



Intro to Krita

Perry Rivera



Twitter: @pvrconsulting
E-mail: perry-rivera@alumni.calpoly.edu

January 2016 | Pasadena Convention Center
SCaLE 14x

Be Free. KDE



Perry Rivera

I motivate and connect teams with technology solutions and provide customer-focused training and support services with System Administrator experience in commercial, educational and non-profit industries.





Overview

- What is Krita?
- History
- Installation Tips
- Basic Concepts of Krita
- Demo





Scope

- Introductory Level
- Topics of Interest for Various Levels
- Engineer with VERY Basic Art Skills





Pronunciation

- Heard various methods of this
- KREE-tah*
- KWEE-tah
- KRIH-tah

*See <https://forum.kde.org/viewtopic.php?f=137&t=125338>



What is Krita?

- Digital Painting Program
- Use it For:
 - Painting
 - Sketching and Drawing
 - Photo Retouching
 - Comic Strips
 - Pixel Art
 - Web Banners
 - Animation
 - And More!



A Brief History of Krita...

- 1998
 - Matthias Ettrich's patch to GIMP
 - KDE spun that off as KOffice's KImage
- 1999
 - That spun off with two different names
- 2002: Renamed to Krita, to avoid potential trademark infringements
- 2003: Development ramps up
- 2004-2009:
 - Original goal is to make an Adobe® Photoshop®/GIMPlike product
- 2009: New goal: Make a painting program
- 2013: Krita Foundation created



Krita vs. Adobe® Photoshop®

Krita	Adobe® Photoshop®
Open Source	Cloud Subscription \$\$\$
Digital Painting	Image Editing
Brush Engines	Brushes
Color to Alpha Filter	Color Range or The Works Plugin
~70 Blend Modes	~30 Blend Modes
Drawing Assistants	?
Multibrushes	?
Layer Styles	Layer Effects



Krita vs. GIMP

Krita	GIMP
Open Source	Open Source
Drawing, Painting, Photo Editing	Photo Editing
Text Tool Quirky	Text Tool Quirky
Brushes Identifiable/Previewable When You Mouseover Them	Brushes Identifiable When You Select Them
Brushes Have Useful Names Like "Textured Fuzzy"	Brushes Have Unhelpful Names Like "Ripped Hole"
Pop-up Palette	Not implemented



Which Should You Use?

- Try them all!
- Use the tool/tools that best works/work for you.



Installation Basics

- **Use Fedora Design Suite Spin**
<https://labs.fedoraproject.org/en/design-suite/>
 - Need to "dnf install calligra" to add Calligra Suite.
 - Can also "dnf install calligra-krita" to add just Krita
- **Use Chakra Distribution**
 - Krita is built-in. The distro is a little tricky to setup...





Installation Basics

- **Install Using Your Distro's Default Installation Processes...**
- **Latest and Greatest - Building From Scratch**
<http://www.davidrevoy.com/article193/guide-building-krita-on-linux-for-cats>



Installation Platform Hints

- **For Mac**
Try turning OpenGL support off:
community.cgcookie.com/t/mac-and-krita-is-anyone-using-krita-on-the-mac-as-i-have-questions/2170
- **For PC**
Install As You Normally Do...
- **For Linux**
Try testing with different workspaces, including KDE

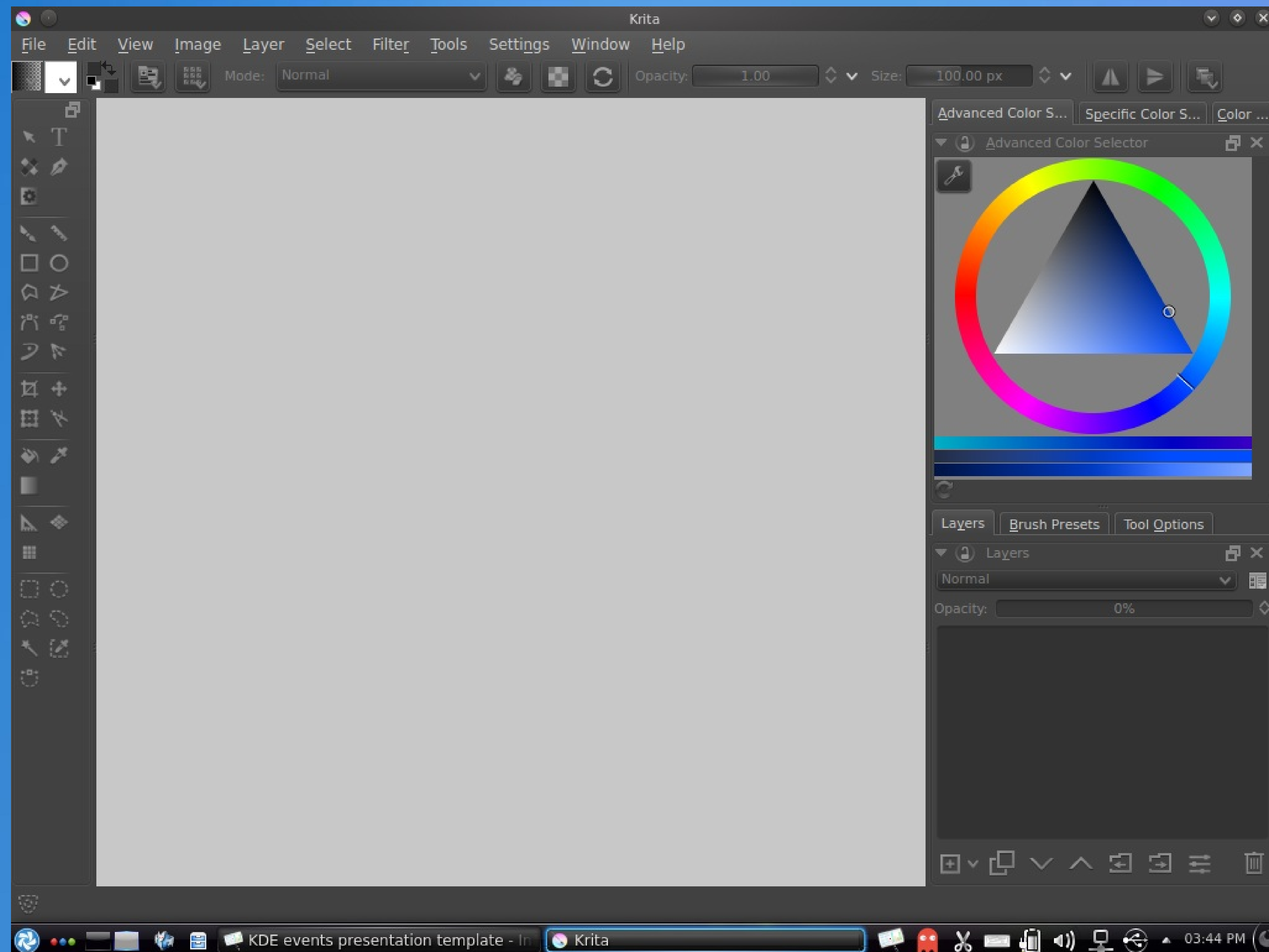


Fedora Walkthrough

- Install Fedora Design Spin (Bare Metal or VM)
- As root-privileged user, install:
dnf update
- As root-privileged user, install:
dnf install calligra-krita
OR
dnf install calligra
- As root-privileged user:
dnf install switchdesk
dnf install @kde
switchdesk kde
- As regular user, invoke:
 - **\$ krita**



User Interface



<https://userbase.kde.org/Krita/Manual/Interface>



Pop Up Palette

- Right Click
- Settings -> Select Favorite Presets



View Canvas Only

- Tab Key
- View -> Show Canvas Only





Zoom

- **Zoom Out:** Ctrl Minus or Mouse Scroll Reverse
- **Zoom In:** Ctrl Plus or Mouse Scroll Forward



Menu (Top of Screen)

- **Image Menu**
 - Affects Entire Image
- **Layer Menu**
 - Affects Individual Layers
 - Use this for Making Collages
- **Select Menu**
 - Affects Selections
- **Filter Menu**
 - Applies Filters to Selections/Canvas.
- **Tools Menu**
 - Macros!
- **Settings Menu**
 - Configure Shortcuts: Keyboard Shortcuts

File Edit View Image Layer Select Filter Tools Settings Window Help



Krita Tools (Left Side)



