

LEBANON CAMERA CLUB

Image Editing with Layers, Part II

4/3/2018

Image Editing with Layers, Part II

Part I

- Layers
 - ◆ Feature in some image editors
 - Combine images, image elements, or image adjustments

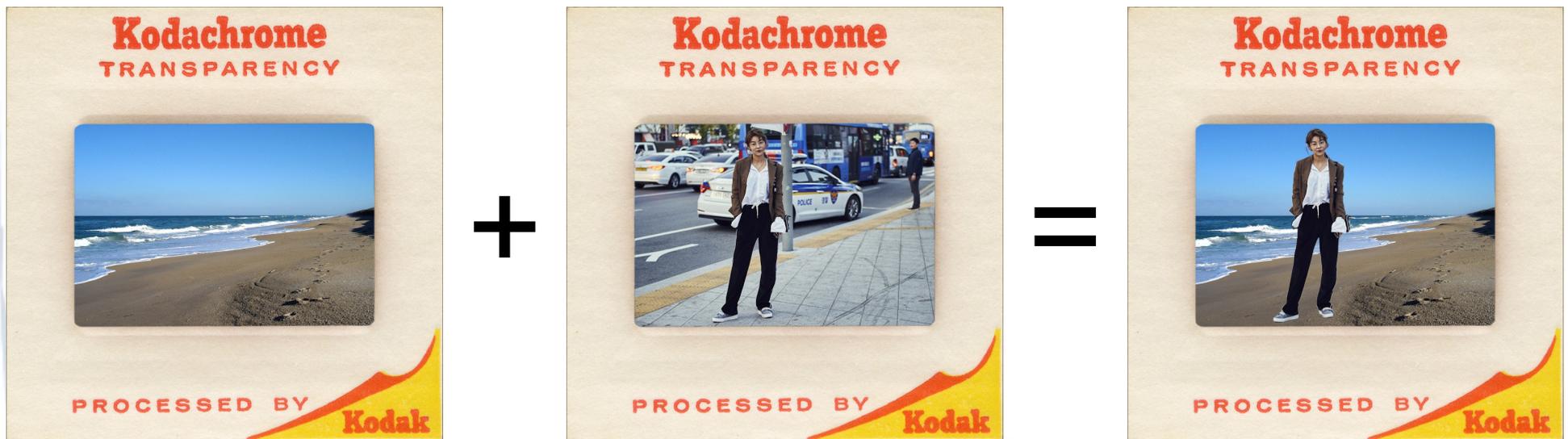


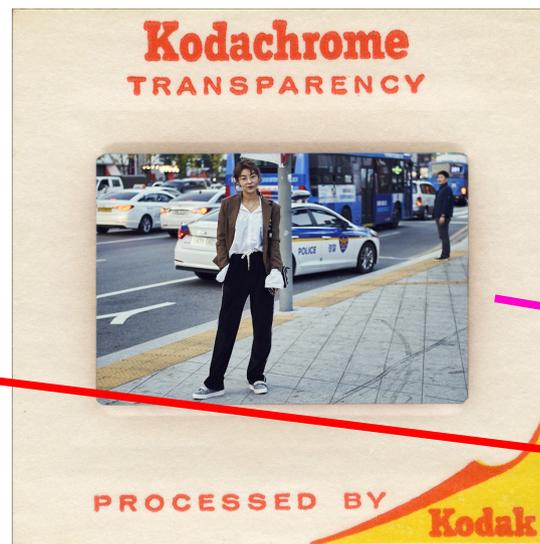
Image Editing with Layers, Part II

Part I

• Layers

- ◆ Feature in some image editors
 - Combine images, image elements, or image adjustments
- ◆ Arranged in a “stack”
 - Can be turned on or off to apply or remove changes
 - Transparency can be controlled
 - Blend modes affect how layers interact

