

BIPC DIGITAL IMAGING STUDY GROUP

ASSIGNMENT 2001-07

SUBJECT: Gradient tool, Posterizing, Introduction to Color Management

PURPOSE: To study the gradient tool and posterizing. Then use them to make color adjustments.

Gradient tool:

This tool implements the shading of a selection in an arbitrary straight-line direction. The shading color varies linearly from the foreground color to the background color. Shading starts at the beginning of the direction line and terminates at the end of the direction line.

Procedure:

- 1- Select the region to be shaded. The selected region can have any shape.
- 2- Using the eyedropper (color choosing tool), choose the terminating color. This color now appears as the foreground color.
- 3- Shift the foreground color to the background color by clicking the little arrows on the tool bar (near the bottom).
- 4- Choose the beginning color using the eyedropper tool. This color now appears as the foreground color.
- 5- Choose the gradient tool on the tool bar.
- 6- Using the mouse, move the cursor to the location where the gradient is to start with the foreground color.
- 7- Holding down the left mouse button, move the direction line from the starting point to the terminating point where the background color will appear.
- 8- Upon releasing the mouse left button, the entire selection area will be shaded starting with the foreground color and terminating with the background color.

Posterizing tool:

Given a selection, this tool converts all colors in the selection to a user chosen fixed number of color levels starting with two levels. (Max number is 255 which is the number of levels for any unposterized 8-bit color image.)

Procedure:

- 1- Make a selection to be posterized.
- 2- Choose IMAGE, ADJUST, POSTERIZE.
- 3- A window appears indicating the number of levels. Enter a number of levels or use the up/down arrow keys to change the entry.
- 4- Use the preview to determine your choice for the number of levels. When satisfied, click ok.

Introduction to color management:

Color management deals with getting the largest range of colors for the monitor and printer while matching the printed image with the monitor display as much as possible. The range of colors for any device is called its "gamut". AND, no two devices have the same gamut which causes many problems. Fortunately, much research and study has resulted in methods which give great color even though an exact match cannot be realized.

Procedure: (In general. The exact details vary from machine to machine and software package to software package.)

- 1- The monitor must be calibrated. In Photoshop, the program "Adobe Gamma" is used for calibration purposes. The program has a "wizard" which sequentially guides the user throughout the calibration process.
- 2- The color space to used must be selected. In PS, Adobe RGB(98) is well suited for color prints. For web images, many suggest sRGB.
- 3- For each digital image software package, there is a collection of items which affect color management. See your manual for details (such as RGB Setup, Profile Setup, CMYK Setup, Grayscale Setup, and so on ad infinitum).
- 4- Make a test print using color test wedges. Compare with the monitor display in the light used when digital imaging is performed. If possible, keep the light the same at all times.
- 5- If your test print is acceptable, you're lucky. If not, then tweak the adjustments in the software provided by your software. Use the color wheel to try to understand what will happen when changes are made. Keep trying. It's tough but worth the effort!!!

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