Vector Tools

Drawing Tools

Manipulation Tools: Crop, Move, Transform, Measure
• Affects Entire Image

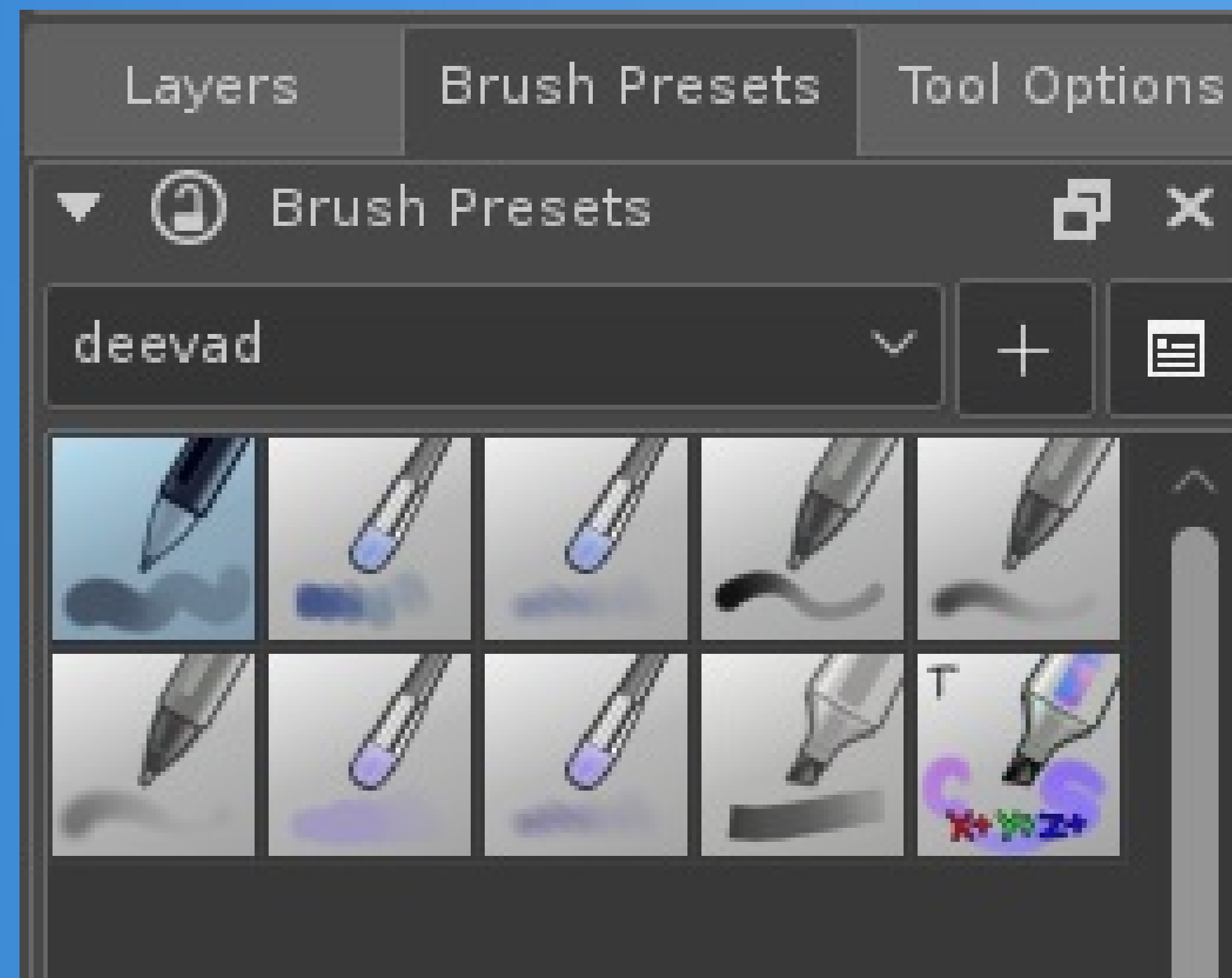
Color Tools: Fill, Eyedropper, Gradient
Assistant Tools: Rulers, Grids

Selection Tools



Introductory Terms

- Brush Presets
- Right side, second tab.
- Play and Experiment...many choices!



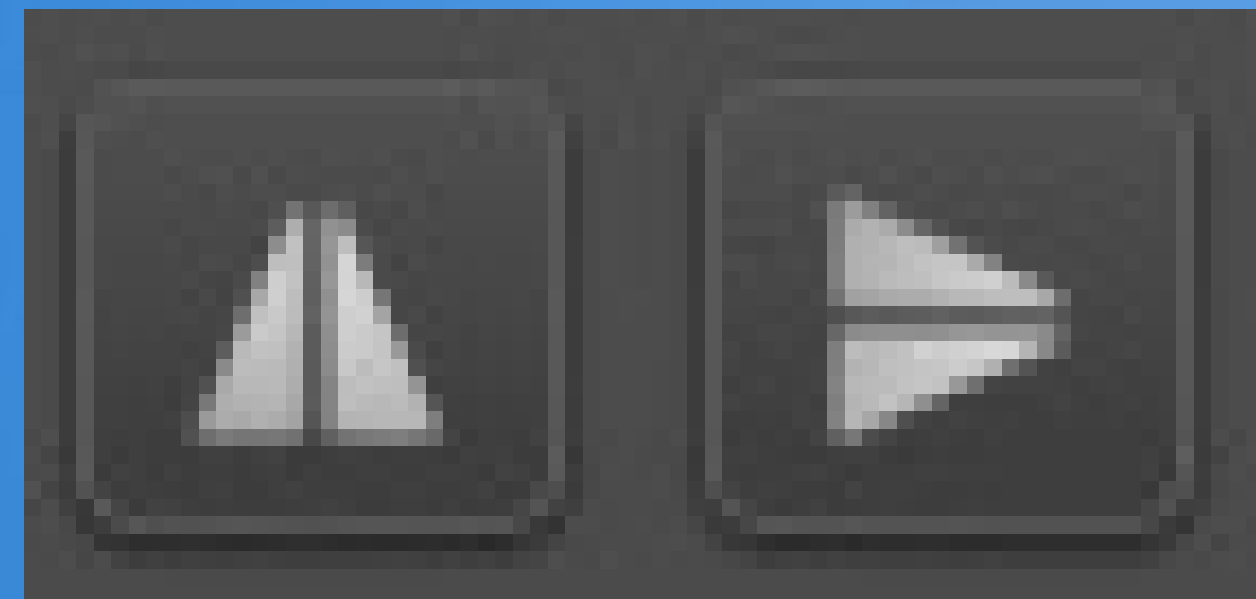
Introductory Terms

- Brush Size
 - Smaller Brush: [Key
 - Larger Brush:] Key
- or
- Shift and Drag Left Mouse



Introductory Terms

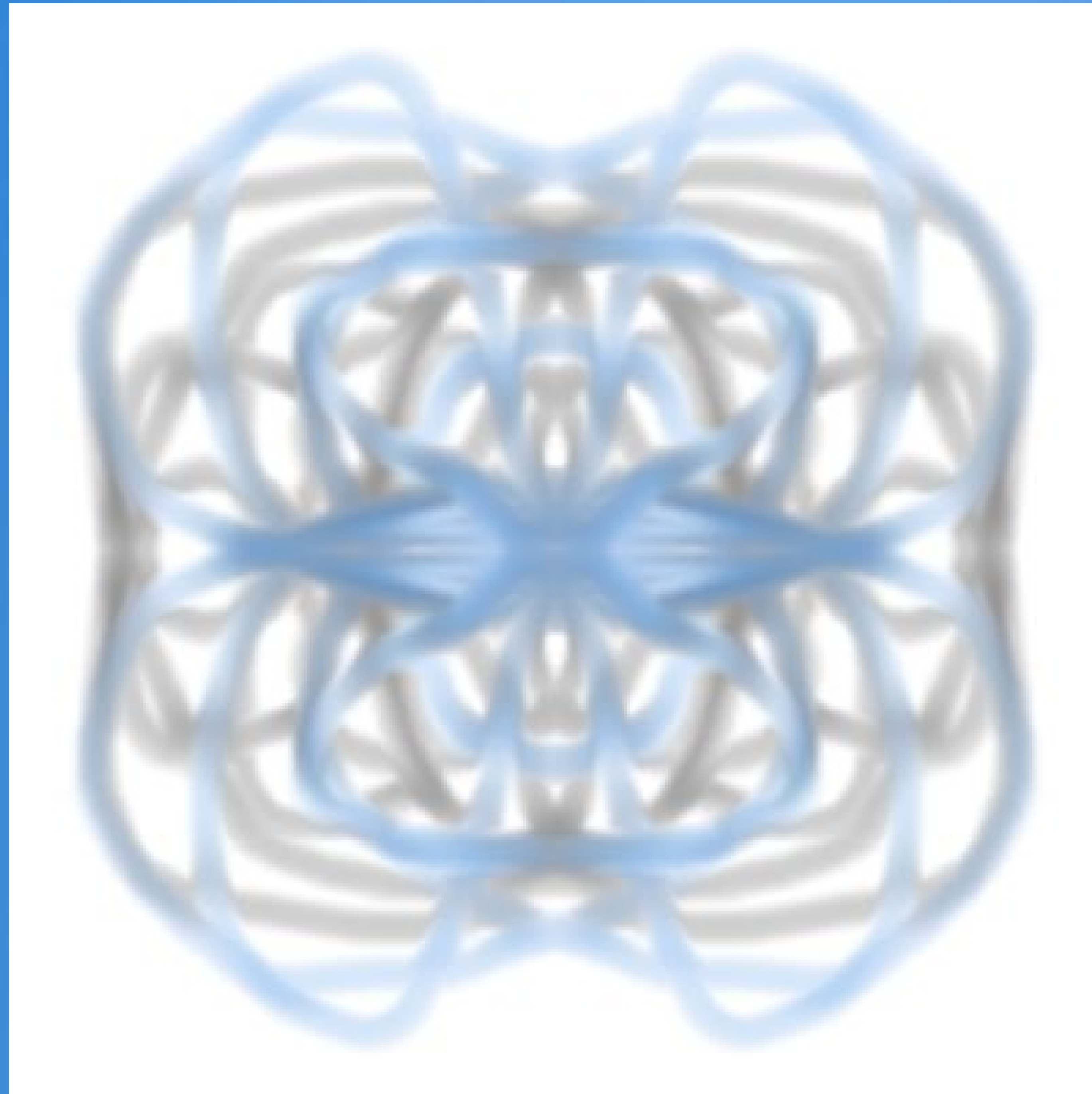
- Symmetry Mode



- Press the buttons to create axes for reflection...
- Choose a brush, size, and paint
- Make Snowflakes, Jewelry, and More