Note: In image editors a checkerboard pattern indicates transparent regions – in the transparency slider 0% is completely transparent, 100% is completely opaque



blend mode

transparency slider

light

visibility button

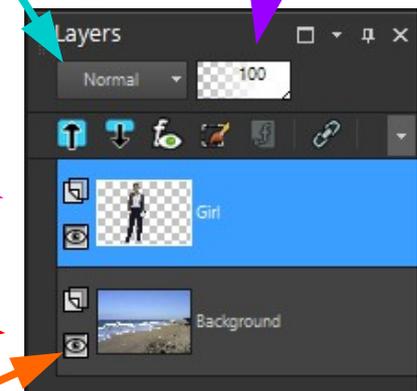


Image Editing with Layers, Part II

Part I

Note: Adjustment layer modifications can also be done without layers, but it is more flexible to use layers (parameters can be changed at a later time)

- **Layers**

- ◆ **Feature in some image editors**

- Combine images, image elements, or image adjustments

- ◆ **Arranged in a “stack”**

- Can be turned on or off to apply or remove changes
- Transparency can be controlled
- Blend modes affect how layers interact

- ◆ **Types**

- Image → raster (normal), vector (graphics and text)
- Adjustment → brightness, contrast, hue, saturation, white balance, etc.
- Mask → selectively controls the visibility of other layers
- Group → treats several layers as a single entity, isolates adjustments

Image Editing with Layers, Part II

Part I

- Composite image examples
 - ◆ Layers make it much easier to create these types of images

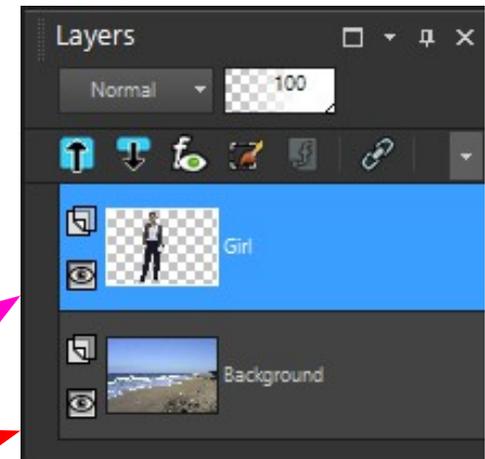


Image Editing with Layers, Part II

Mask layers

Note: In image editors a checkerboard pattern indicates transparent regions

- Control visibility of other layers
 - ◆ Masks are not absolutely necessary
 - Remove unwanted image information by cutting



