

BIPC DIGITAL IMAGING STUDY GROUP
ASSIGNMENT 2002 - 13
SUBJECT: Blending Modes

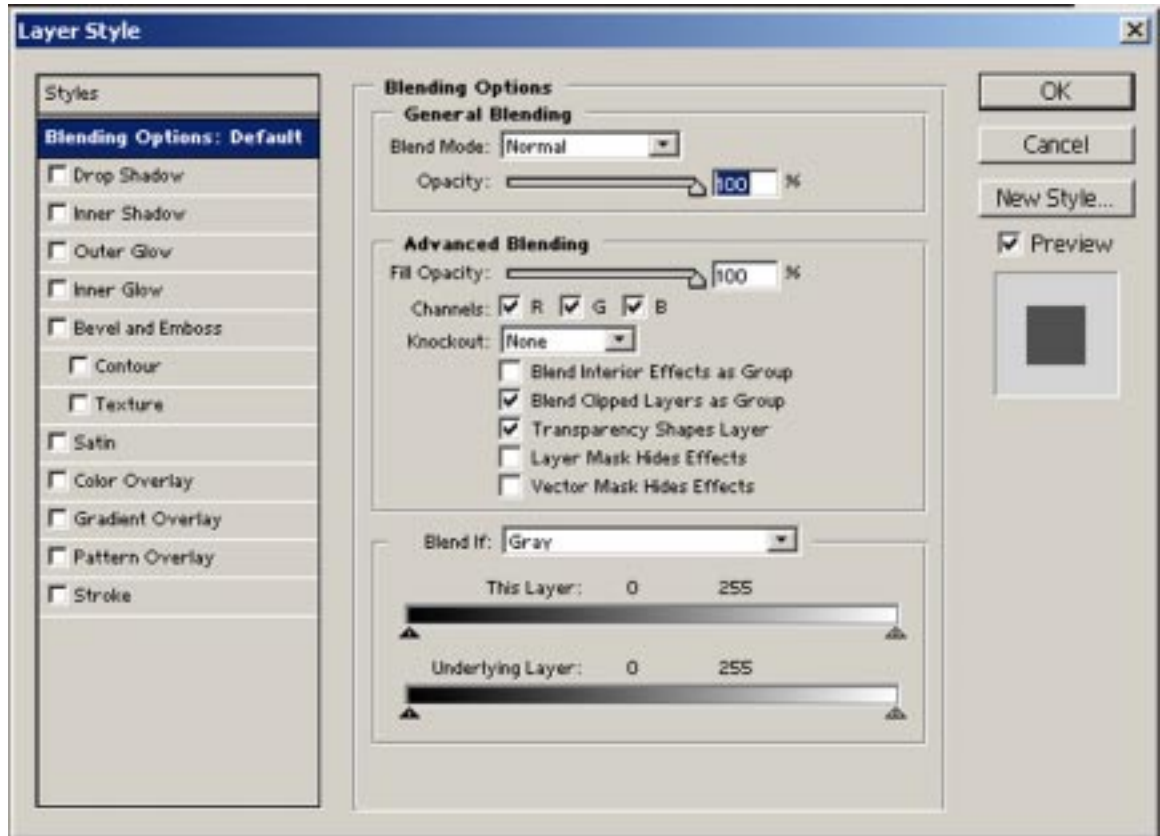
CHALLENGE: To remove some of the mystery about the use and benefits of Blending Modes in Photoshop.

FUNCTION: Blending modes mathematically change how layers interact with the layer below them. They are a great aid for the retoucher to quickly improve image tonality.

One Way to Invoke Blending Modes (there are several ways):

Photoshop 6: [Alt] click the New Fill or New Adjustment Layer icon to select the Adjustment Layers blend mode.