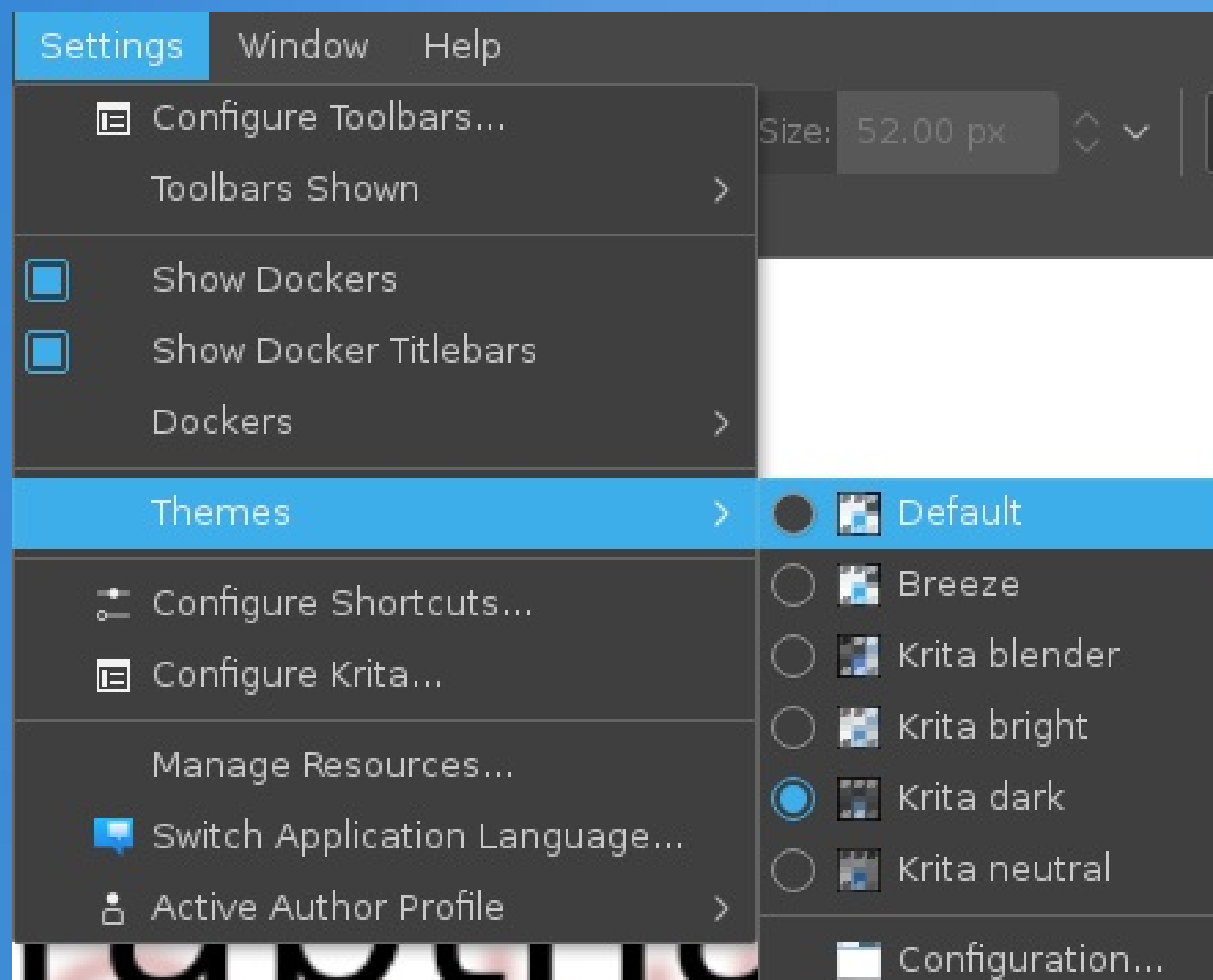


Introductory Terms



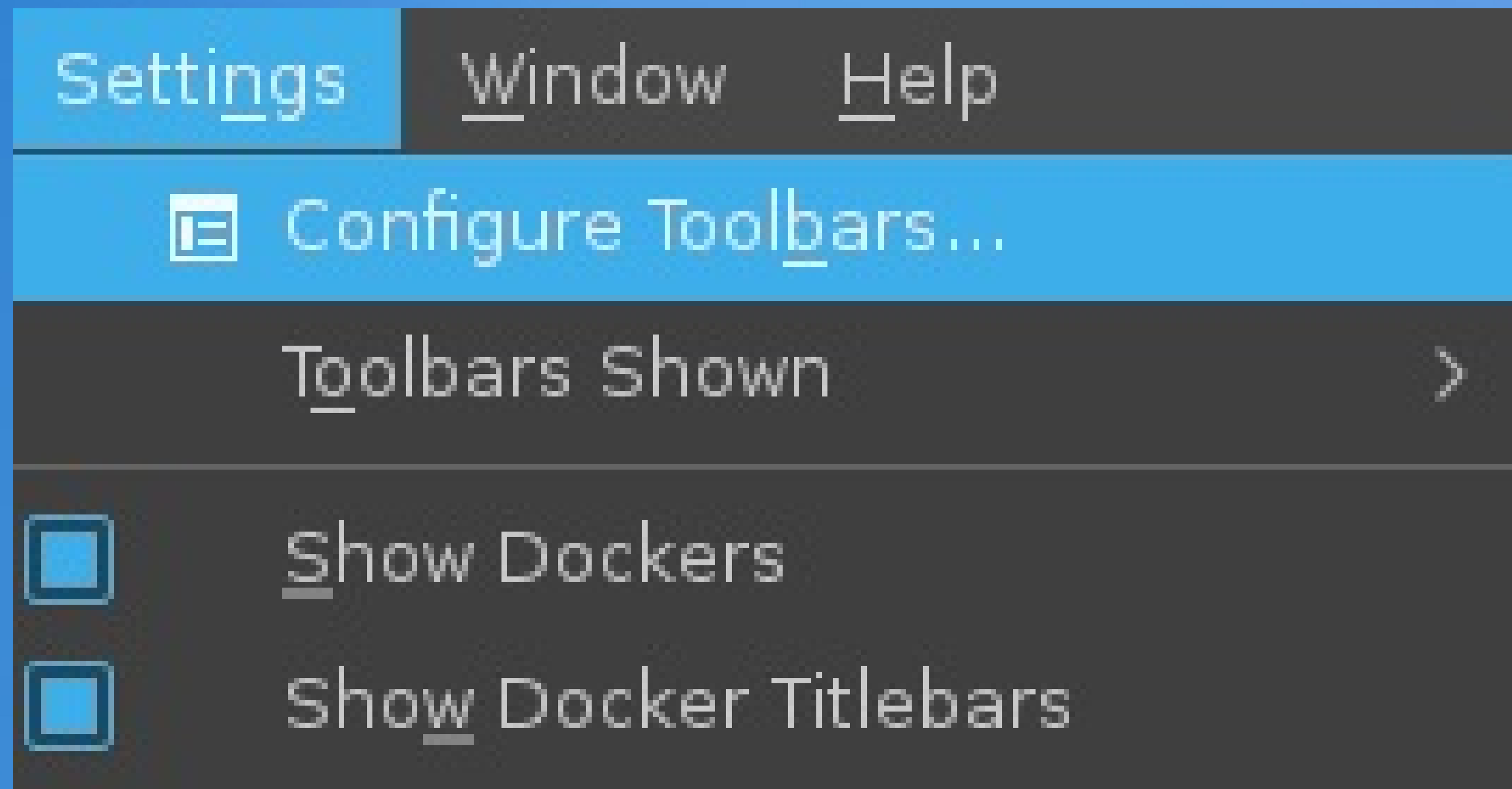
Color Themes

- Settings Menu -> Theme -> (pick one)