everything other than the girl
has been erased

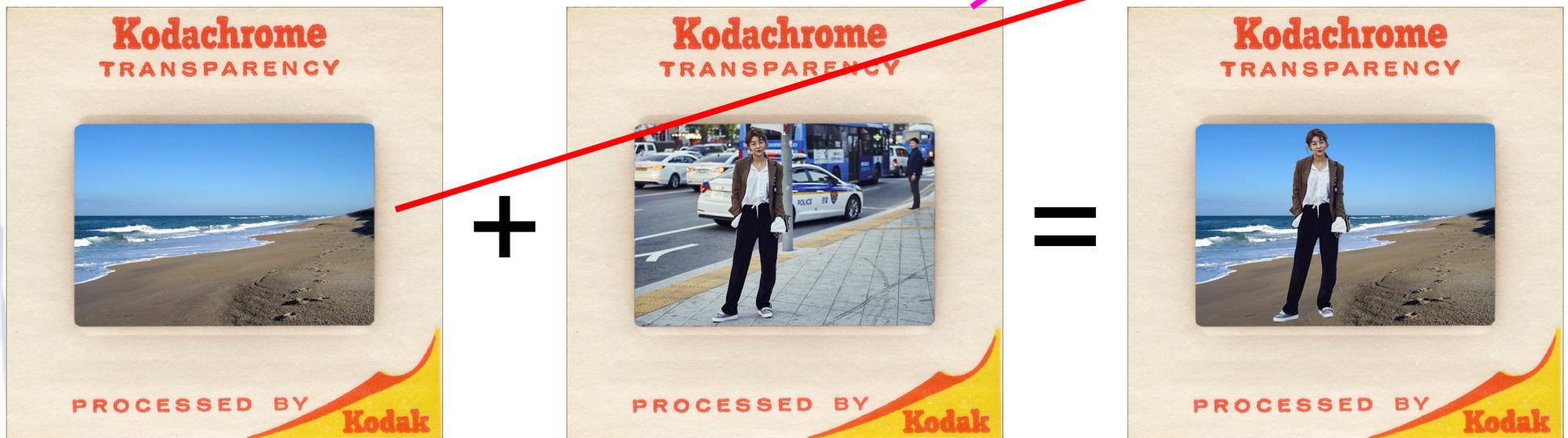


Image Editing with Layers, Part II

Mask layers

Note: In image editors a checkerboard pattern indicates transparent regions

- Control visibility of other layers
 - ◆ Masks are not absolutely necessary
 - Remove unwanted image information by cutting
 - ◆ Mask consists of black, white, gray tones
 - Black is 100% opaque, white is 100% transparent
 - Gray values are partially transparent
 - Using a mask does not alter the original layer
 - Creating a mask automatically creates a group

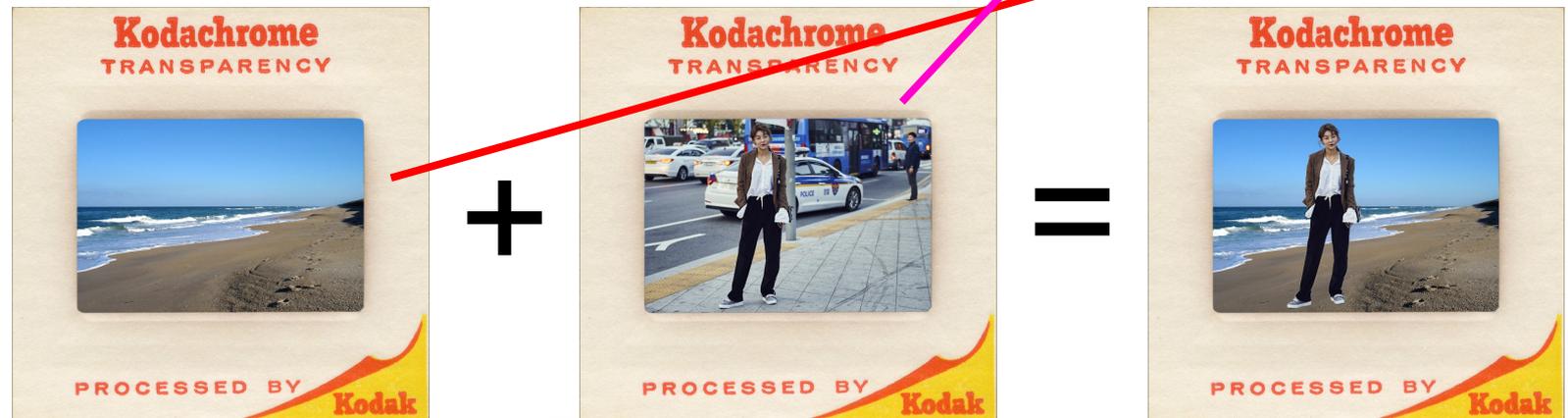
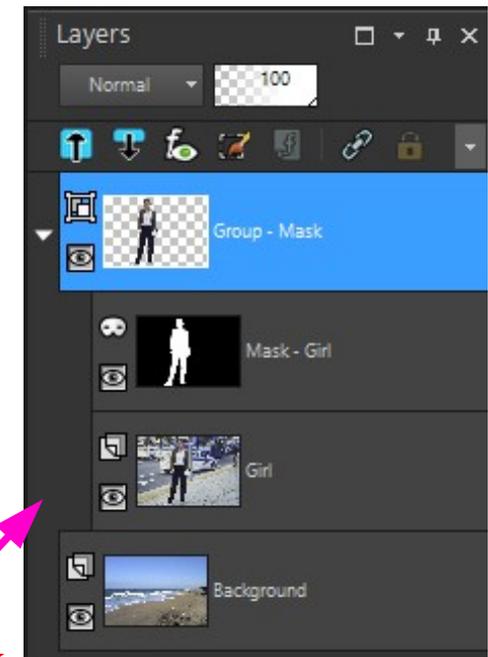
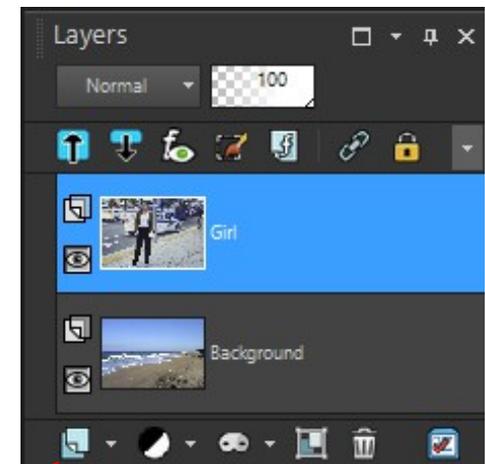


