

Eye for Design: Essentials of Color in Print Design **Part II: Practical Application of Color in Print Design**

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In Part I of the Essentials of Color in Print Design, we examined some basic concepts that will arm the librarian/designer with a fundamental understanding and sensitivity toward designing with color. In this second half of the article, using an example project to illustrate the process, we will tackle some basic technical know-how and issues associated with the production of color design so tools can be used most effectively.

Getting Started

The sample task here is to create some flyers to generally market the library. Before opening Photoshop or any other design program, get prepared. Spend some time brainstorming and developing a few possible strategies for achieving your overall vision. Sketch some thoughts out on paper and gather any needed text or images and have them on hand. Taking the time for such efforts allows the designer to execute ideas purposely and more efficiently in the production phase.

Once I settled on a concept for the sample project, I drew up a couple of rough design schemes and assembled a layout for my image and text components. I developed a simple plan to combine a picture of a brain map, one that I have already doctored a bit to resemble a satellite landscape image, with the slogan “explore uncharted territories” at “MyCollege Library.” Now, I want to develop an effective color scheme—one that helps to deliver the narrative of navigating a cognitive terrain, reinforce my theme, and grab the audience’s attention.

Generating a Color Scheme

There are a number of ways you can generate a color scheme based on your needs. Most people have at least a color or two in mind when they are conceptualizing a project, and you can build a palette based on those foundation colors by applying what you already know about color relationships and how colors works in combination with one another (see Part I). Additionally, there are a number of free online resources available for creating color schemes. To peruse a comprehensive list of color palette tools, please see the Smashing Apps article “50 Best Free Tools to Create Perfect Color Combinations” (<http://www.smashingapps.com/2009/12/17/50-best-free-tools-to-create-perfect-color-combinations.html>).

For this sample project, I used the very cool Adobe Kuler* (<http://kuler.adobe.com>) to generate a color palette. I had previously settled on base color for my design, a hue of light green, which I laid on top of the image of the brain map. In Photoshop, I sampled that light green color by using the Eyedropper tool via Color Picker (Figure 1). In the Color Picker window, I was able to determine the necessary color code (116/187/133), which can be plugged into Kuler and other tools.

Working in the digital environment with design software, you will inevitably encounter a lot of jargon, e.g., “RGB” or “CMYK”. These two particular terms refer to systems of color that are available, and I will explain

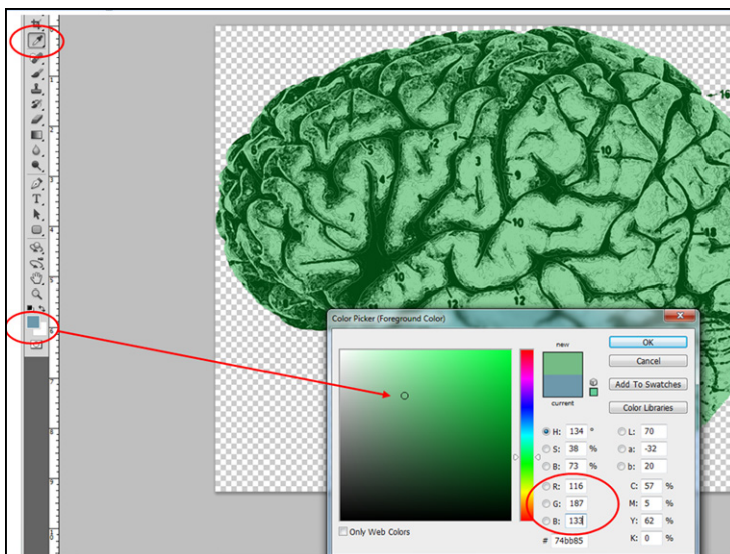


Figure 1:
In Photoshop: Using the Eyedropper/Color Picker tool to sample a light green color and retrieve the RGB color code

these systems in more detail in the next section. For now, just know that each model represents a different way of describing and engendering color, and has a specific *gamut*, or range, of colors. You will notice each system has a set of numeric values that designate a specific color code. Shifting these values will alter the color. Additionally, know that each numeric code works like a unique color identifier and you can plug these codes into various software applications to generate these specific colors for your project.