Toolbars

- Settings Menu -> Configure Toolbars



Dockers

- Settings Menu -> Dockers -> ...
 - Turns on the Various Tools at Your Disposal...
 - Palette
 - Overview
 - More!
- Save Your Workspace
 - Choose Create Workspace Icon: 
 - Type in a New Name

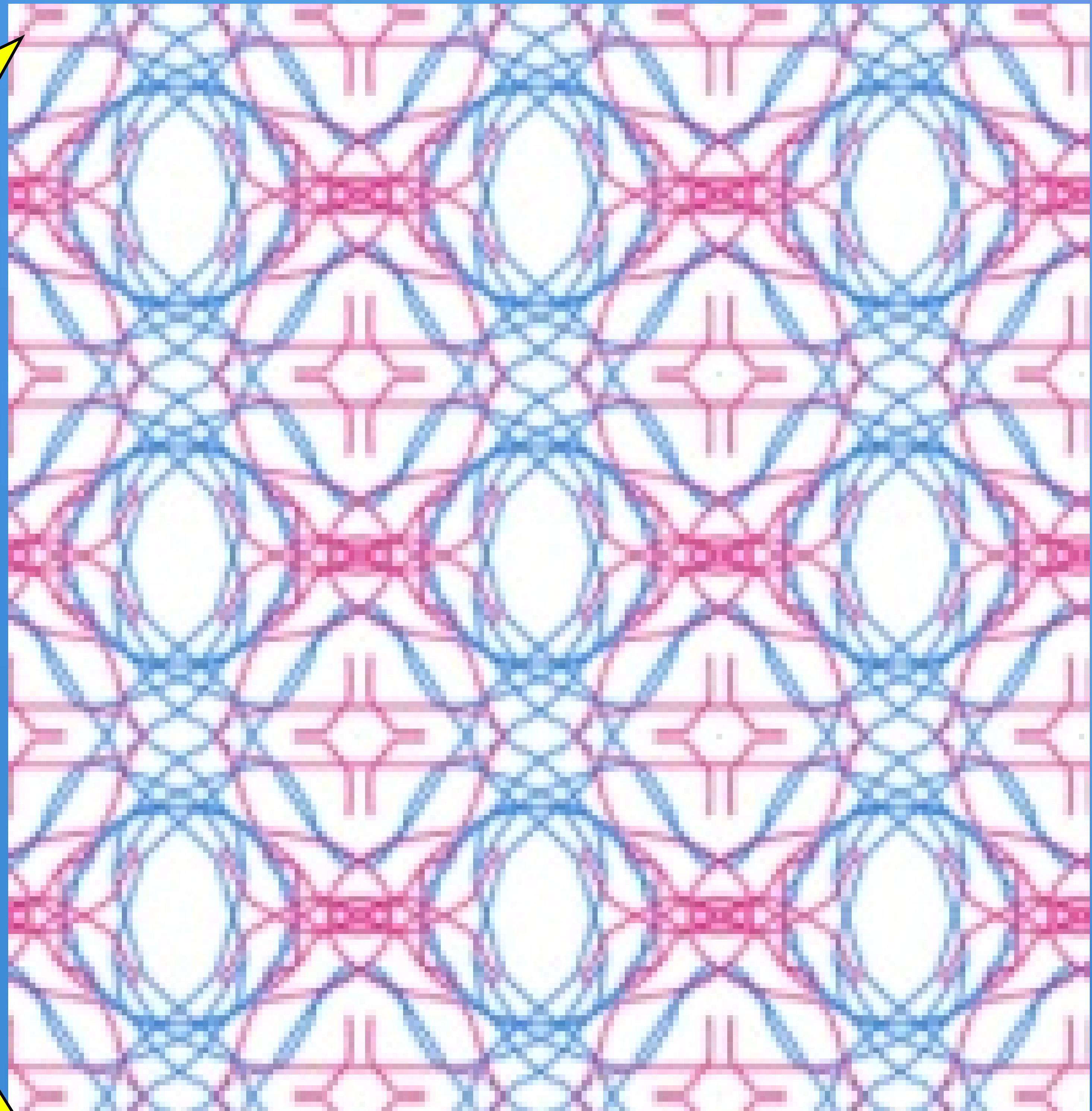
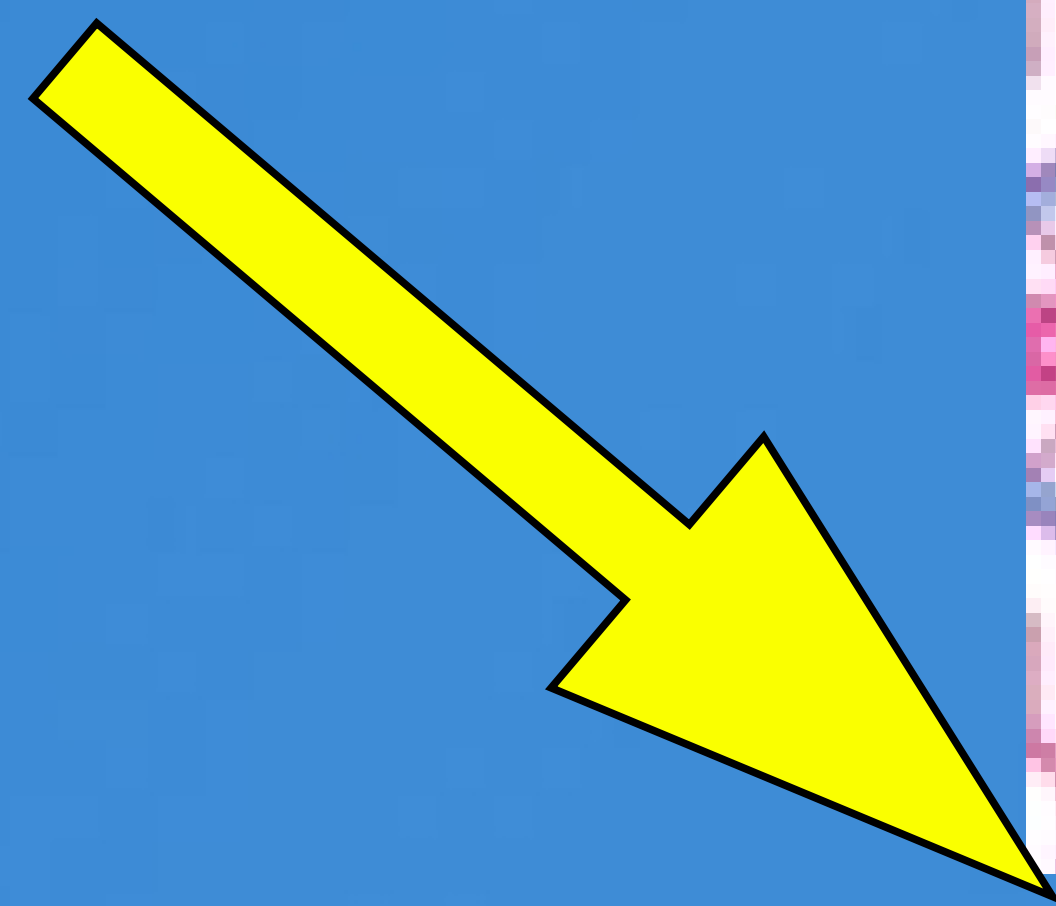
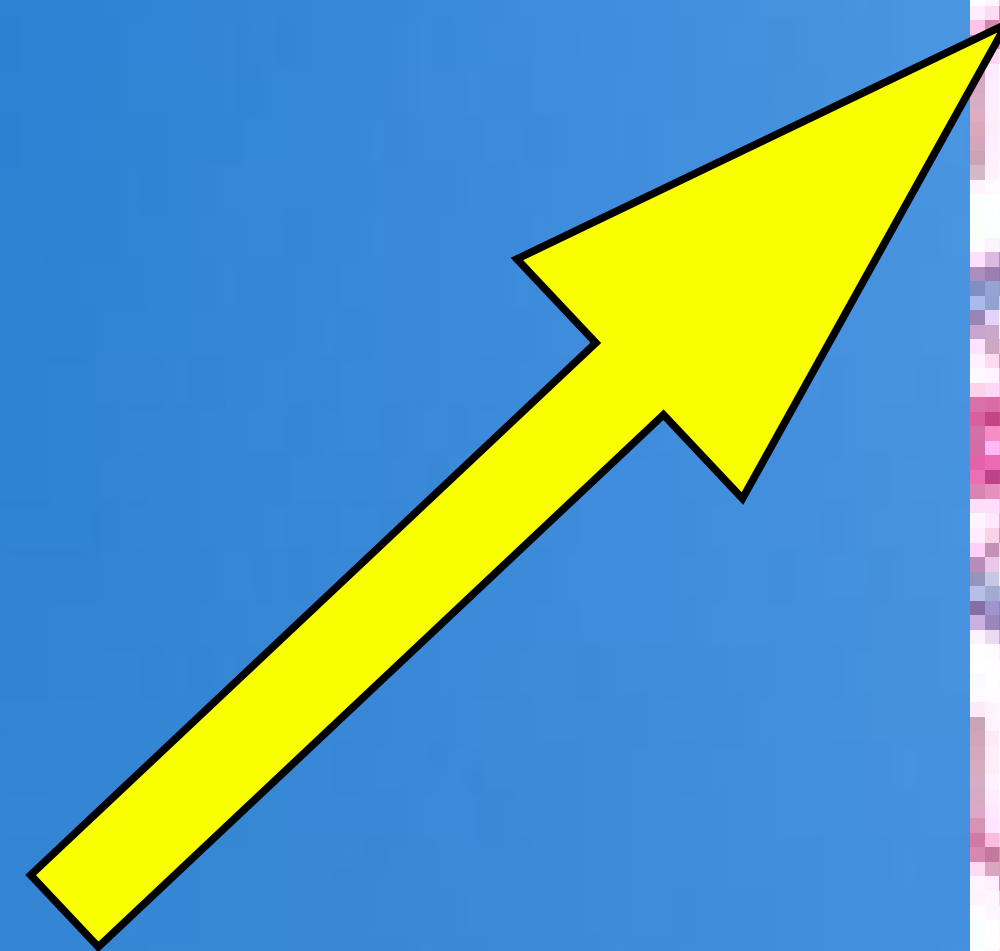
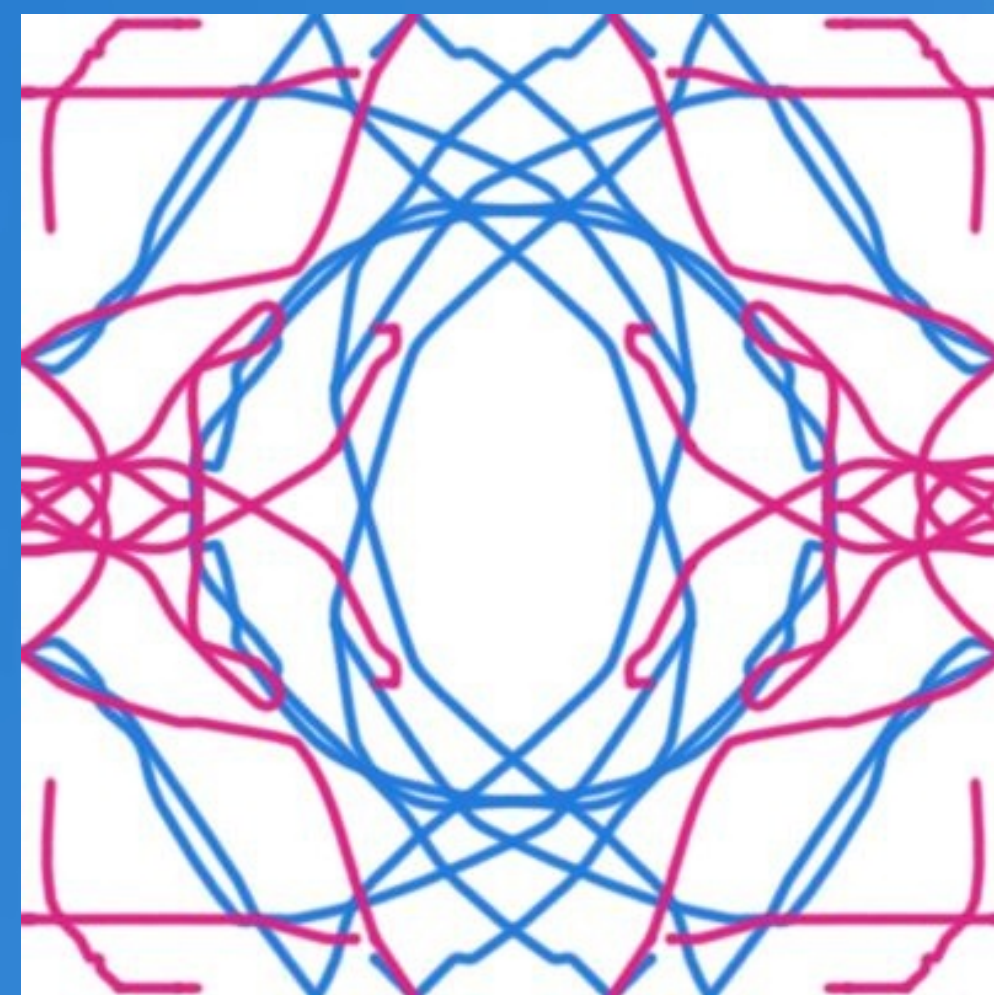