Image Editing with Layers, Part II

Mask layers

Note: In image editors a checkerboard pattern indicates transparent regions

- Creating a mask
 - ◆ Varies with the editor
 - All editors → menu options
 - Paint Shop Pro → icons at bottom of layer palette
- 1. Select layer to be masked
 - Highlighted in blue for Paint Shop Pro



new layer
new adjustment layer
new mask layer
new layer group
delete layer

Image Editing with Layers, Part II

Mask layers

Note: In image editors a checkerboard pattern indicates transparent regions

- **Creating a mask**

- ◆ **Varies with the editor**

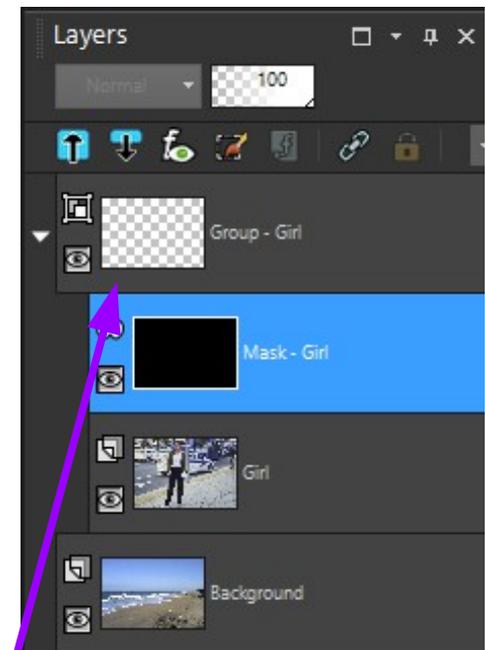
- All editors → menu options
- Paint Shop Pro → icons at bottom of layer palette

1. **Select layer to be masked**

- Highlighted in blue for Paint Shop Pro

2. **Select “Create Mask” in menu or use icons**

- Choose “Hide All” or “Show All”
- “Hide All” creates a black mask (nothing visible)
- “Show All” creates a white mask (everything visible)



“Hide All” mask created → nothing shows through

Image Editing with Layers, Part II

Mask layers

- Creating a mask

3. Select an area

- Use selection tools to “draw” a shape
- Often involves tracing around an image element

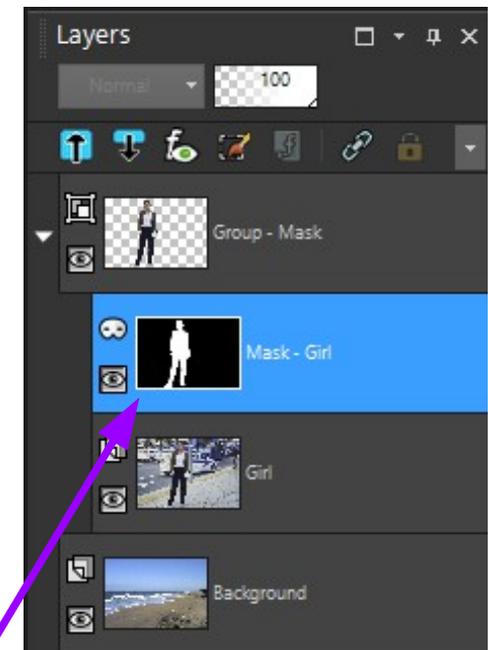
4. Feather the selected shape → **critical!**

- Creates a “blend zone” around the shape

5. Fill the selected shape on mask layer

- Black = opaque (0% transparency)
- White = clear (100% transparency)
- Gray = partially opaque, depending on value