In Kuler, I entered the RGB code 116/187/133 in the corresponding boxes under the “Base Color” option for the desired shade of light green (Figure 2). Then, because I want an attention-grabbing theme, under “Select a Rule,” I selected the “Triad” scheme (see Part I for an explanation of this and other themes), which will offer a palette mix replete with contrasting colors. Finally, after some adjustment of the hue/saturation/value sliders, I found an appropriate color scheme for my poster. I took note of each color’s RGB color code for later use in Photoshop.

Production Modes: RGB vs. CMYK

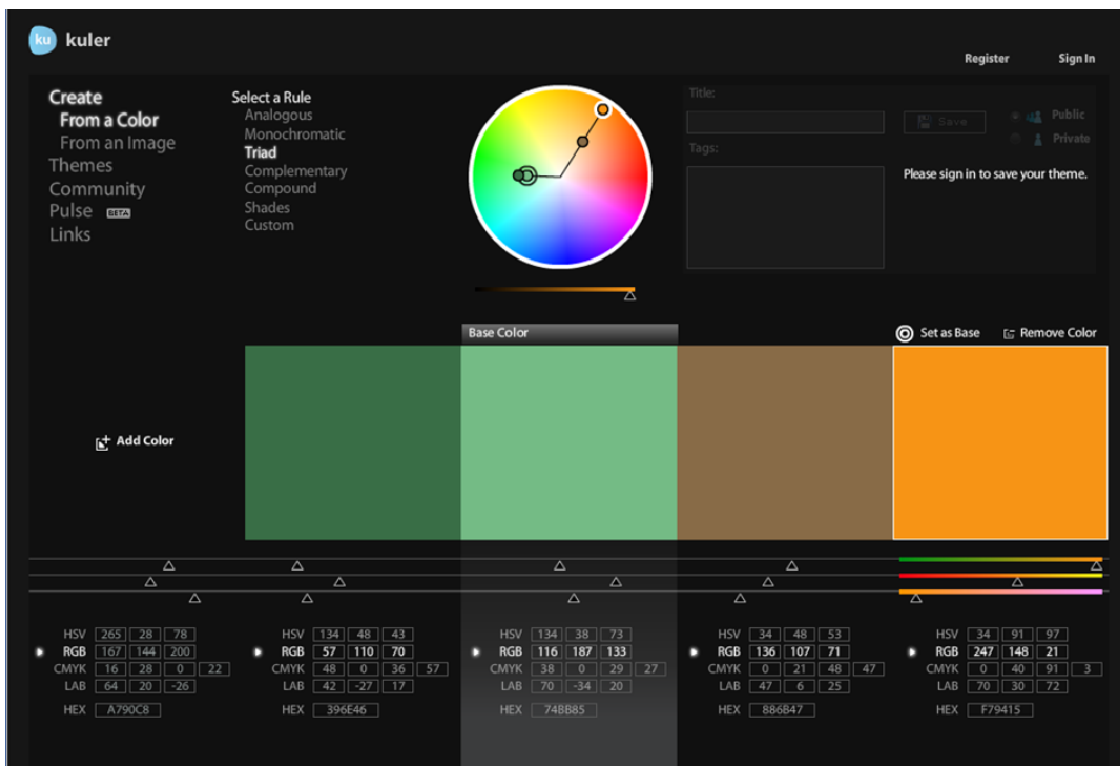
When you are ready to begin work in your design or imaging program, you first need to make a decision about what *production mode* you wish to work in. Generally

designers using color will work in RGB or CMYK mode, though there are other production mode options (e.g., HSV).

In the RGB (red/green/blue) model, colors are generated by light, as in the light of your computer monitor. This *color space*, or set of colors included in a single color system, is also utilized by video monitors, projectors, web images and most digital photography. Each different color you see on your monitor is the combination of red, green or blue in varying values, ranging from 0 (no color) to 255 (full color).

The CMYK (or cyan/magenta/yellow/black) color space is the model used in color printing, and its numeric values range from 0 to 100 in percentage (%) for each color. If you have ever replaced the inks on your desktop printer, you may recall these colors correspond to the colors of the ink cartridges. CMYK is currently the industry standard for commercial printers as well, but it has fewer colors in its gamut than RGB. Thus, CMYK does not have a matching color for every RGB color, and when converting from system to another a color shift may occur (see Figure 3 for an example of this).