Wrap-Around Mode

- "W" Key
 - Creates a Repeating Texture
 - Use the "M" Key and Paint to Continue Repeating...



Wrap-Around Mode



Pan Canvas

- Press Wheel Button Down or SPACE+mousing
- Repositions the Canvas



Rotate Canvas

- Press CTRL [or CTRL]
- 4 - ROTATE LEFT
- 5 - ROTATE RESET
- 6 - ROTATE RIGHT



Lighten/darken Color

- Lighten: L
- Darken: K



Export

- File Menu > Export
Choose a filename and a filetype
- File Menu > Export as PDF...
Click OK, then choose a filename

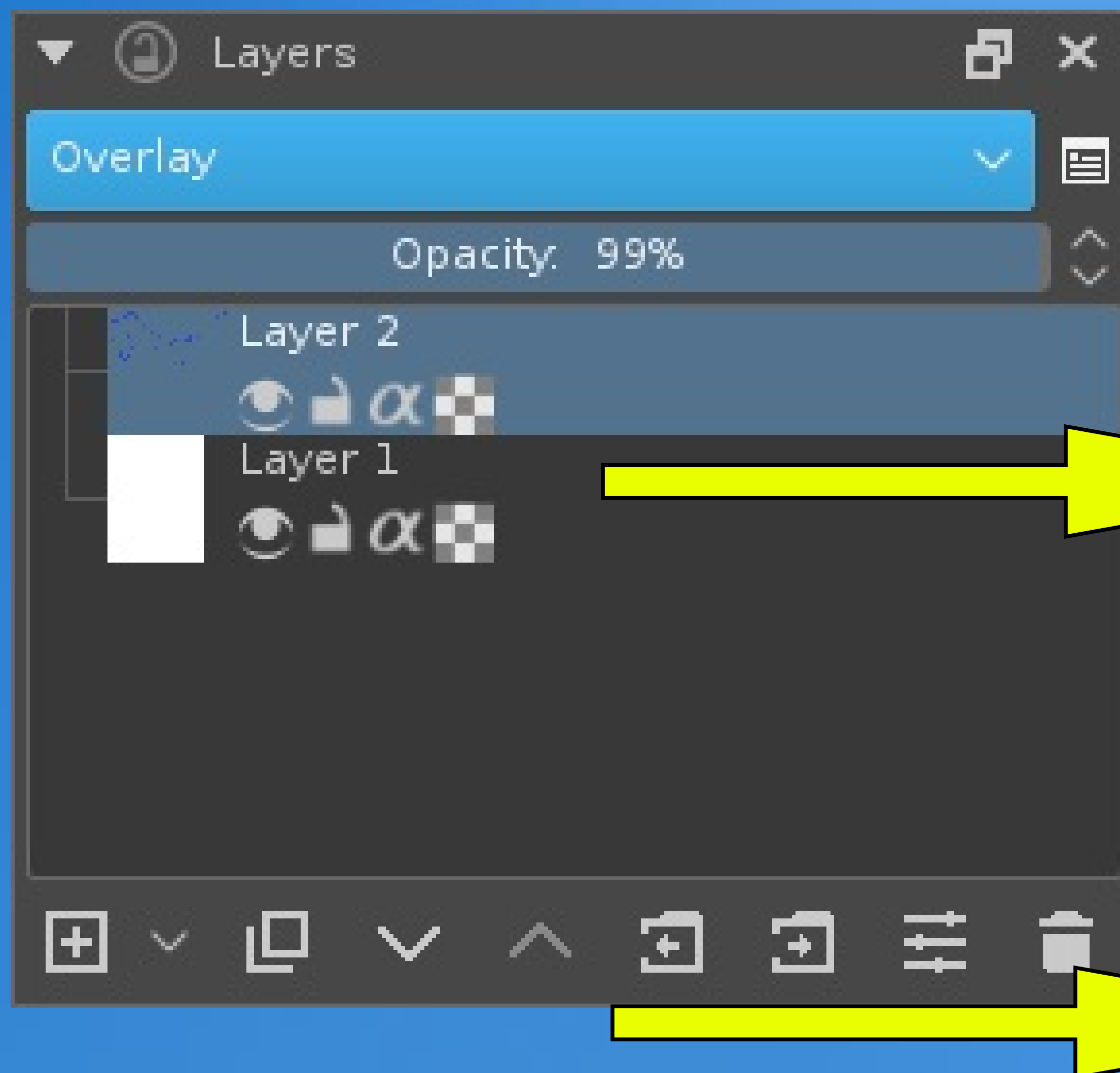


Layers

- Think of Clear Sheets of Plastic Atop a Background
- Bottom Layer is the Background
 - Transparent (for Web Banners, etc.)
 - Opaque
- Can Group These
 - e.g. Face Layer Group Could Have Eyes, Nose, Hair, and so on..