Note: White has an [R,G,B] value of [255,255,255] – black is [0,0,0] – gray is in between → a gray mask of [128,128,128] provides 50% transparency



selected area was the girl → filled with white

Image Editing with Layers, Part II

Selections

- Creates a closed shape
 - ◆ Can be simple (rectangle) or complex
 - Indicated by a “moving” dashed line in some editors
 - ◆ Selection indicates area to be modified
 - Erased
 - Filled with a color
 - Copied
 - Mask create “Hide Selection”
 - Mask create “Show Selection”

Note: Mask create “Hide Selection” creates a white mask with the selection in black – “Show Selection” is the opposite



Image Editing with Layers, Part II

Selections

Note: Selection modes → replace (new selection replaces old), append (adds to existing selection), remove (subtracts new selection from old)

- Tools

- ◆ Rectangle

- Creates a rectangle selection

- ◆ Freehand

- Freehand → hold down mouse button and draw until released
- Point to point → select end points of line segments
- Edge Seeker / Smart Edge → program tries to follow edge in image

- ◆ Magic Wand

- Automatically creates selections based on color, brightness, etc.
- Set up matching type and “tolerance” (deviation from indicated value)
- Click on part of image that you want to select
- Can specify whether selection is universal or “contiguous”

Image Editing with Layers, Part II

Selections

• Operations

◆ Invert

- Selects everything that wasn't selected before

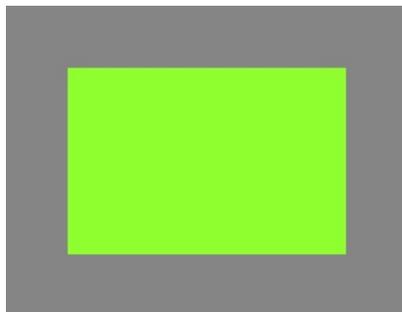
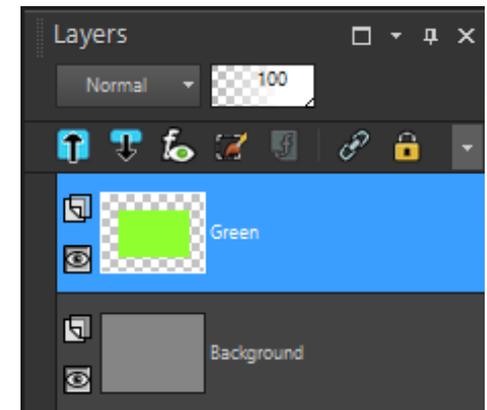
◆ Expand / contract

- Grows / shrinks selections by # of pixels

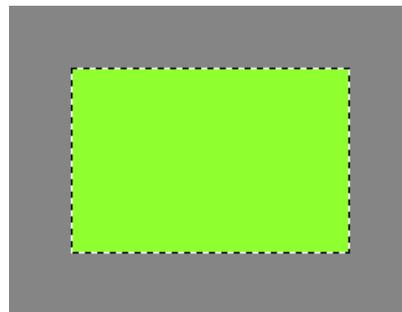
◆ Feather

- Creates a “blend zone” around selection
- Blend zone → transition area where fill color fades from 100% intensity inside the selection to 0% intensity at the edge
- Eliminates hard edges, which make image elements look artificial

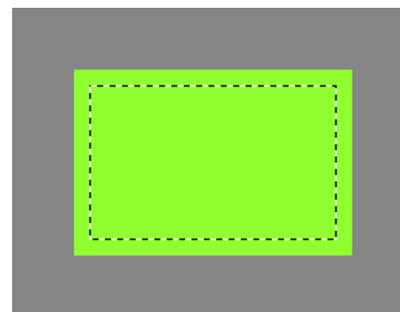
Note: “select green” means that the Magic Wand was used to select a specific color → in this case using a zero tolerance (only that specific [R,G,B] value would be selected)



