



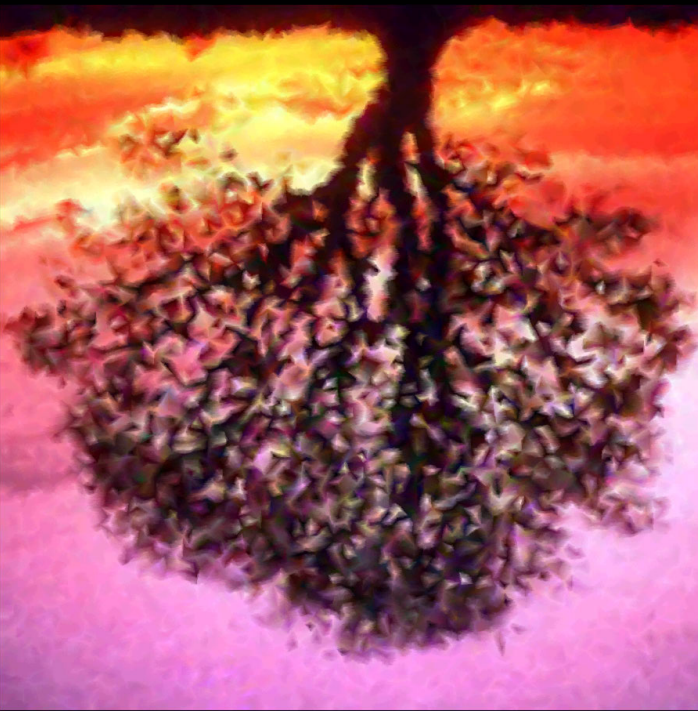
# Image Processing for the Imagination







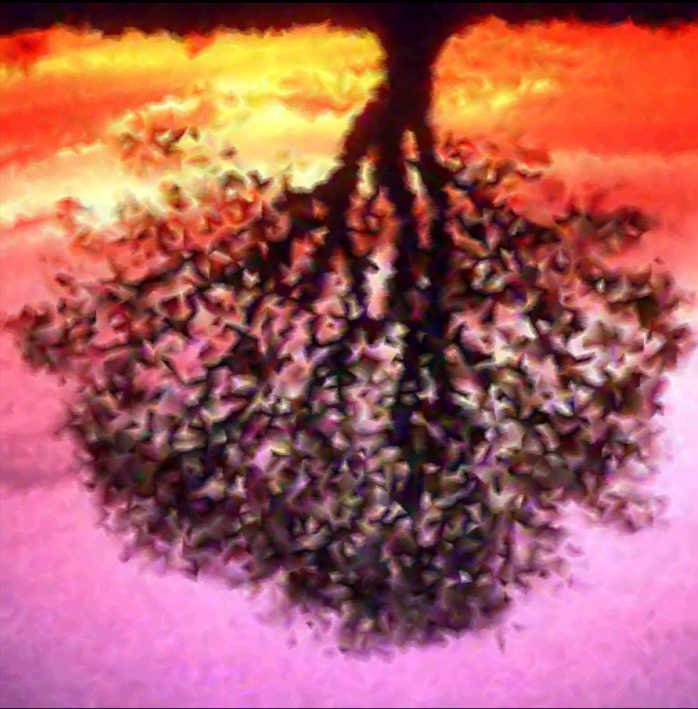
# Mark Grundland







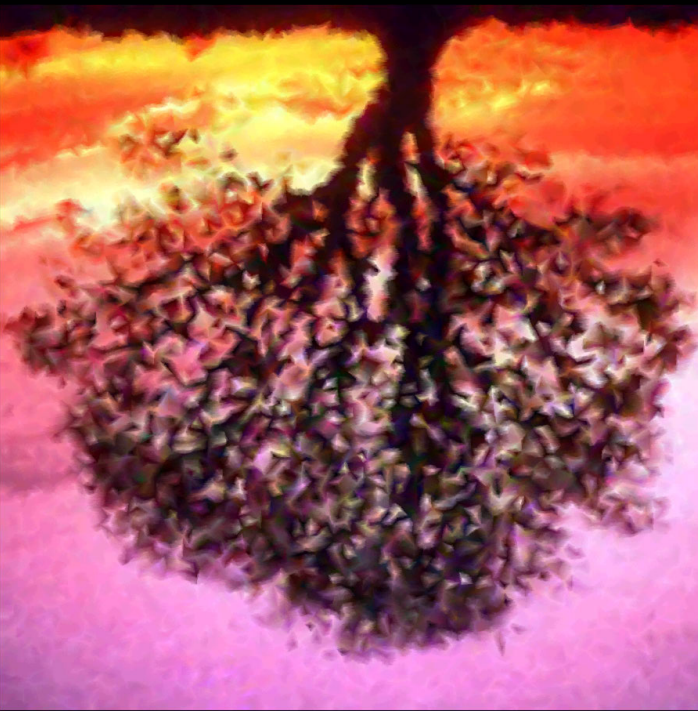
[www.Eyemaginary.com](http://www.Eyemaginary.com)