Layers



- Visibility
- Layer Lock
- Alpha Lock
- Alpha Inheritance

- Add
- Duplicate
- Move Layer Down
- Move Layer Up
- Move Outside of Group
- Move Inside of Group
- Layer Properties
- DeleteLayer

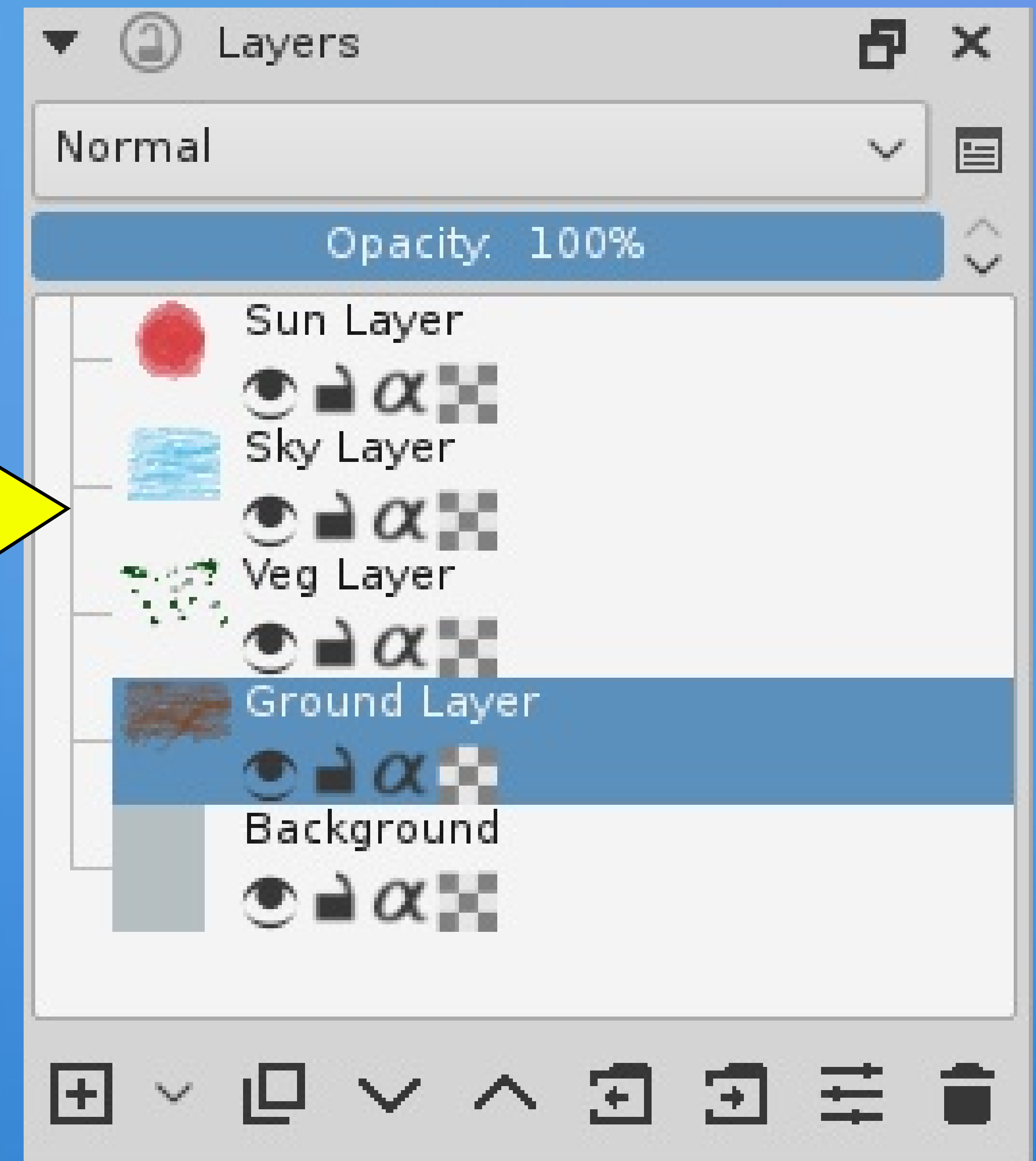
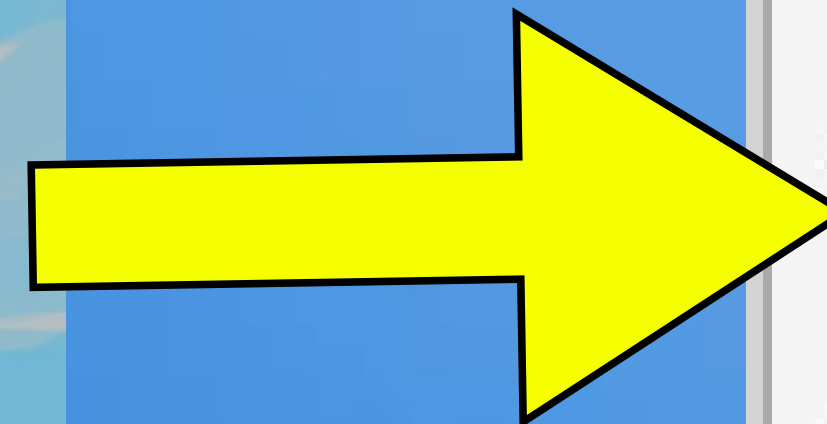


Layers

- Add Layer
 - Insert key - Inserts Paint Layer
- Remove Layer
 - Click on desired layer to remove..
 - Right-click on layer, choose Remove Layer
- Duplicate Layer
 - CTRL J



Case Study: Sunny Day



Layers

- Layers Add Extra Complexity
- Save First!
- Flatten Layers If You No Longer Need the Sublayers.
- Right Click the Layer and Choose:
 - Flatten Image
or
 - Flatten Layer



Layers

- Knowledge Check:
- How Would You Create the Following Three Layers?
 - TOP: Ink
 - MIDDLE: Sketch
 - BOTTOM: Canvas



Undo and Redo

- Undo: CTRL Z
- Redo: CTRL SHIFT Z



Erase Mode

- Hit E
- Any brush or drawing tool can be turned into an eraser...



Mirror Image Mode

- Hit M



Stabilizer Mode

- Might be Useful if You Use a Mouse While Painting...
- Docker: Tool Options
- Change Dropdown Smoothing from Basic Smoothing to Stabilizer