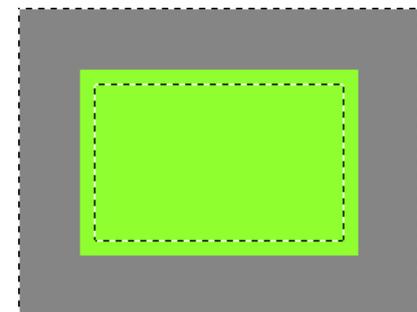
no selection



select green



contract 10



invert contract 10

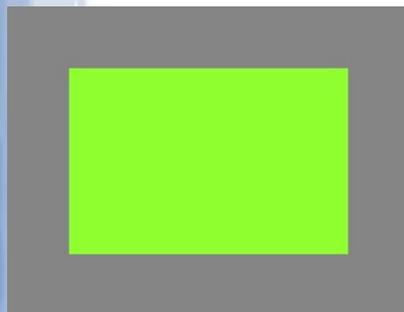
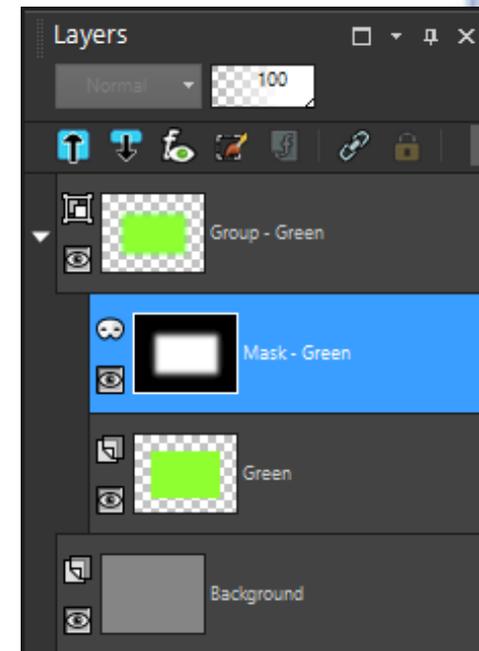
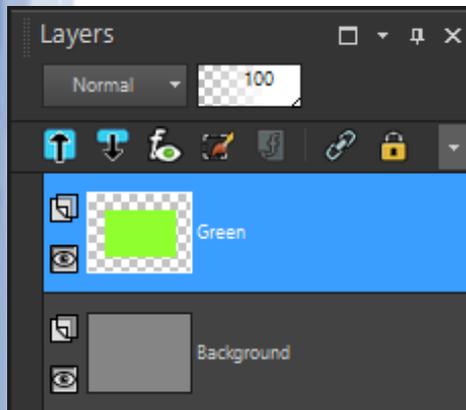
Image Editing with Layers, Part I

Selections

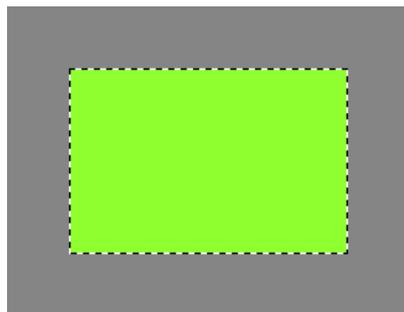
• Operations

- ◆ Feather example 1 → mask feather
 - Using large values for contract and feather for purposes of demonstration

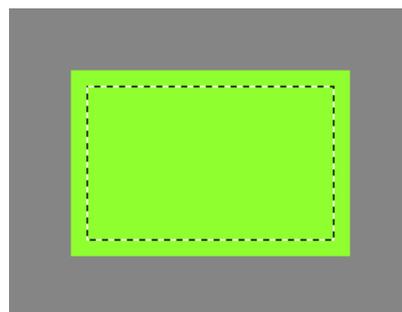
Note: Sharp image element → 2 or 3 pixel feather works well – more feather pixels needed if elements are less sharp