# Part I: Compositing





# Linear Image Blending

# 20% Sunrise



# 40% Lake

# 40% Couple

# Standard Linear Image Blending



# Salience Preserving Image Blending





# Contrast Preserving Image Blending





# Color Preserving Image Blending





# Detail Preserving Image Blending





# Linear Image Blending

# Church



# Forest

# Opacity



# Linear Image Blending





# Saliience Preserving Image Blending





# Linear Image Blending



# Saliency Image Blending



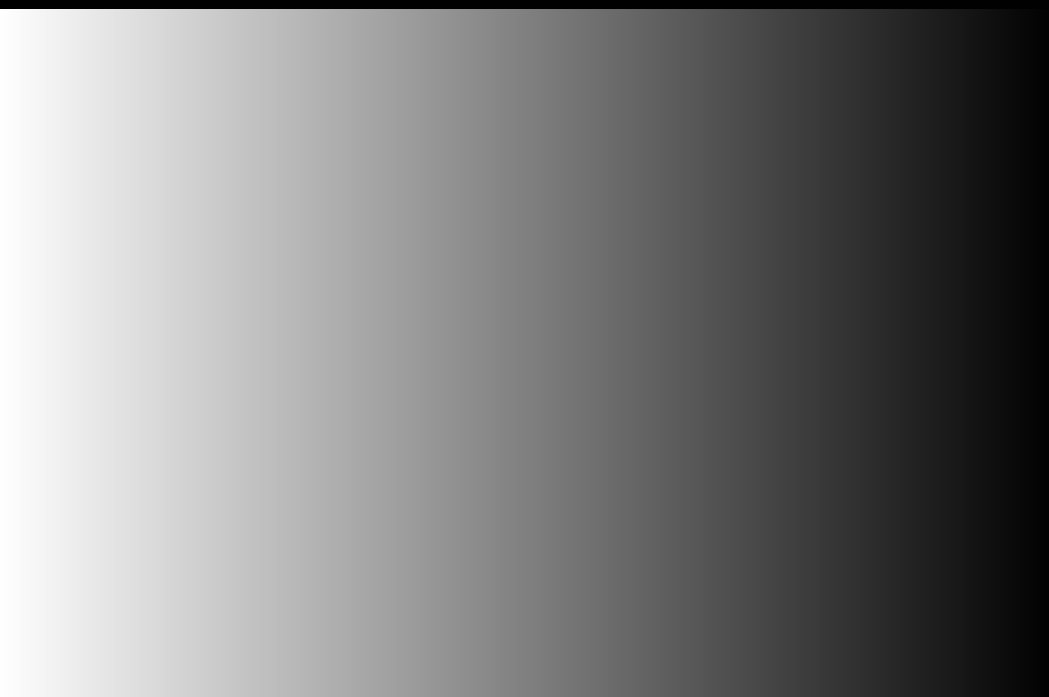
**Shell**



**Shore**



**Opacity Matte**



**Salience Matte**



**Shell Salience Map**

**Shore Salience Map**





**25% Inside**



**75% Outside**



**Linear Blending**



**Salience Blending**



**33% Coin**



**Linear Blending**



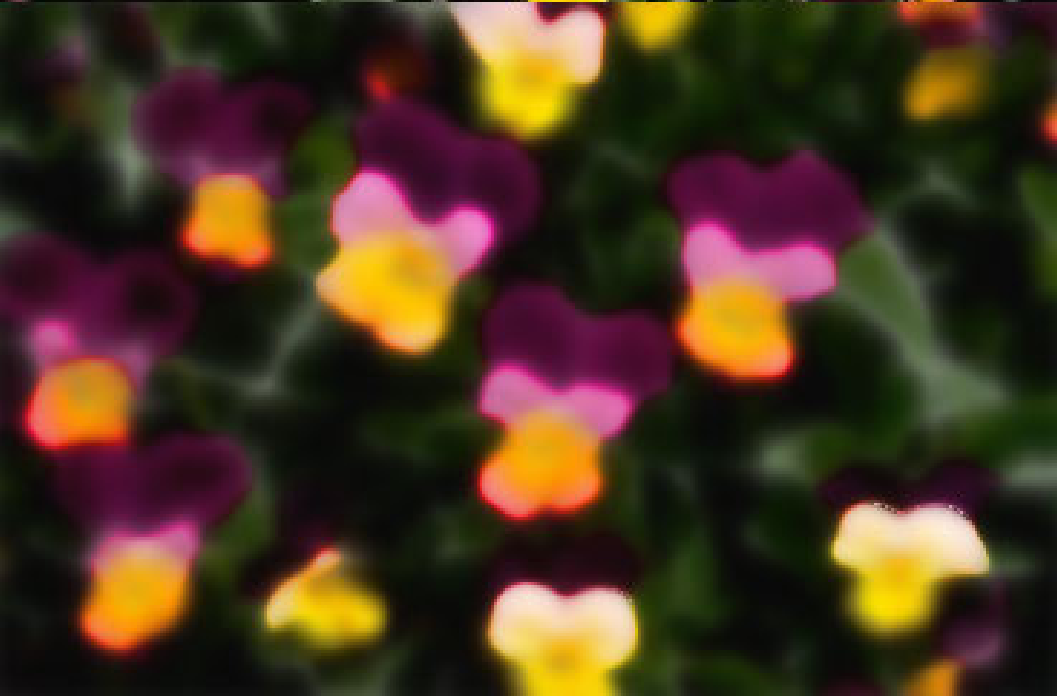
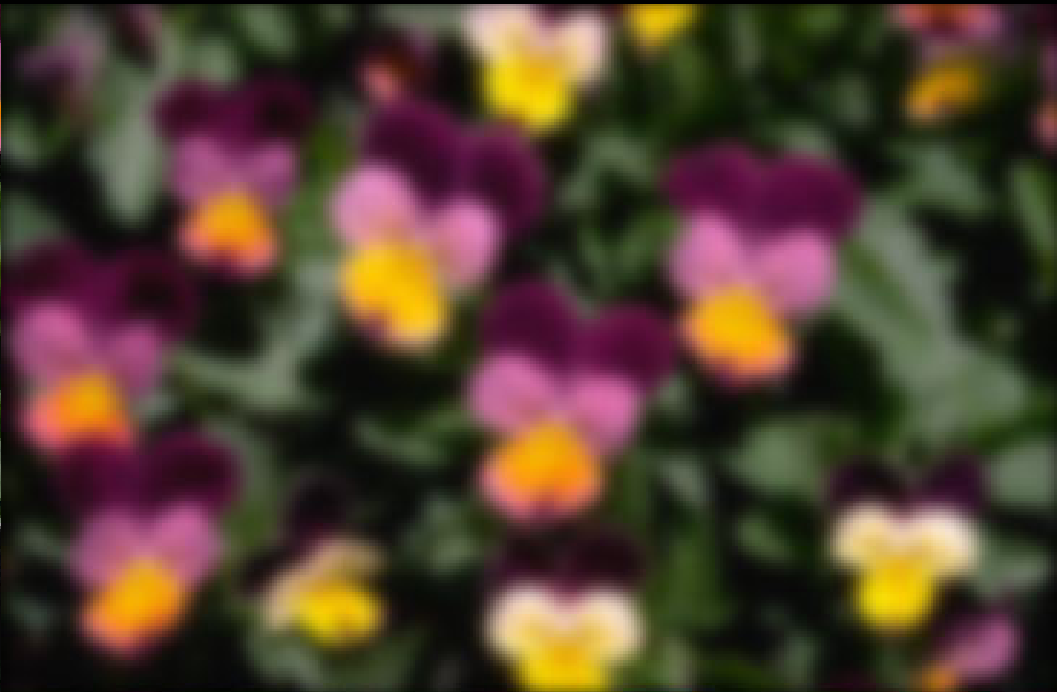
**Salience Preserving Blending**