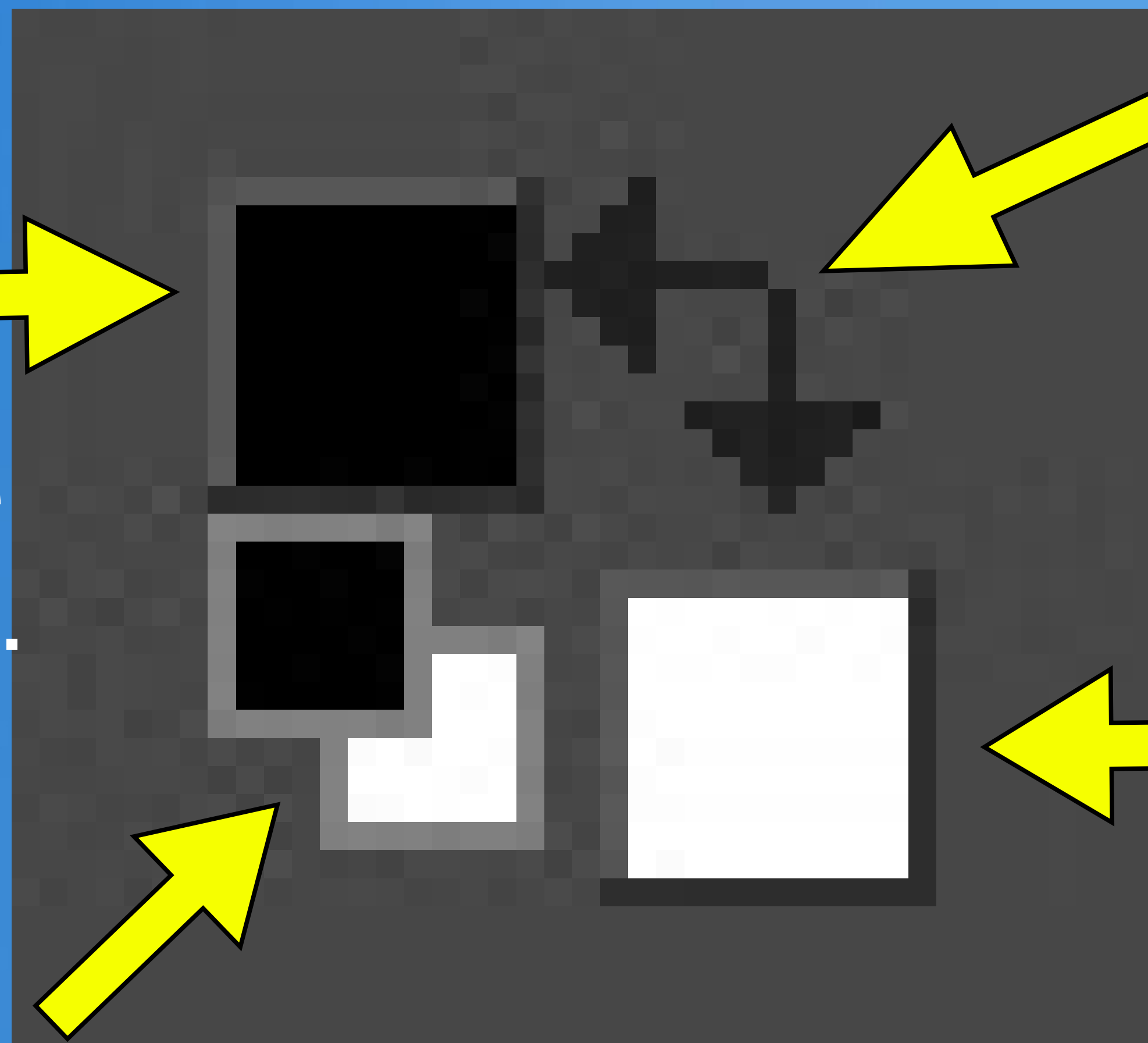


Foreground/Background Color

Foreground
Color.

Click to Choose
a Different One..

Click Here or hit D
on Your Keyboard to
Reset Foreground Color to
Black and Background
Color to White



Click Here or Hit X on
Your Keyboard to Swap
These Two Colors

Background
Color.

Click to Choose
a Different One...



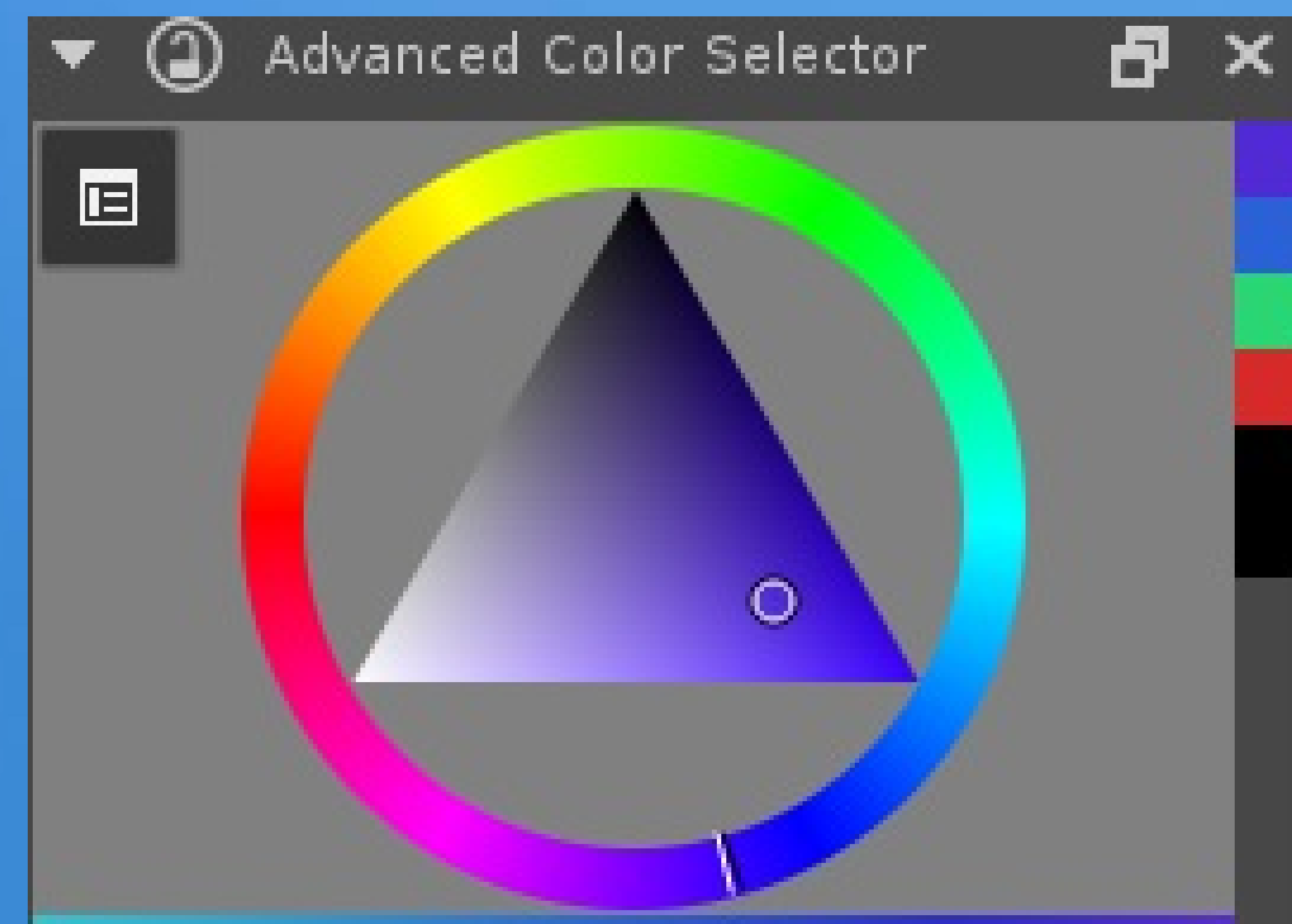
Fill a Layer with Color

- Backspace:
Fill with BACKground Color
- Shift+Backspace:
Fill with FOREground Color
- Great for Masked Photos!



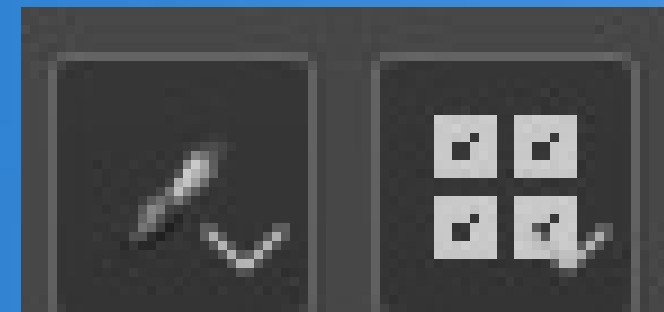
Color History

- See/Select Your History in the Color Selector
- History is Visible in the Pop-up as well



Brush Engines (Up Top)

- Brush Settings, Brush Presets



- Pencil
- Sketch
- Airbrushes
- Bristle Brushes
- Brush Tip
 - Auto, Predefined, Text
- Use "Shift" and Drag Mouse to Change Size of the Brush...
- Click on the Tool Options tab to play around with the various settings...



Toolbar (Top)

- Gradient
- Fill Pattern
- Brush Engine
- Brush Settings
- Blending Modes
- Eraser
- Preserve Alpha
- Reload Original Preset
- Opacity/Size/Flow
- Mirror: Set Horizontal/Vertical



Scaling

- Image Menu: Scale to New Size
- Change to larger or smaller size accordingly...





Blending Modes

- Algorithms describing how colors are mixed together
- <http://heap.kogmbh.net/downloads/IntroductiontoKritaforusercomingfromPs.pdf>



Blending Modes

- Create a new Filter (NOT Filter Mask!) Layer
 - Type a name for that new Filter Layer
 - Click OK
- Change Blend Mode from Normal to X
 - Popular Ones Include:
 - Normal (The Default)
 - Multiply (Darken)
 - Screen (Lighten)
 - Overlay
 - Soft Light



Blending Modes (cont'd)

- Color Blending Mode: For grisailles greyscale underpainting (colorizing greyscale pictures) or general colorizing.
 - Duplicate Paint Layer (Ctrl+J)
 - Set Layer Blending Mode to Color
 - Paint Grey (Desaturation) or Paint With Another Color
 - Reduce the Opacity to a Reasonable Level.