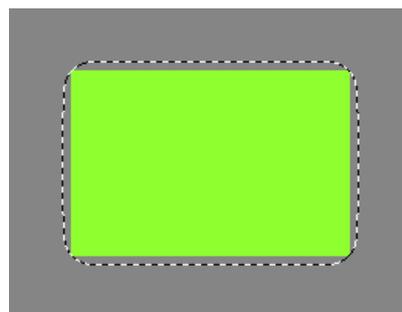
no feather



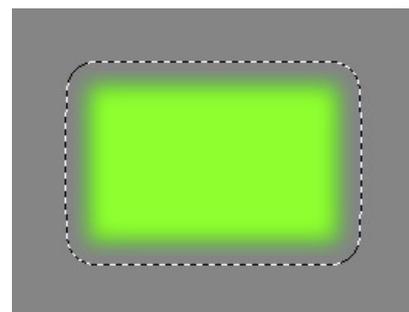
select green



contract 10



feather 17



mask: show selection

Image Editing with Layers, Part I

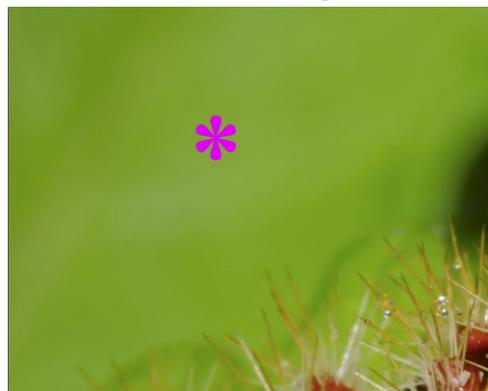
Selections

- Operations

- ♦ Feather example 2 → cloning feather

- Cloning often uses large feather amounts → 6, 12, 24, or more pixels

Note: Initial selection needs to be larger to support a large feather amount → feathered area will not completely obscure what is below



spot to be cloned out



selection, no feather



hard edge visible

pasted selection

feather grows the selection to provide transition area (initial selection also larger)



selection, feather 32



no hard edge

pasted selection

Image Editing with Layers, Part II

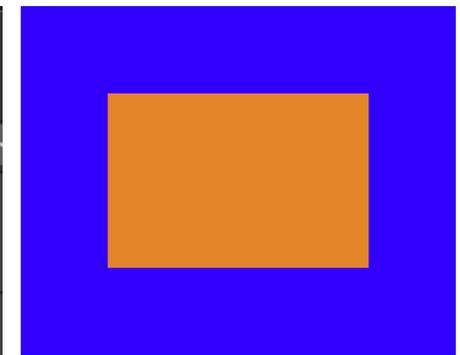
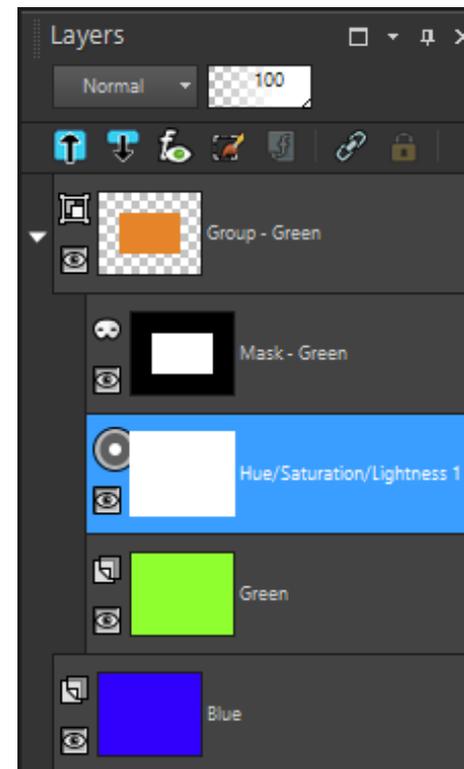
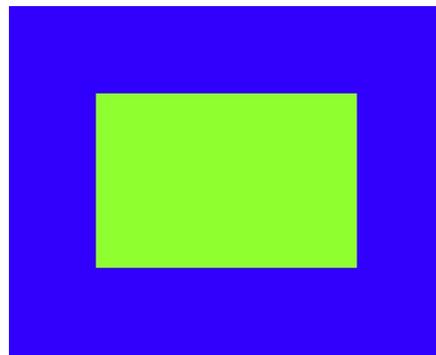
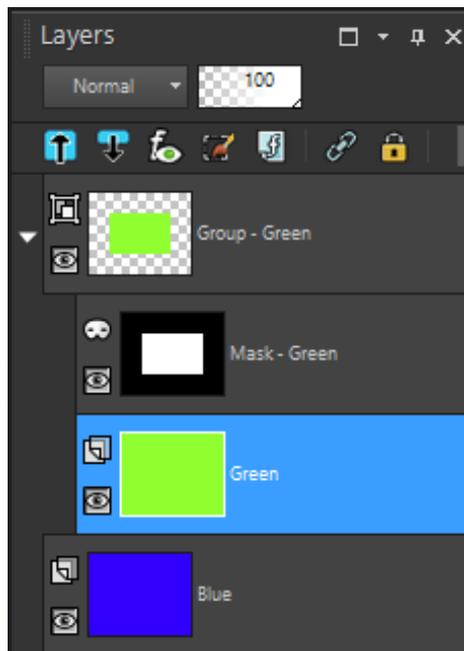
Mask layers

