Lebanon Camera Club

Image Editing with Layers, Part I

3/6/2018

Image Editing with Layers, Part I

What are layers?

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

double exposure

Note: On film cameras the shutter could be cocked without advancing the film to permit multiple exposures — some digital cameras have a multiple exposure mode

Image Editing with Layers, Part I

What are layers?

Note: A "true" double exposure is one where the full images are shown, with no selective editing

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

Image Editing with Layers, Part I

What are layers?

Note: In this example white areas are "clear" → in editors a checkerboard pattern indicates transparency

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

white area means that the slide would be clear → all light would pass through

composite image (photomontage) → combines image elements from two or more images

Image Editing with Layers, Part I

What are layers?

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

Image Editing with Layers, Part I

What are layers?

Note: This image is composed of approximately 20 different layers

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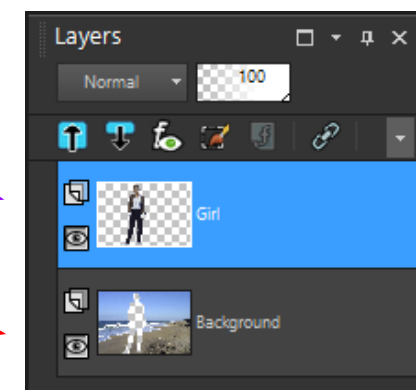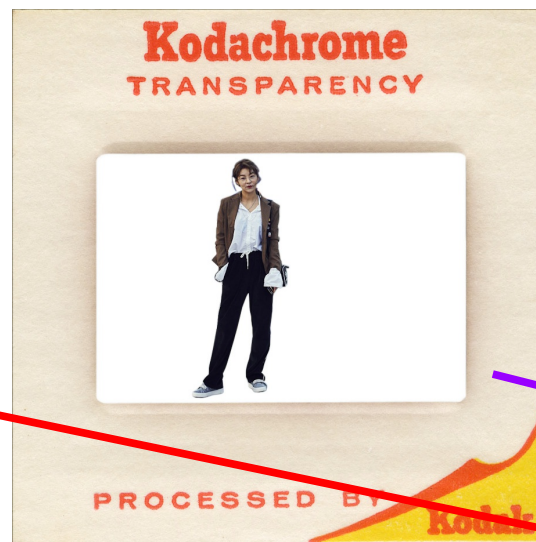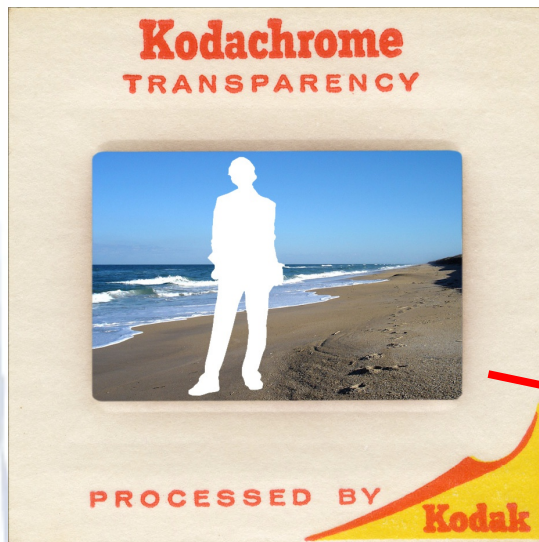 - Combine images, image elements, or image adjustments

Image Editing with Layers, Part I

What are layers?

Note: In this example white areas are "clear" → in editors a checkerboard pattern indicates transparency

- Feature in some image editors
  - Combine images, image elements, or image adjustments
    - Layers are arranged in a "stack" → "light" passes from top to bottom
  - Allows independent control of image modifications
    - Layers can be turned on or off to apply or remove changes

layer 1

layer 2

light

Image Editing with Layers, Part I

What are layers?