Figure 2: Kuler Interface



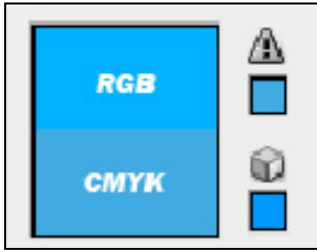


Figure 3:
A shade of blue in RGB and its closest match in CMYK; the CMYK shade of blue is less saturated.

There is actually a debate among designers as to what is the more preferable mode for production. Some work in CMYK from start to finish to avoiding dealing with a color shift. Others argue that working in RGB allows more flexibility throughout the production process and beyond. Not only are there more image manipulation options open to those working in RGB, but RGB also preserves the most amount of data possible for final the image and can then be used in other formats, like for the Web. Adobe recommends working in RGB until you finish editing your image, then converting to CMYK, and making any necessary corrections (of course in Adobe applications, you can set your production mode to RGB, but preview your image in CMYK, which helps).

Going back to the sample project, I chose to work in RGB because flexibility of image use is important to me. While I had a general plan going into production, I experimented a bit with the different elements, including my color scheme inside the program, which provided me

with concrete visuals. Eventually satisfied with the image, I began to tweak the color settings.

Color Adjustments

There are numerous ways to fine-tune the color in your project and any professional grade software will offer a variety of advanced options (Figure 4). For our purposes, let’s keep it simple and examine some key controls. Knowing about color’s three, main, inter-related properties--hue, value, and saturation--will help you make informed choices about what adjustments you wish to make. *Hue* refers to the name of a color on the color spectrum (e.g., “red” or “green”). *Value* describes the lightness or darkness of a color—for example, black, white, and gray do not have hue, but do have value. Adding black, or *shade*, to a hue will change its value by making it darker, while adding white, or *tint*, to a hue will change its value by making it lighter. Combining gray with a spectral color creates *tone*. *Brightness* and *contrast* settings will allow you to adjust these tonal values. Finally, *saturation* conveys intensity, or how bright or dull a spectral color may be and is related to the purity of a hue. Ultimately, the best way to learn about these and other controls is to play with them!

For the sample project, I opted only to boost the contrast a bit. Then, I created a duplicate image and converted the copy to CMYK. In the CMYK version, I did, in fact, observe some minor color shift, so I tweaked my color settings once more before attempting to print.