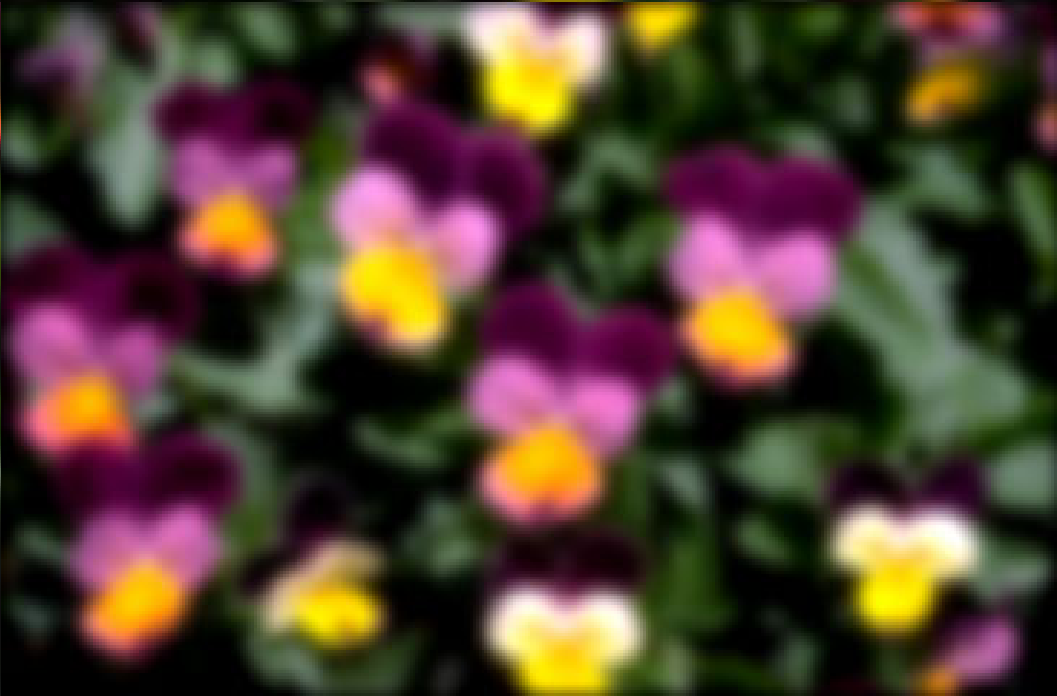
**Flowers**



**Linear Gaussian Filter**



**Color Preserving Gaussian Filter**

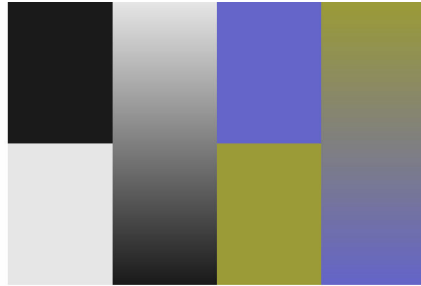


**Contrast Preserving Gaussian Filter**

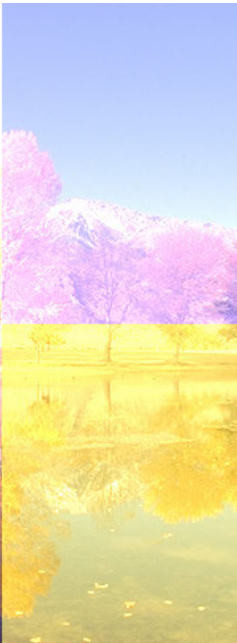
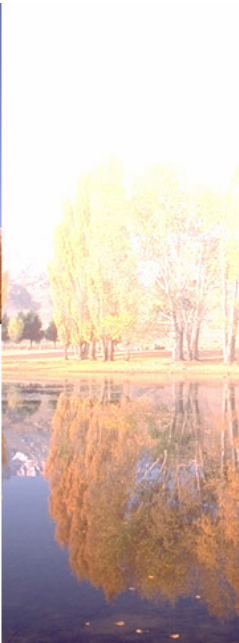