- Feature in some image editors
  - Combine images, image elements, or image modifications
    - Layers are arranged in a "stack" → "light" passes from top to bottom
  - Allows independent control of image modifications
    - Layers can be turned on or off to apply or remove changes
  - Image editors that have layer capability
    - Photoshop
    - Photoshop Elements (recent versions only)
    - Paint Shop Pro
    - Gimp (free software)
    - Adobe Lightroom (not explicitly, workarounds to achieve similar results)

Image Editing with Layers, Part I

Layer controls

- Visibility
  - On-off control → non-visible layer is transparent
    - May be indicated by a button that looks like an eye
- Transparency → 0% to 100%
  - 0% is transparent, 100% is fully opaque (nothing below visible)
    - 50% gives equal "light" to the layer and everything below it

same result without transparency on Background layer

transparency slider

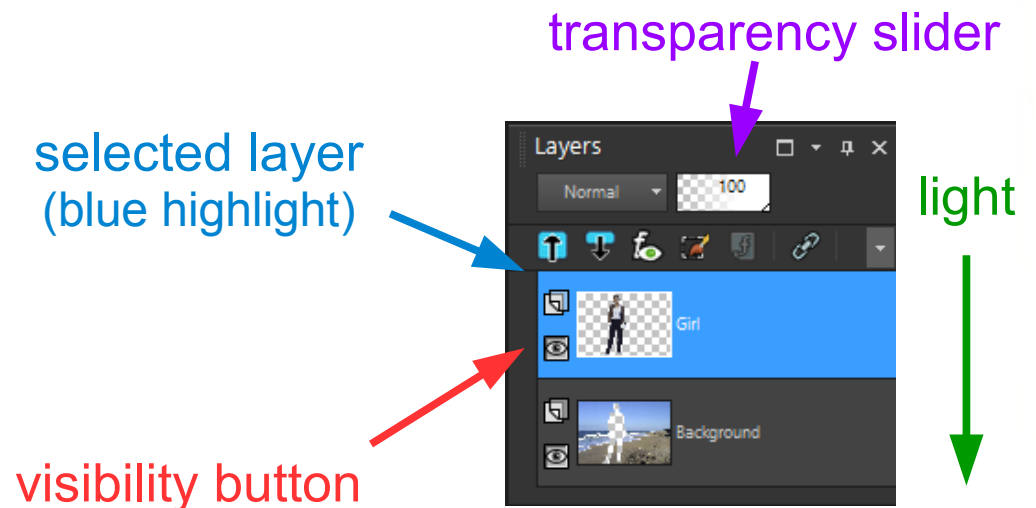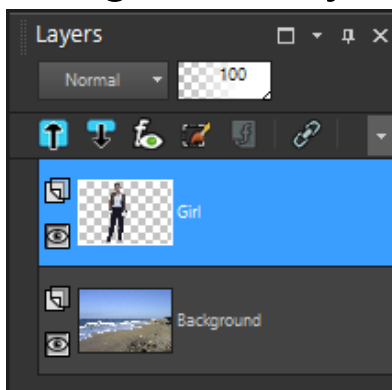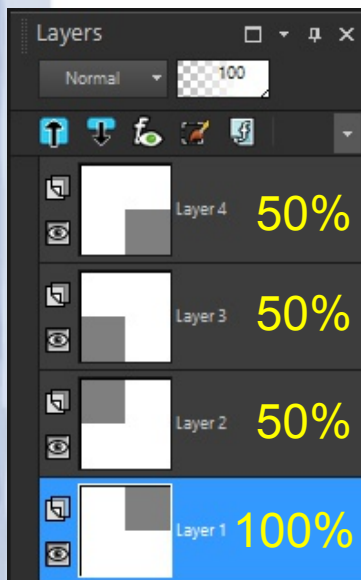selected layer (blue highlight)

light

visibility button

Image Editing with Layers, Part I

Layer controls

- Visibility
  - On-off control → non-visible layer is transparent
    - May be indicated by a button that looks like an eye
- Transparency → 0% to 100%
  - 0% is transparent, 100% is fully opaque (nothing below visible)
    - 50% gives equal "light" to the layer and everything below it

