

Being limited to a single color of ink (a client's official PMS color, for example) and white paper is pretty much the most restrictive guideline a designer is likely to encounter when developing the look of a printed piece.

The good news is that this really does not need to
be seen as a restriction at all. You can create eyecatching layouts, images, and illustrations with just one color of ink. True, the color needs to be dark enough to stand out clearly against its white backdrop, but given a deep enough hue, the possibilities are many: The colored ink could be broken down into various percentages to create a monochromatic palette, the ink could flood the page at full opacity with typographic and illustrated material either reversed to white or printed at light percentages, and, of course, the ink could simply be used to color a layout whose aesthetic structure and/or textual message are compelling enough to catch and hold viewers' attention.

Photos and illustrations can certainly be printed with one color of ink, especially if they feature a value structure that is bold enough to present itself clearly using something other than black ink.

Be sure to think through the thematic ramifications when pondering the possibility of printing certain images with a single color of ink. You may want to think twice, for instance, before printing a halftone of a banana using bright purple ink (which may or may not be a bad idea-it all depends on whether or not your piece's message is meant to be silly, serious, quirky, or commonplace).

Whatever the case, accept the challenge the next time you're asked to design an eye-catching printed piece using a single color of ink. There are few better ways of proving one's worth and talent as a designer than by rising above the perceived limitations of something like a one-color print job and coming up with topnotch visual material.


PRACTICAL PALETTES FOR DESIGNERS
25 BLACK PLUS ONE COLOR


Designers are regularly asked to come up with layouts that are limited to black and a single color of ink. Business cards, brochures, and posters, for example, often fall into the category of jobs that are to be printed with black and one spot color.

Some designers see limitations like these as restrictions.

Other designers see limitations like these as grand opportunities to demonstrate the power that effective composition, smart color usage, and strong thematic components have in producing intriguing and compelling visuals.

So, which kind of designer are you?

## PRACTICAL PALETTES FOR DESIGNERS

## 26 PARING COLORS

Take seriously the potential for aesthetic beauty and thematic intrigue even when working with as few as two colors of ink.

Generate connotations of visual energy by combining a pair of saturated hues (just be wary of pairing bright hues with similar values since this can cause
the unpleasant visual buzz mentioned on page 78).
Also convey visual charisma through strong levels of contrast between the hue, value, and/or saturation of any two colors that you use together.

Lessen projections of aesthetic vigor by restricting the levels of saturation in a pair of colors, and also by limiting differences between the two hues' values.

In terms of printing, keep in mind that there are at least a couple of ways of inflating the appearance of a twocolor print job. For one thing, you can always expand each color of ink into a set of monochromatic relatives
by including lighter tints of each color. And—because printing inks are transparent-you may be able to lay your colored inks on top of each other to produce additional hues. A yellow ink, for example, when printed on top of a blue ink, will produce green (exactly what kind of green it might yield might be difficult to predict without paying the printer to run some tests prior to the actual press run, but it will yield a green).



## 27 THERE ARE NO BAD COLORS



Do the trio of colors shown at top left make a good set? Yes. And no. It all depends on how the designer chooses to present each color in terms of its saturation and value. Using Adobe Illustrator's Color Picker panel it was possible to find variations among these three fully saturated colors to produce the seven color schemes featured above and right.

In design, colors that are perfectly good for one project might be perfectly terrible for another. A deep and vibrant fuchsia that functions beautifully as the corporate color for a contemporary hair salon, for example, might fail miserably if it were applied to the business card of an industrial welding firm.

So really, in the world of commercial art, there are no bad colors-just bad applications of color. This goes for individual colors as well as for full palettes of colors. In short, the measure of a color's worth—or a set of colors' worth—lies in how well it appeals to its target audience, how effectively it boosts the client's message, and whether or not it's notably different from the color-or the colorsbeing used by competing companies. (See Know Your Audience, page 152, for more about seeking effective colors for client work.)


If you've decided on the colors you'd like to apply to a multi-color layout or illustration, and have concluded that the above-mentioned criteria for client-based success has been satisfied by your selection of hues, then there's another principle of effective color usage you'll want to keep in mind as you work: There are no bad combinations of colors-only bad applications of saturation and value.
whatever adjustments are necessary to the value and/or the level of saturation of each of the palette's members to ensure the hues look good together and function well as a set. (Chapters 2 and 3 contain plentiful information and ideas about finding and assessing attractive and effective relationships between hues.)

It's true. Any set of hues can be made to work effectively as a palette: It's just a matter of making

## PRACTICAL PALETTES FOR DESIGNERS

## 28 SEEDING MULTICOLOR PALETTES

Here's a practical, reliable, and versatile way of coming up with palettes that contain multiple hues.

