

# Tom Bugzavich

## Assignment 4

### Blending Modes

Determines how layers applied blend with layers already in the image. Most of the painting and editing tools, as well as each layer offers a menu of blend modes from which you can choose the way new layers will mix with those already there.

Basic terminology used for describing blending effects is:

**Base** - this is what is already there. The one that you are going to paint over, onto, or add a layer on top of.

**Blend** - what you're going to add with your paint tool, or which is already on the layer for which you are selecting a blend mode (the layer will be blending with the layers below it).

**Result** - what you get after you do some "blending."

The Blending Modes are:

**Normal** - This is the default setting. The color applied is the color you get. In some of the color modes, this may be called Threshold.

**Dissolve** - It looks like what you see when a movie does a dissolve into a new scene; there are little speckles of the scene you're leaving mixed with the just emerging colors of the new scene. Dissolve only affects partially transparent pixels.

**Darken** - looks at the two colors, the color already there, and the one you're painting with, and chooses the darker one, whichever it is. No blending. Whichever is darker wins. Which of the two is used will vary across the image according to which is darker at each spot. This I can understand.

**Multiply** - multiplies the base color with the blend color. The resulting color will be darker. Black times any color equals black. White times any color leaves that color unchanged. Light colors have less effect, dark colors have more effect. Repeated strokes with this blend mode produce darker and darker colors.

**Color Burn** - supposed to be the opposite of Color Dodge. What it looks like is, the color applied to light areas is unchanged by the underlying colors, while color applied to darker areas is dramatically darkened.

**Linear Burn** - Uses the color data from each channel, darkens the base color to reflect the blend color by decreasing the brightness.

**Lighten** - reverse of the above. As the new color is applied, if it's lighter than the color already there, it replaces that color. If it's darker than the color that's already there, it is not added.



**Screen** - Makes the light parts a lot lighter, the dark parts a little bit lighter, leaves the black parts unchanged, and nothing gets any darker.

**Color Dodge** - The color applied to light areas is bright, but pale, and the color applied to dark areas is barely visible.

**Linear Dodge** - The inverse of Linear Burn. Uses the color information from each channel to brighten the base color according to the blend color.

**Overlay** - multiplies (darkens), or screens (lightens) the colors depending on the base color. Totally unpredictable; try it and see if you like it.

**Soft Light** - if the color being applied is lighter than mid-gray, the image is lightened. If the color being applied is darker than middle gray, the image is darkened.

**Hard Light** - if the colors being applied are lighter than mid gray, screen mode (see above - lightens) is applied. If the colors being applied are darker than middle gray, multiply mode (see above - darkens) is applied.

**Vivid Light** - Dodges or burns the colors base colors depending on whether the blend colors are brighter or darker than middle gray. This mode works on contrast while Linear Light works on brightness.

**Linear Light** - Dodges or burns the colors base colors depending on whether the blend colors are brighter or darker than middle gray. This mode works on brightness while Vivid Light works on contrast.

**Pin Light** - Replaces the base colors depending on the brightness of the blend color. If the blend color is lighter than middle gray, base colors darker than the blend color are replaced. And the reverse; if the blend color is darker than middle gray, base colors lighter than the blend color are replaced.

**Difference** - It looks at the two colors, and, subtracts the less bright from the more bright one. Therefore, blending with white inverts the color values (you are subtracting color values of 100 % so you go all the way to the inverse), while blending with black makes no change (black has zero color values, so you subtract zero). Having figured all that out, you still have to do trial and error to see what the colors will look like. This one changes the colors, not the brightness.

**Exclusion** - says this is a lot like Difference (above) but with less contrast. It's good to see that the Adobe people don't know how to describe these things, either. Try it and see what it's like.

**Hue** - uses the hue (color) that you're adding (the blend color), but the luminance (brightness) and saturation (richness) of the base color (the color already there). Not as hard as some of the previous ones, but I'd still have to try to see if I liked it.

**Saturation** - just like hue, but this time the saturation (richness, depth) of the new color is used, while the luminance (brightness or darkness) and hue (color) of the original image are used.

**Color** - the result of this blend has the luminance (brightness or darkness) of the base or original color, but the hue (color), and saturation (richness) of the new, or blend color. This blend mode is commonly used for colorizing black and white images.

**Luminosity** - uses only the luminance (brightness or darkness) values of the new or blend color. All hue, and saturation values of the blend color are ignored. This is a useful mode to choose when using the Sharpen tool.