If Layer 4 = 25%, Layer 3 = 33%, Layer 2 = 50%, and Layer 1 = 100%, then square brightness would be uniform
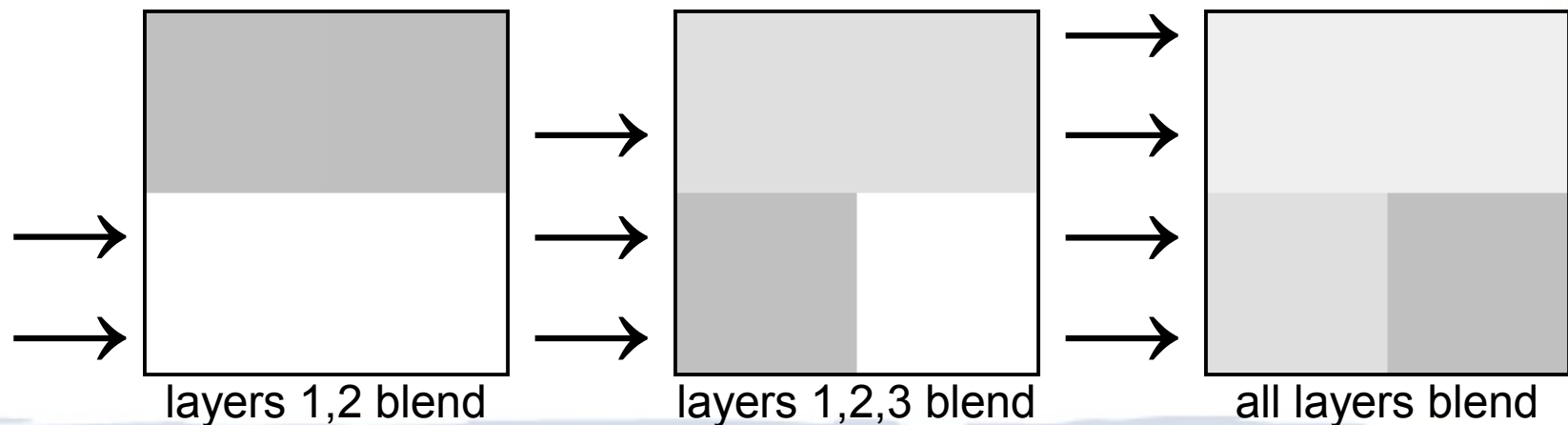

layers 1,2 blend   layers 1,2,3 blend   all layers blend

Image Editing with Layers, Part I

Layer controls

Note: Transparency affects the intensity of the blend modes

- Visibility
  - On-off control → non-visible layer is transparent
    - May be indicated by a button that looks like an eye
- Transparency → 0% to 100%
  - 0% is transparent, 100% is fully opaque (nothing below visible)
    - 50% gives equal "light" to the layer and everything below it
- Blend mode → determines layer interaction
  - Different algorithms for layer blending
    - Normal → straight blend
    - Hue – Saturation – Luminance
    - Darken – Lighten
    - Multiply
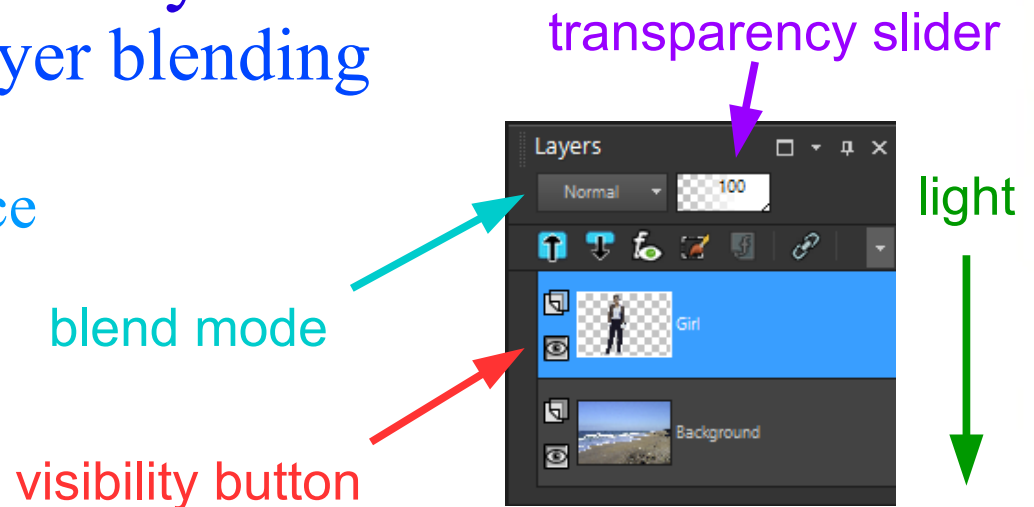   - Difference
    - Dodge – Burn