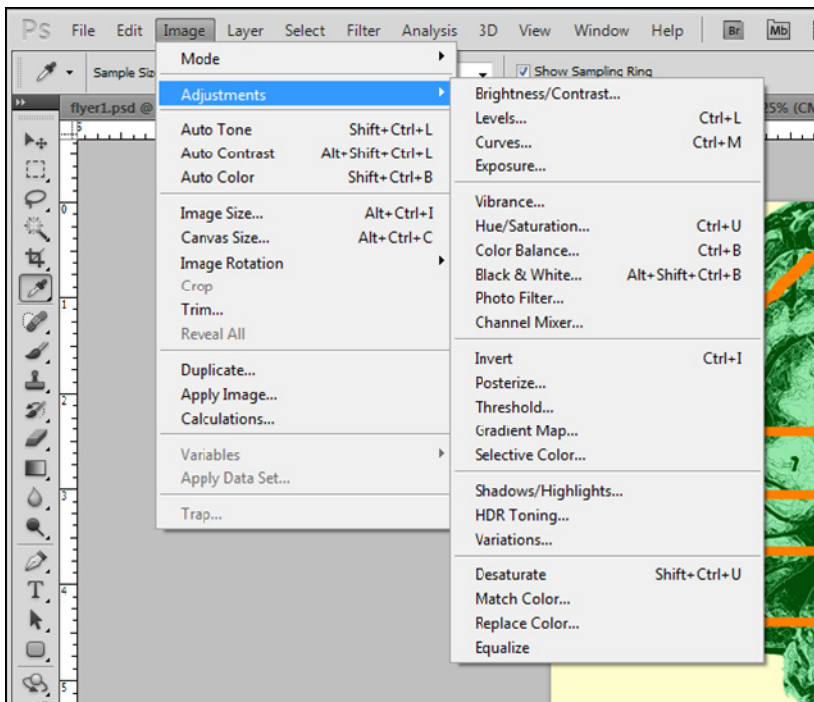


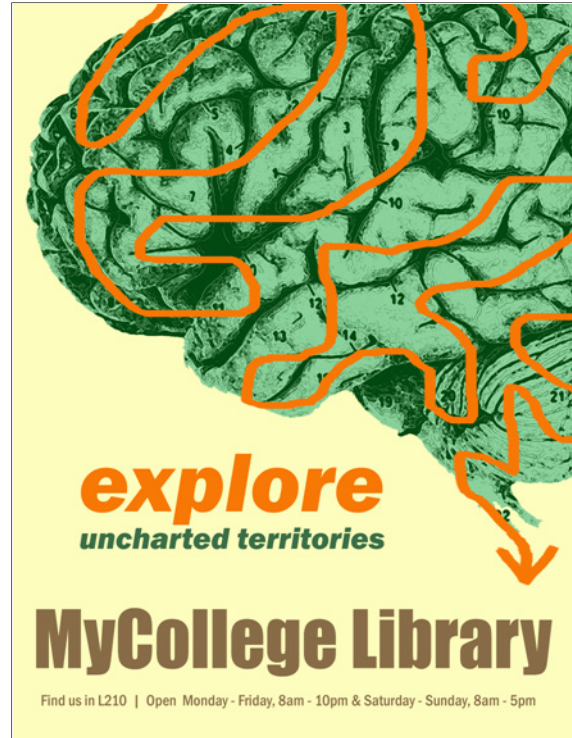
Figure 4:
Professional grade design and imaging programs, like Photoshop, will offer numerous ways to tweak your color settings.

The Proof Is in the Print

While printing occurs in the last stage in the process, it is actually one of the first things you should consider before you begin the production process. If you are having your project printed elsewhere, be sure you find out in advance what are the specifications to submit a print-ready design. Ask what is the preferred file format (e.g., TIF, PDF, PSD), resolution (e.g., 300 ppi), color mode (e.g., CMYK), and if there is anything else you should know beforehand.

If you are a DIY kind of gal or guy and decide to print from a color desktop printer in your office, shoot off a test image, or *proof*, to see how the project looks. Remember, colors can change in appearance as you move between color spaces and transfer images between different devices such as scanners, monitors, and/or printers. Expect some variation.

Now that you have a better understanding of color schemes and RGB codes, the meaning of key adjustment settings and the challenges of working in color modes, you too can navigate this technical terrain! The best way to learn and keep learning, of course, is to create, to experiment, to traverse the vibrant, digital landscape, and “explore uncharted territories” of color in print design.



*(Kuler was recommended to me by fellow librarian Kristen Mastel from University of Minnesota Libraries).

(Prezi...Continued from page 7)

Alternately, you could start off using one of the many prezis that have been designated as “reusable” by their creators. Go to the “Explore” tab, search for prezis on a topic of interest, and then check the “Show only reusable” content check box. Select a prezi you want to copy and then from the presentation screen click the “Make a copy” button. A copy of the prezi will be added to the “Your prezis” tab and from there you can access and edit it.

Sharing Prezis

Prezi provides a variety of options for sharing your content with others. First, you can make your prezi “Public” so that others can find it by searching in the “Explore” tab. You can also select the “Public & allow copy” option if you want to make your prezi reusable by others.

Whether public or private, you can send a direct link to selected individuals to view your prezi. To do so, simply select the “Edit together” button from the button menu on the presentation viewer page and fill in the e-mail address to allow the recipient to view your prezi

online. An account is not required for others to view your prezi.

Prezi Meeting

A second option on the “Edit together” window allows you to send an e-mail with a link inviting collaborators to join you in a “Prezi Meeting”. When in this mode, teams can work together in real time (or not) to edit and update a prezi. In order to co-edit, however, all users will need to have a Prezi account.

Conclusion

If you are looking for a flexible tool that may help you spiff up your presentations and possibly engage your audience in a new way, I would recommend that you give Prezi a try. Do keep in mind that working with Prezi requires you to conceptualize your presentation materials in a different way than you may be used to if you typically work with PowerPoint. As a result, it may take some exploration and practice to learn how to use Prezi effectively. However, if you approach it with an open mind and a willingness to engage in a bit of creative experimentation, you’ll be developing interesting and engaging presentation materials with Prezi in no time at all!