# RGB Color Operators

$[0, 1]^3$  Linear Color Space



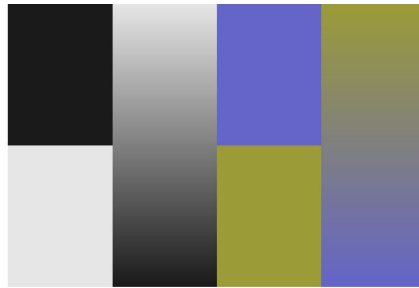
2 to 0		
0.5	1	2





# Our Color Operators

## $\mathbb{R}^3$ Nonlinear Color Space



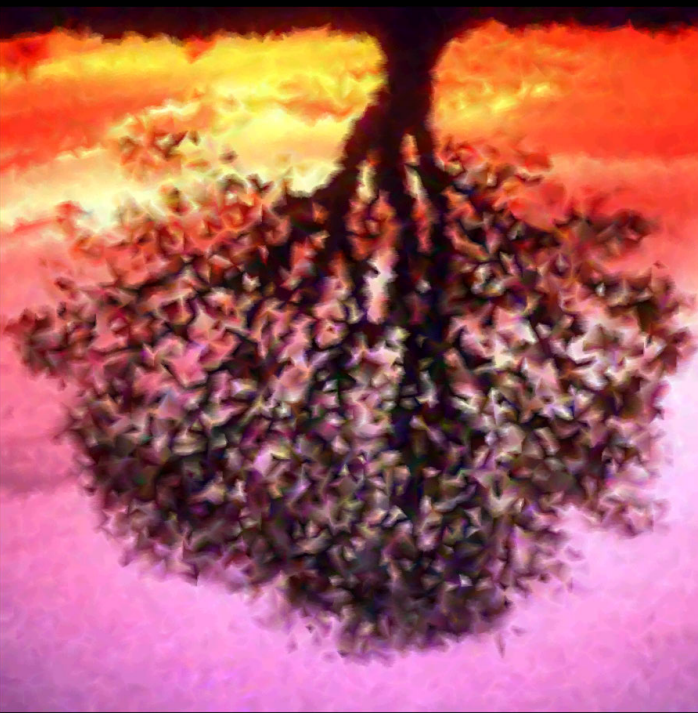
2 to 0		
0.5	1	2





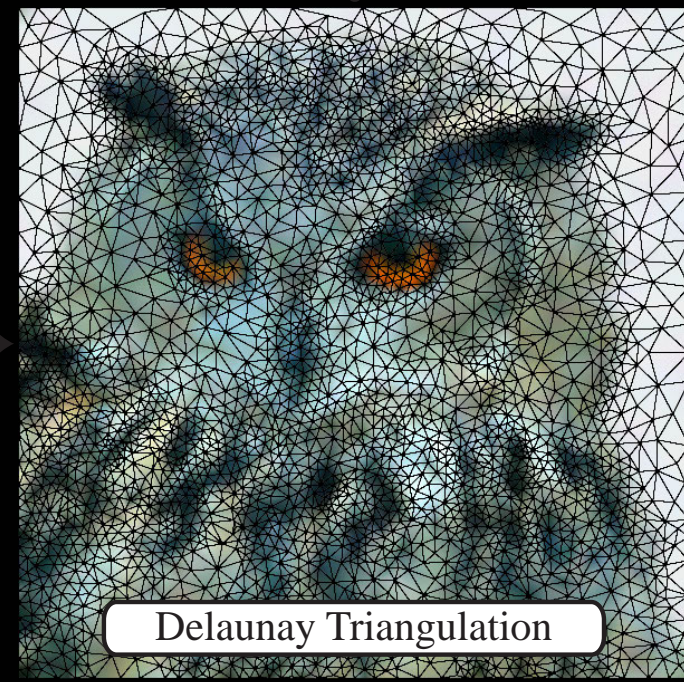
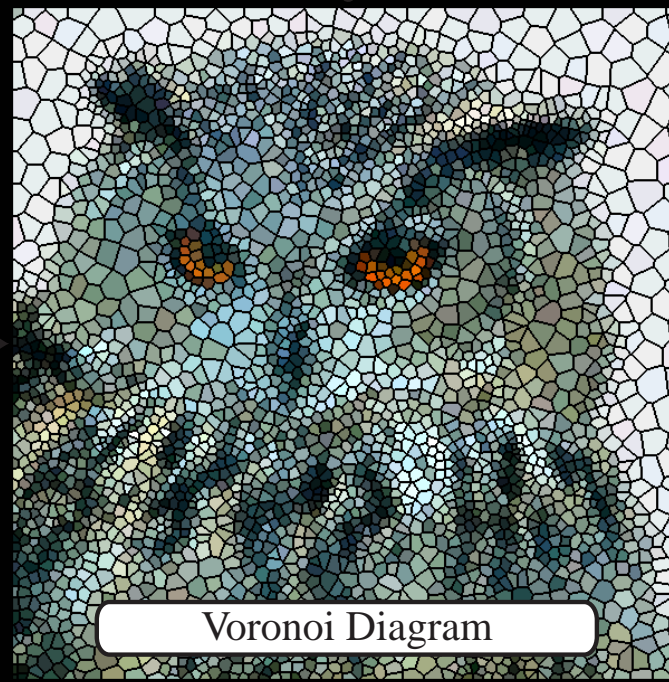