Start with a single color-a hue that seems capable of contributing to your project's aesthetic and thematic goals. This starter color is your seed hue, and from this hue your palette will grow.

Locate your seed hue's spoke on the color wheel. To do this-especially if you have chosen a particularly dark, light, or muted version of a color-you will need to employ your art instincts and your knowledge of color to figure out from which spoke of the color wheel your seed hue originated. For example, if your seed hue is a muted pea green, then it probably came from the yellow-green spoke of the color wheel since yellow-green, when muted, becomes what most people consider pea green. (In the end-whether or not your color instincts are well developed at this point-your best guess at the origins of your seed hue will be perfectly sufficient: Scientific accuracy is not a requirement here.)

Next, explore relationships between your seed hue and other colors by employing it as a startercomponent of the palettes described in the previous chapter: monochromatic, analogous, triadic, complementary, split complementary, and tetradic. The visuals on the facing page illustrate how you can employ pea green as the seed hue for six different kinds of palettes.

With practice, patience, and experience, your speed and skill at exploring palette possibilities in this way will improve greatly. Also, if you currently use a visual color wheel as you ponder the possibilities of various palettes (and there's nothing wrong with this practice), likely you will find that eventually you'll be able to perform most or all of your palette-building brainstorming mentally— with little or no help from visual guides.


This muted pea green was chosen as the seed color-the starter component, in other words-for each of the six palettes featured on this page.




Don't let looks fool you. There is often an easily understood rationale behind complex-looking palettes.

Take the hues in this illustration as a case in point. The palette employed here began as a single bluegreen seed hue (learn about seed hues on the previous spread). This seed hue became the founding member of a triadic palette. After that, the triad expanded to include at least one darker, lighter, brighter, and more muted version of each of the palette's members before being applied to this spread's illustration. And then, in the interest of generating further connotations of visual complexity, several of the composition's elements were made transparent and allowed to overlap to produce additional hues.

Don't feel intimidated the next time you're tasked with developing a visually complex palette. Start with a seed hue and let things grow (and grow and grow) from there. And also feel free to throw in whatever extra hues you feel like adding (see Whatever Looks Good, page 60, for more on this idea).


When is it time to stop adding-or removing-colors from a palette? When the palette has exactly as many colors as it needs to do its job-no more and no less. And when is that? That, of course, is up to you to decide.

## PRACTICAL PALETTES FOR DESIGNERS

## 30 ESTABLISHING CONNECTION

Digital tools make it easy to establish visual links between color images and other components of the layouts in which they appear.

If you've worked much with Photoshop, Illustrator, or InDesign, then you probably know about the Eyedropper tool. Use this tool to identify and borrow colors from specific parts of an image and apply them to compositional elements elsewhere.

You can borrow a single color, a pair of colors, or an entire collection of hues from an image. You can also employ a color borrowed from an image as a seed hue for a layout's entire palette.

Though it's not always necessary or desirable to borrow and apply colors from a layout's image(s), it is a strategy worth considering when looking for ways of helping an image look at home within the context of a particular layout or work of art.



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LOGO


## PRACTICAL PALETTES FOR DESIGNERS

## 31 DANGEROUS COLOR

On this spread: Four cautionary axioms relating to specific color issues, each followed by a few words in support of or against throwing caution to the wind.

DO NOT confuse the eye by letting hues compete for attention. The eye might feel an uneasy tug-ofwar when, for example, contemplating a layout that features a brightly colored headline, a brightly colored illustration, and-you guessed it-a brightly colored backdrop.

EXCEPTION: Go ahead and use colors that fight and bite each other for attention if you're creating a work

DO NOT allow bright complementary hues of the same value to touch. Intense complementary hues that share both a value and an in-common border are notoriously capable of producing an almost palpable visual buzz where the colors meet. Most people find this visual vibration anything but pleasant.

EXCEPTION: If you're trying to capitalize on a resurgence of the 1960s psychedelic look, then yes, by all means, let the same-value complementary hues of your artwork interact with as many shared boundaries as you like. of art or design that is meant to generate notes of tension, chaos, or celebration gone wild.

DO NOT let poor value structure play a part in any work of design or art you create. Value is critical in letting the eye and the brain figure out what's being seen. Good value structure also helps guide viewers' attention in sensible ways throughout the components of layouts and illustrations.

EXCEPTION: There are few-if any-exceptions to this principle. Value simply must be a primary consideration when applying color, and you must make conscientious choices when establishing the values that you'll apply to any work of design or art.


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