- Adjustment layers

- ◆ Have built-in masks

- Created as a “Show All” mask → why layer is shown as white
- Can fill areas with black/gray to prevent/reduce adjustment effect

Note: Hue/Saturation/Lightness adjustment layer allows adjustment of all three values at once
– Brightness/Contrast adjustment layer allows adjustment of both values at once



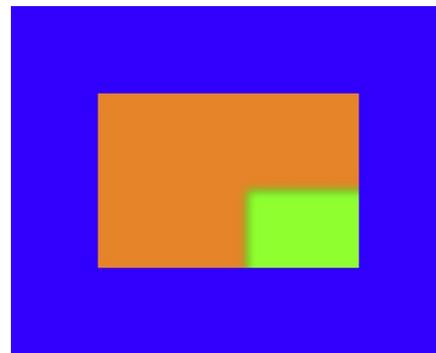
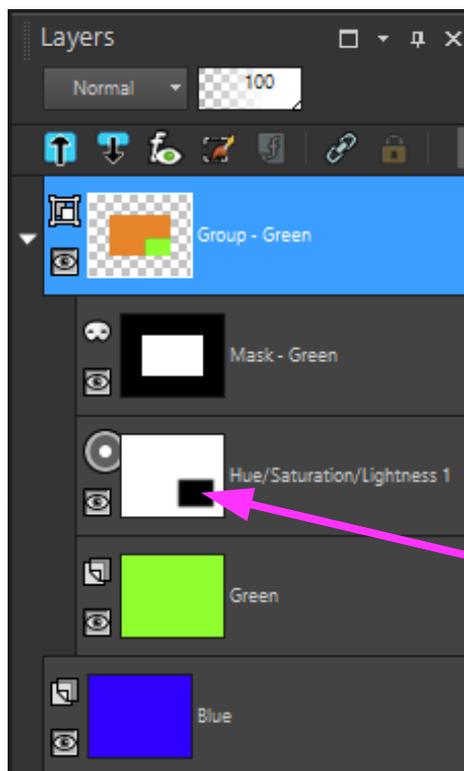
hue -90

Image Editing with Layers, Part II

Mask layers

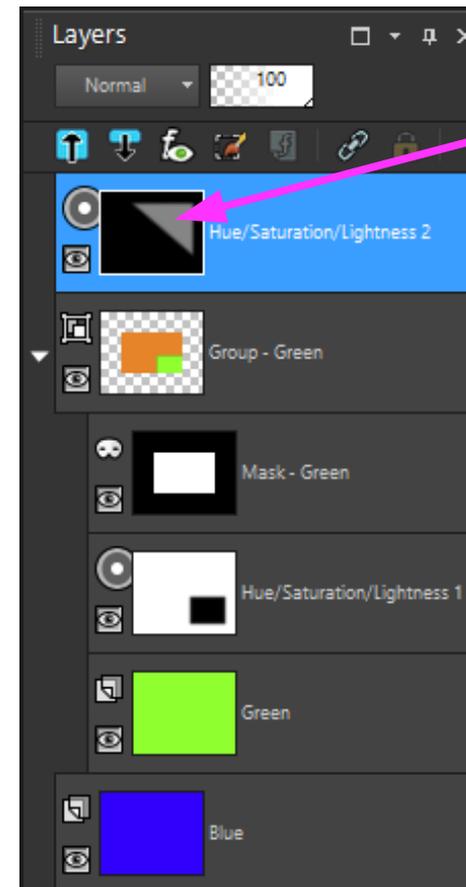
- Adjustment layers
 - ◆ Have built-in masks

Note: Adjustment layer in the group only affects layers below it within the group, adjustment layer outside the group affects all layers below it



hue -90

black, feathered



gray [128,128,128], feathered

hue +90