## Part II: Rendering





# Stylized Image Rendering

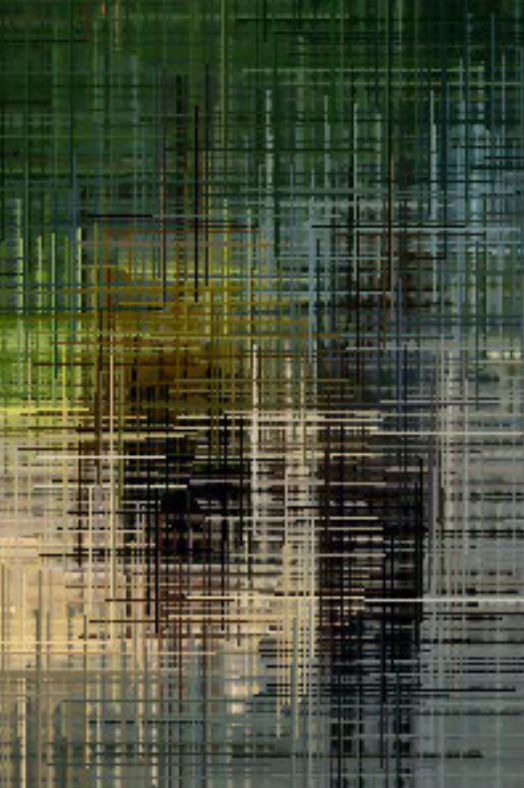




# Progressive Image Rendering





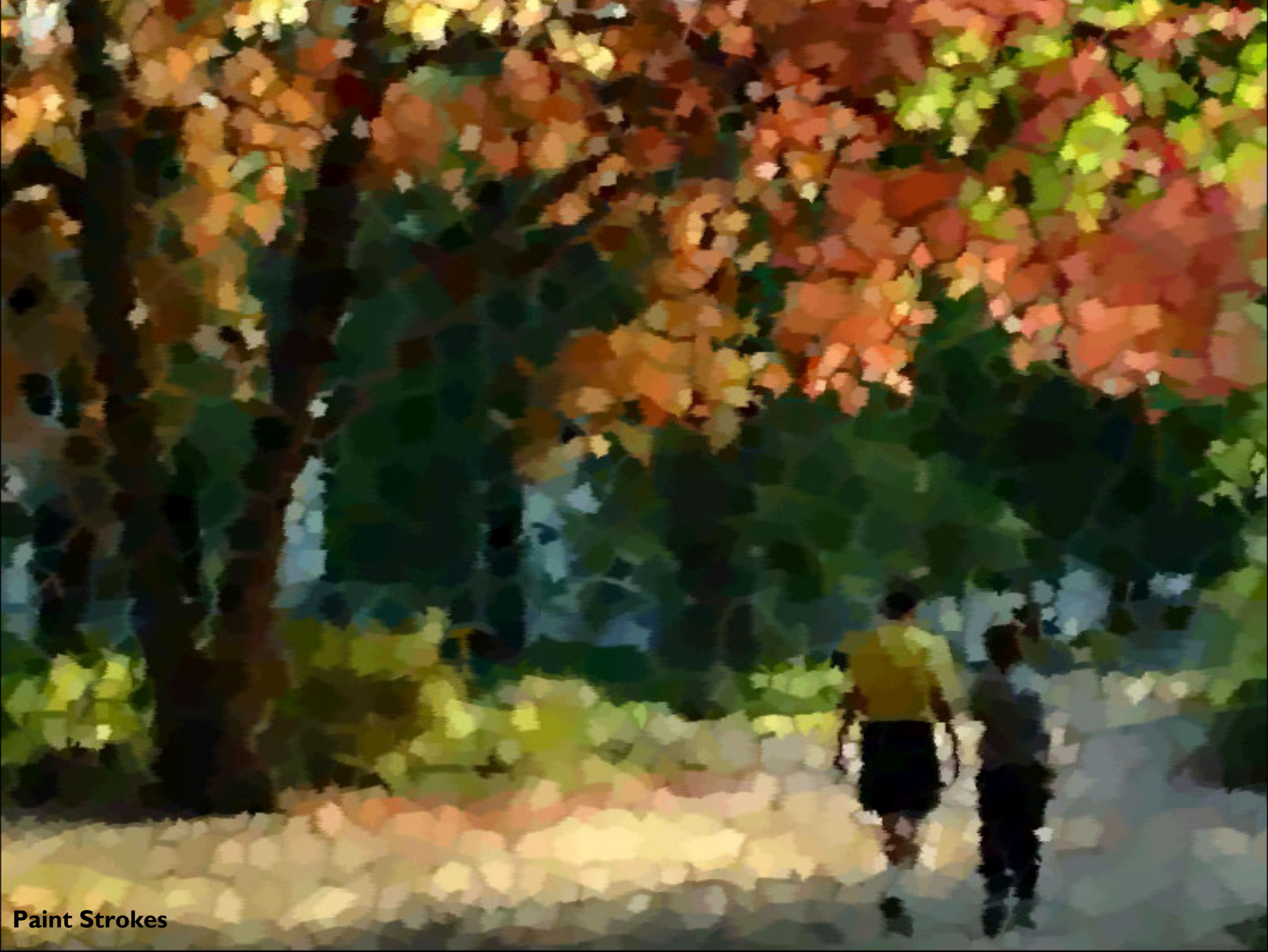






**Brush Marks**





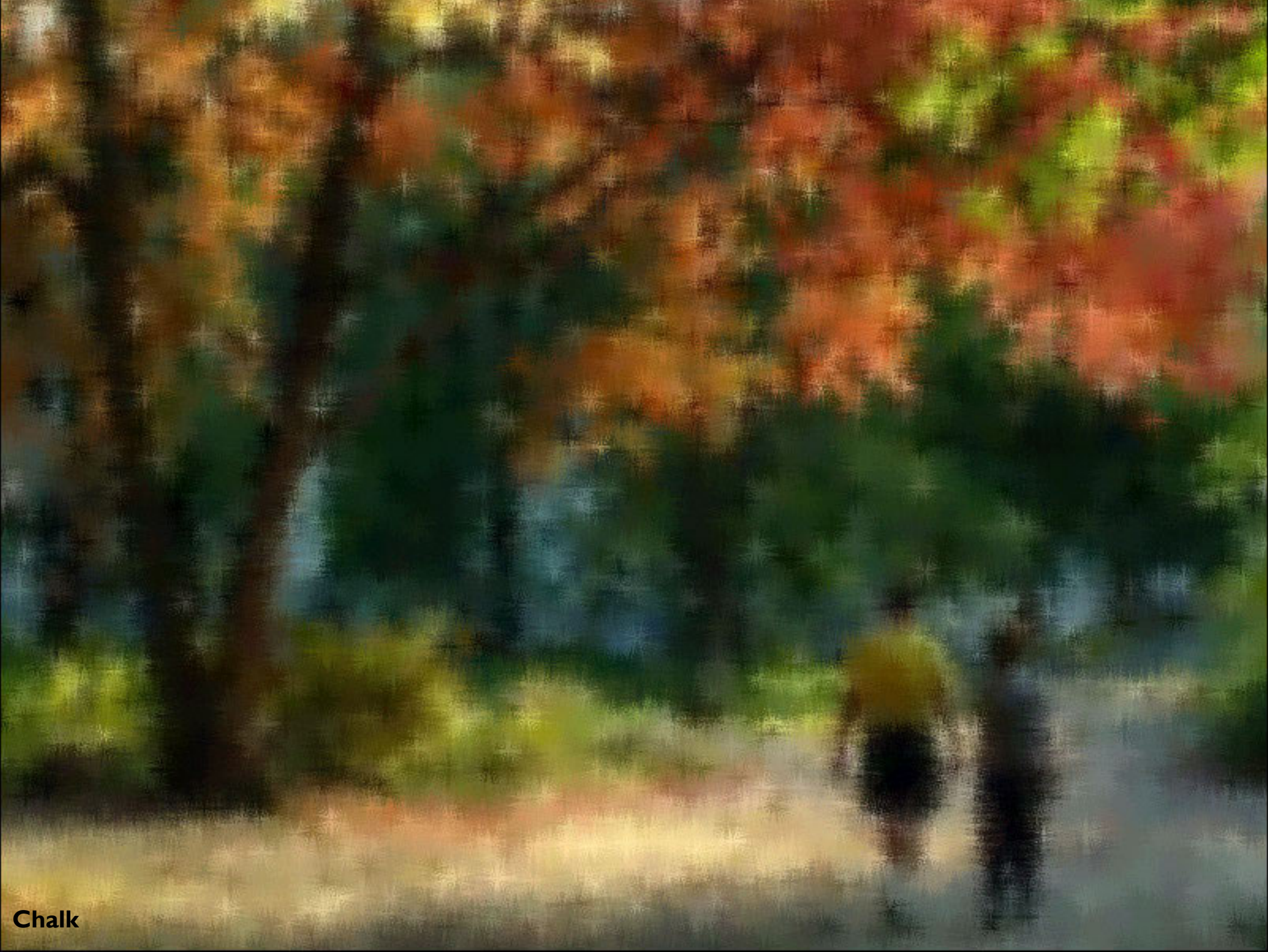