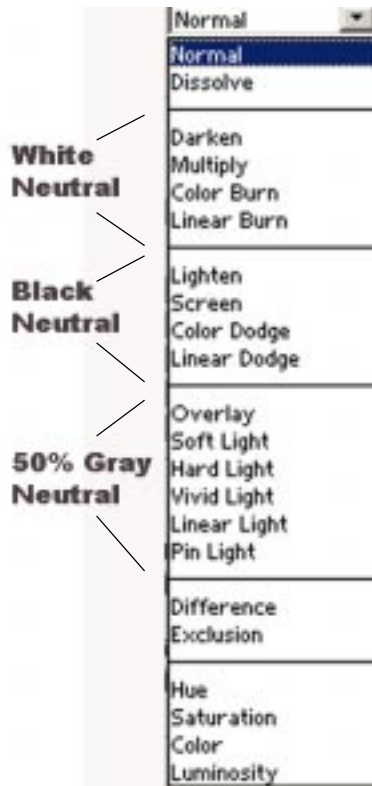
Photoshop 7: Add an Adjustment Layer. Then click the options bar and select Blending Options. This screen will appear:



The blending sliders let you control which pixels from the active (Blend) layer and which pixels from the underlying visible (Base) layers appear in the final image. For example, you can drop dark pixels out of the active layer or force bright pixels from the underlying layers to show through. You can also define a range of partially blended pixels to produce a smooth transition between blended and unblended areas.

Choosing Gray from the Blend If pop-up menu lets you specify a blending range for all channels; choosing an individual color from the pop-up menu lets you specify an individual color channel (for example red, blue, or green in an RGB image) to specify blending in that channel.

When we open the Photoshop 7 Blend Mode box these choices appear:



So, when we consider these choices and the choices of style we see that many variations are possible.

How to Learn about Blending Modes:

At least two of us feel that explanation of how the modes work (multiplying color numbers, etc.) doesn't get you very far. We think that the way to appreciate the use of blending modes is to see actual examples of the wide variety of different applications. In this respect, they seem to be quite different from techniques such as selection, masking, tonal adjustment, color adjustment, etc., where an understanding of the mechanics, apart from examples, will get you a long way.

For photo retouching

Multiply darkens the entire image and is useful to add density to highlights and midtones. It is especially useful for overexposed or very light images.

Screen lightens the entire image -- use it to open up/lighten dark image areas and to bring out tonal information in underexposed images.

Overlay, *Soft Light* and *Hard Light* lighten the lights and darken the darks, as they are a mixture of *Multiply* and *Screen*, and all three are useful to boost image contrast. *Hard Light* adds the most contrast, *Soft Light* adds the least contrast, and *Overlay* is the average.

Underexposed Image - Method No. 1

Add a Curves Adjustment Layer and change the Blending Mode to Screen.

Ref: [1] p. 51

Underexposed Image (Contrast Mask) - Method No. 2

1. Layer/Duplicate Layer. Name it Contrast Mask.
2. Image/Adjust/Desaturate.
3. Image/Adjust/Invert.
4. Right-Click on the Contrast Mask layer. Select Blending Options. Select Overlay Mode.
5. Filter/Blur/Gaussian Blur - usually a value between 10 and 30.

Ref.: [2]

Note: A Contrast Mask will also correct for excessively high contrast.

Dustbusting(dealing with random dust specks on a variety of backgrounds)

1. Add a new layer.
 2. Activate the Blur tool and set its options to 100% Pressure and Use All Layers. To eradicate light specks, set the Blur Tool's Blending Mode to Darken. To make dark specks disappear, set the Blending Mode to Lighten.
- Ref: [1] p. 94

Knockout Advanced Blending Options

The Blending Options screen has a pop-up menu called Knockout. The Knockout options allow you to specify which layers punch through underlying layers to reveal content from other layers. For further information see Reference [3].

A comprehensive tutorial on Blending Options

Reference [4] demonstrates in detail many different effects that can be achieved using Blending Modes. Some of the topics are Fill Opacity, Channels, Knockout, Blending Groups, use of Sliders, fading one layer into another (your chance to play with Ducky again) and altering or removing backgrounds. Recommended reading.

Another comprehensive tutorial on Blending Options

Reference [5] also demonstrates in detail many different effects that can be achieved using Blending Modes. Some of the topics are Blending Range, Fill Opacity, Knockout, Grouping Blend Effects and Channels. . Recommended reading.

References:

- [1] *Photoshop Restoration & Retouching*, Katrin Eismann
- [2] http://www.luminous-landscape.com/contrast_masking.htm
- [3] <http://www.adobe.com/support/techguides/photoshop/advancedblending/knockout/pdf/knockout.pdf>
- [4] <http://www.planetphotoshop.com/PeteBauer33.html>
- [5] <http://graphicssoft.about.com/cs/photoshoplayers/>
- [6] *Photoshop 7 Artistry*, Haynes & Crumpler, chptr. 31