transparency slider

blend mode

visibility button

light

Image Editing with Layers, Part I

Layer controls

- Blend mode → determines layer interaction
  - Examples

girl layer above beach layer – girl layer blend @ 50% transparency

normal   hue   luminance   difference

beach layer above girl layer – beach layer blend @ 50% transparency

Image Editing with Layers, Part I

Layer controls

Note: Blends are useful for creative images, often in conjunction with other effects

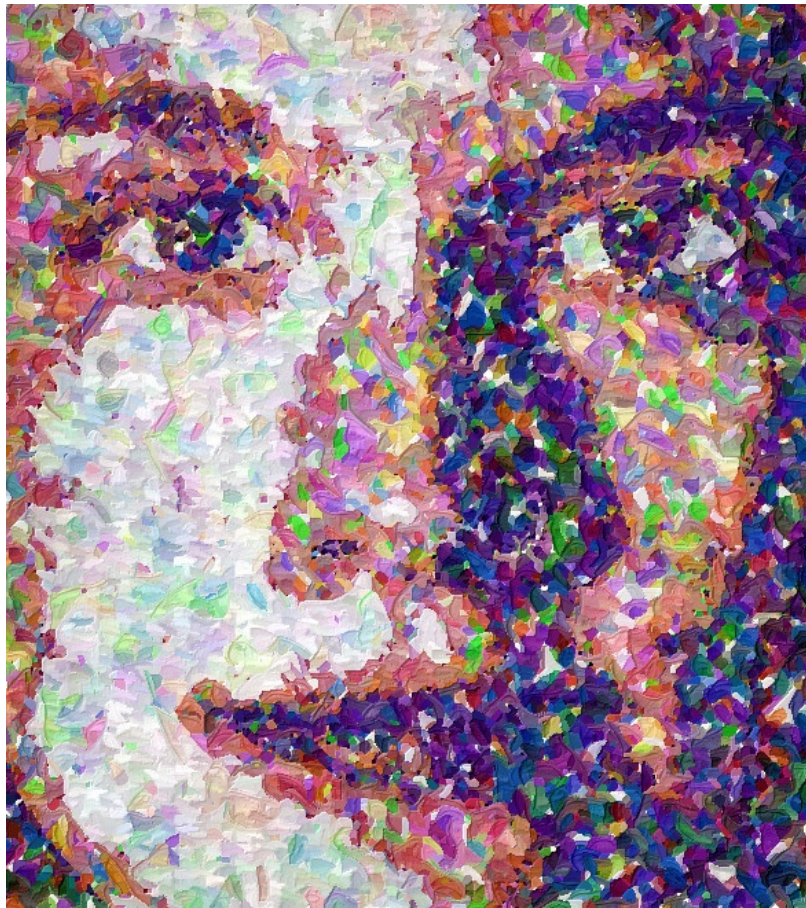- Blend mode → determines layer interaction
  - ◆ Examples

Image Editing with Layers, Part I

Types of layers

- Image
    - Raster → normal image layer
    - Vector → used for graphics such as text or lines

hue = +90

- Adjustment → modifies image layers
    - No image information (thumbnail is white)
    - Examples
        - Brightness & contrast
        - Hue, saturation, lightness
        - White balance
        - Chanel mixer → controls conversion to black & white image
- Mask → selectively controls visibility of other layers
    - Critical for making composite images
- Group → treats several layers as a single entity