Paint Strokes





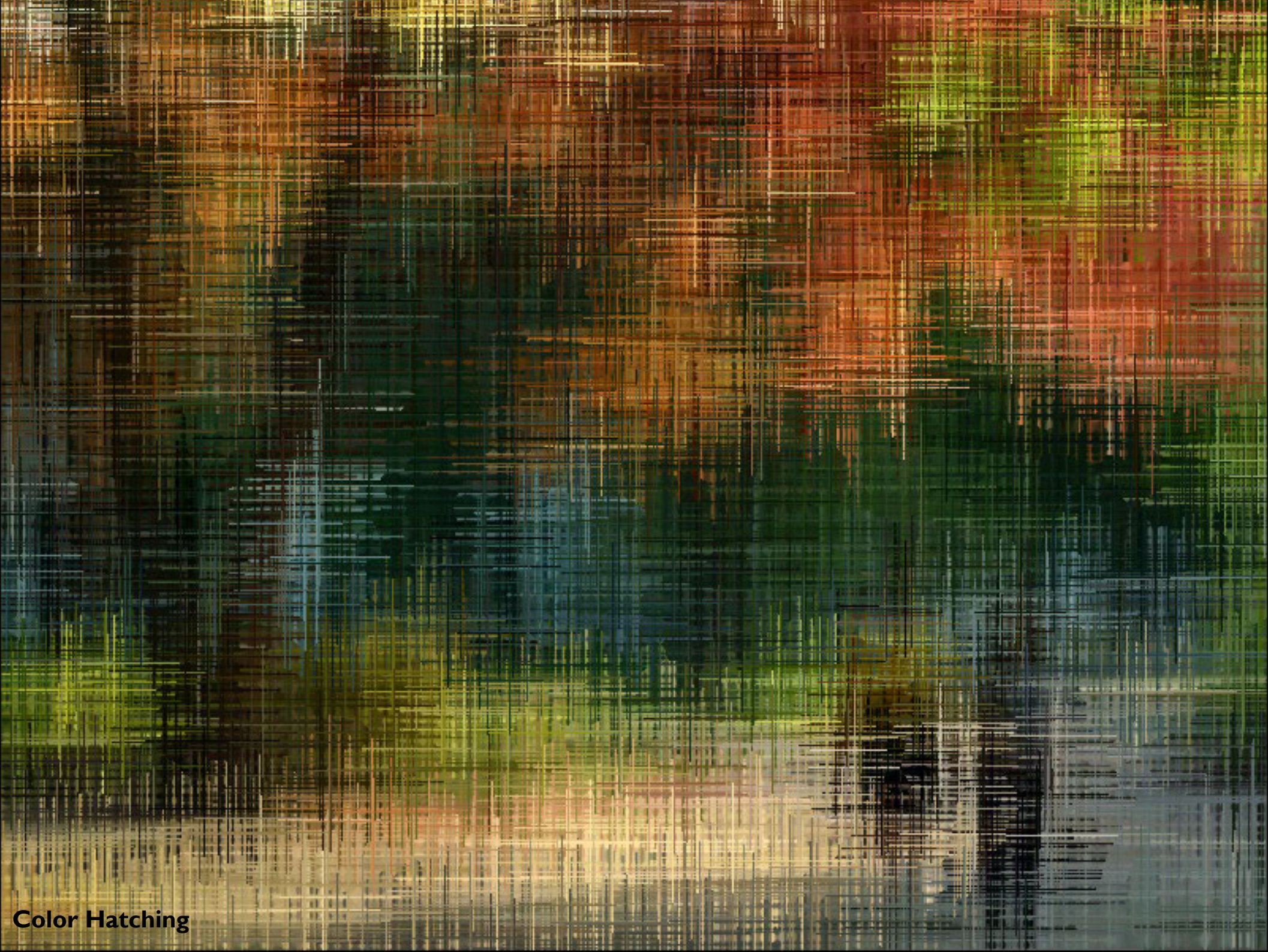
Dabble





Chalk





**Color Hatching**





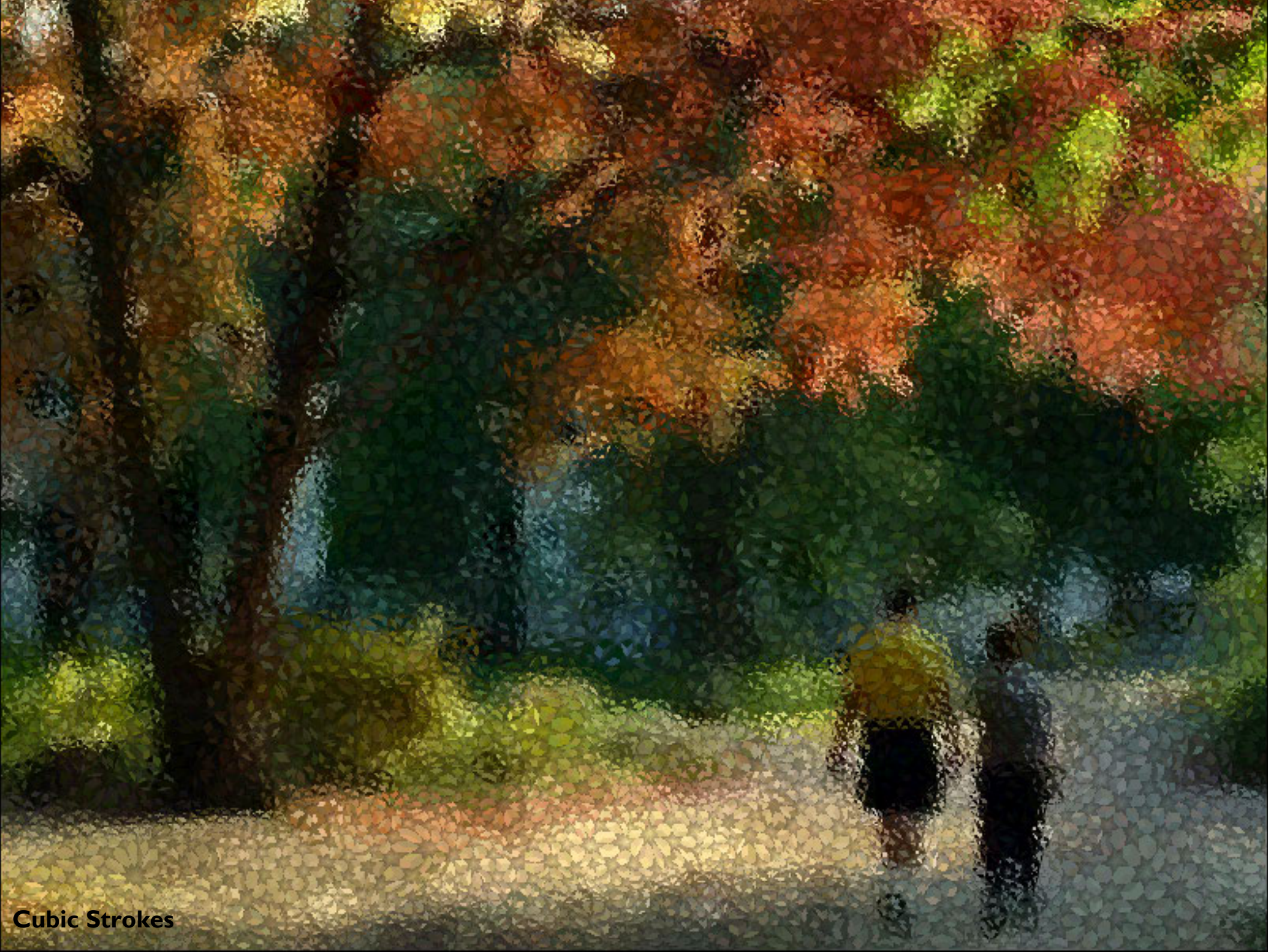
Inlay Mosaic





Patchwork



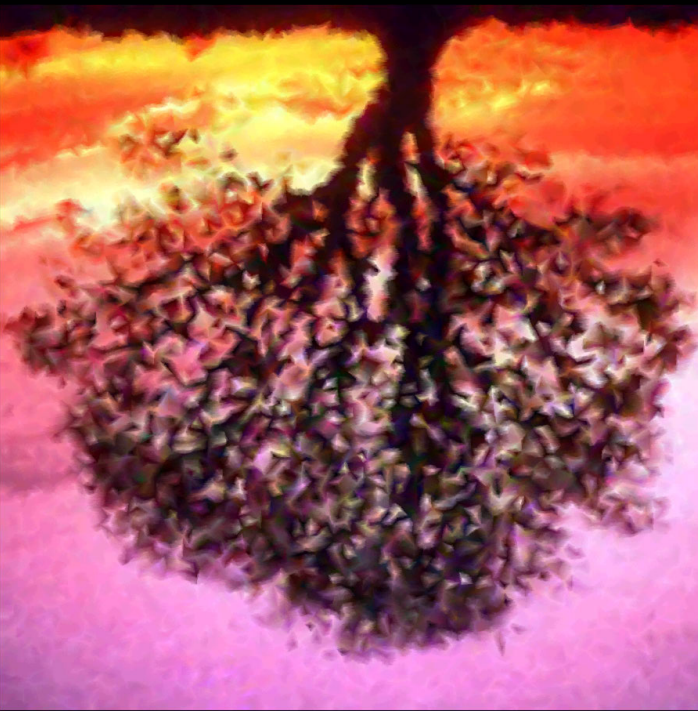


**Cubic Strokes**





## Part III: Recoloring





# Find and Replace Color Gradients

Original Parrot

Preservation = 0.20



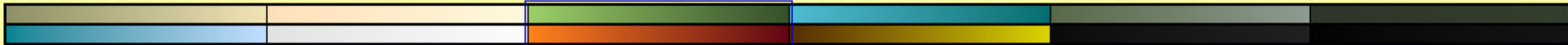
Recolored Parrot

Influence = 5.00



Edit Gradients

LAB



Find Gradient

Scope = 2.00

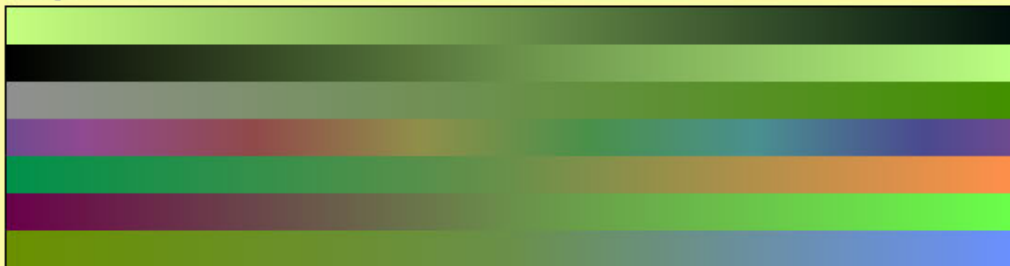


Replace Gradient

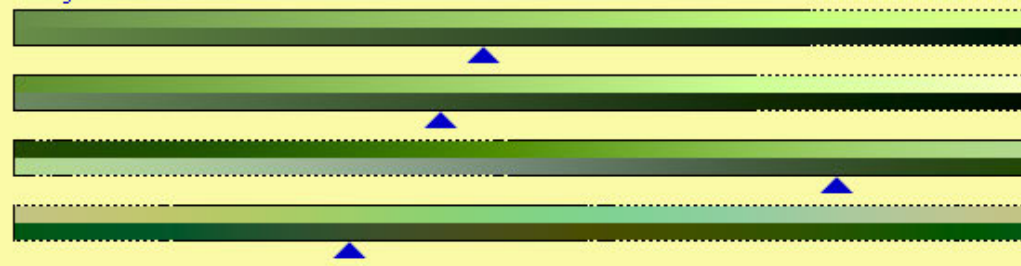
Emphasis = 0.50



Adjust Color



Adjust Contrast



Add

Delete

Mask

Keep

Restore

Quit