Blending Modes (cont'd)





Shapes

- Squares
- Circles
- Polygons
- Polylines-Similar to Polygons, but not connected at the end



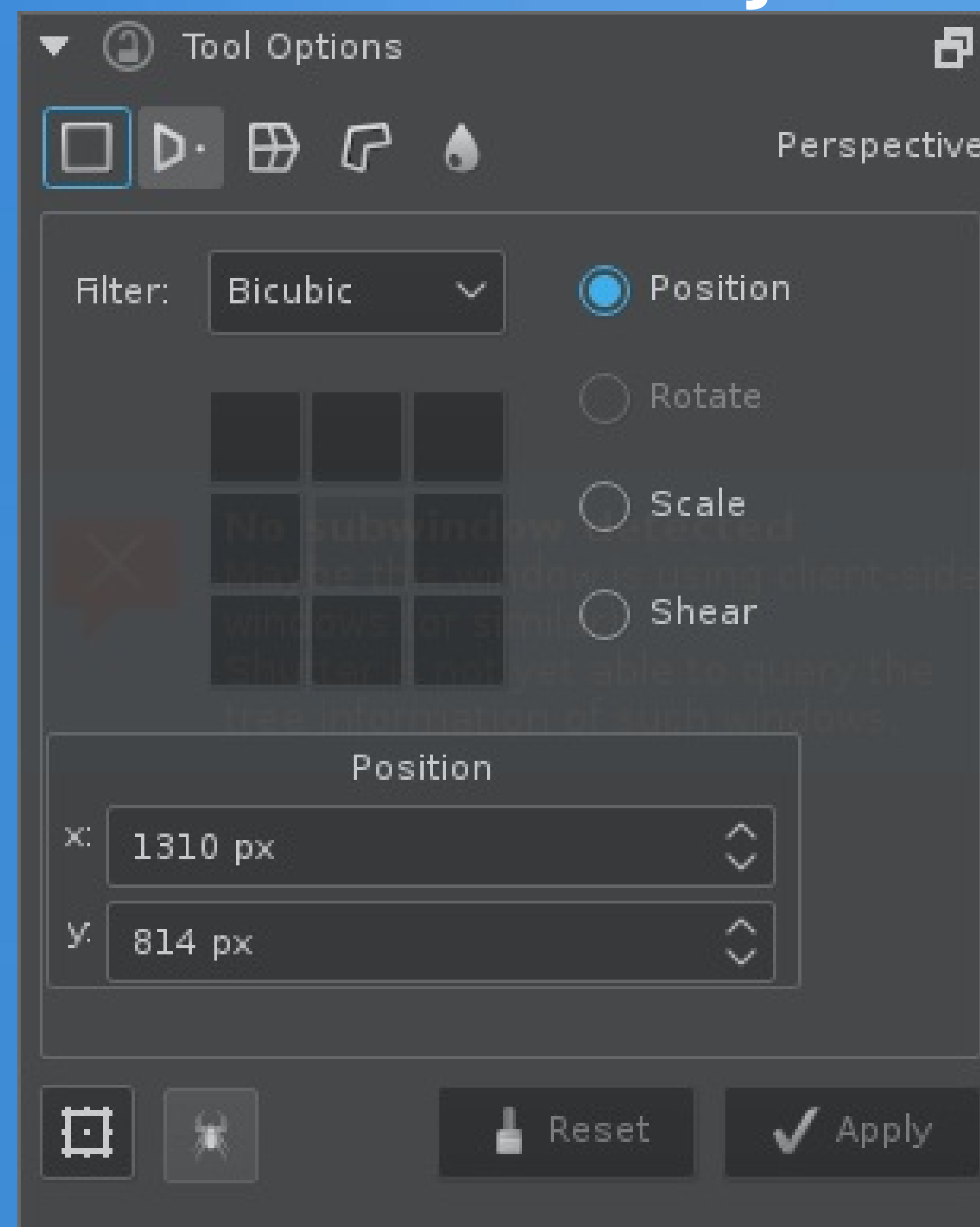
Transform

- "T" and Ctrl+T
 - Hold SHIFT to maintain aspect ratio
- **Perspective Skew**
 - Hit Ctrl and Drag a Handle



Perspective Transform

- Ctrl+T
- Tool Options Docker
 - Choose Perspective (second tool)
 - Drag Handles of Object



Filter Menu

- Use Create Filter Mask on Layer for Flexibility
- Gaussian Blur: Smooth Blurring of Image
- G'MIC: GREYC's Magic for Image Computing
 - Patterns
 - Experiment!
 - Frames
 - Check out:
 - Frames > Polaroid
 - Frames > Frame [Fuzzy]
 - Countless More



Some G'MIC Examples



Frames > Polaroid



Frames > Fuzzy

Text Tool

- Adds a Vector Layer for Text
 - Vector:
 - Paths defined by math formulas
 - When scaled up, image will not be pixellated/distorted [unlike rasters]
- Note that you can interleave Vector Layers with Raster Layers



Favorite Presets

- Go to Brush Presets Docker
- Right Click on a Desired Brush Preset
 - Right-Click and Choose Assign to Tag
 - Choose: Favorite Preset or any other group
- Right click on the canvas and see that your preset is added

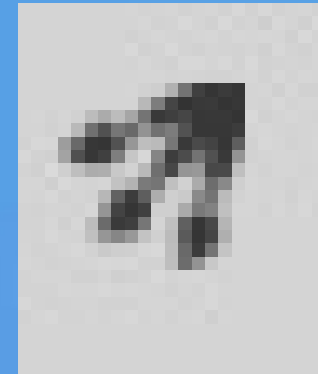


Case Study: Jewelry/Snowflake

- Symmetry Mode
- Choose a Brush
- Choose a Color
- Choose a Size
- Draw!



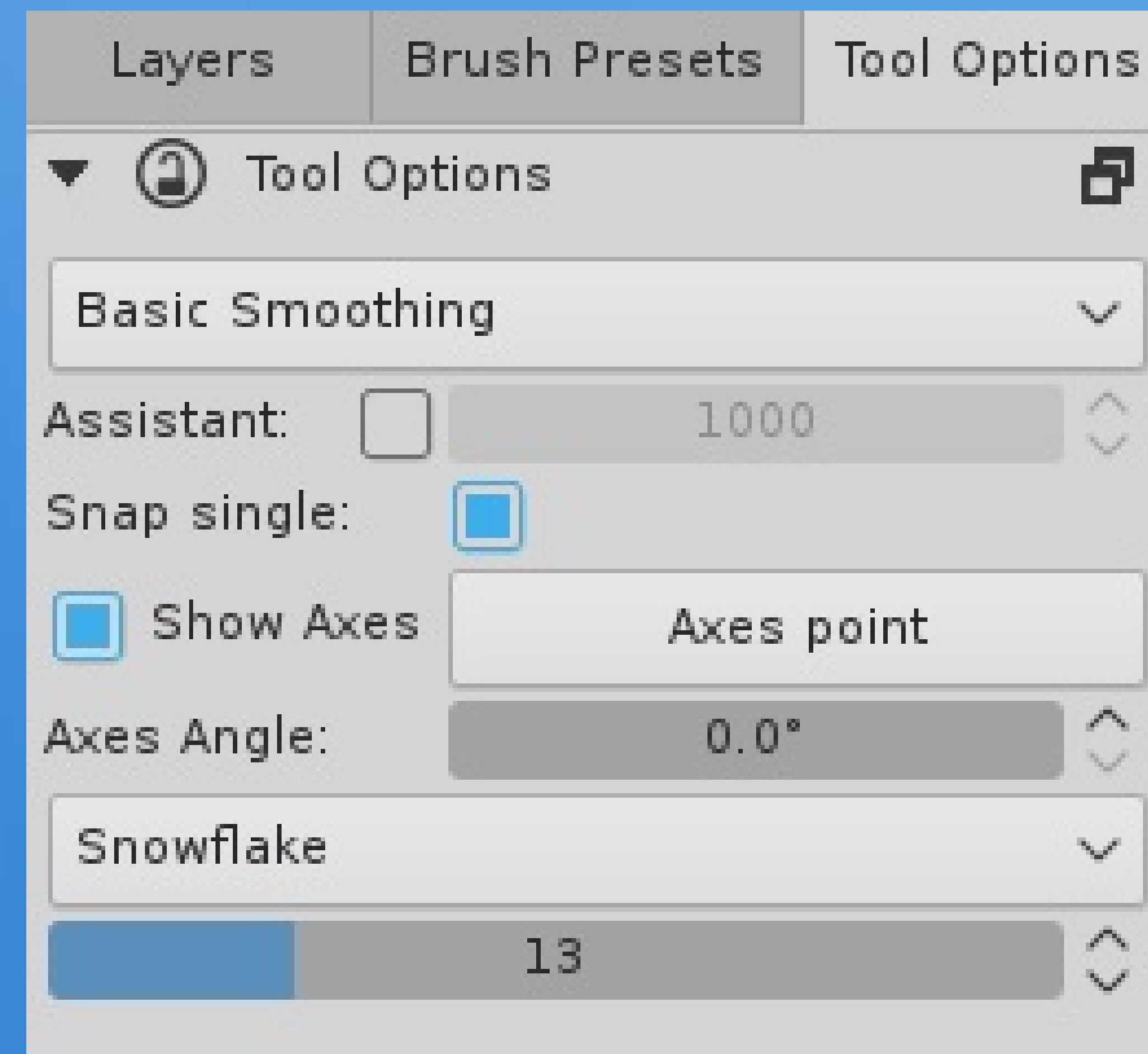
Case Study : Jewelry/Snowflake

- Multibrush Tool 
- Choose a Brush Preset
- Choose a Brush Color
- Choose a Brush Size
- Draw!



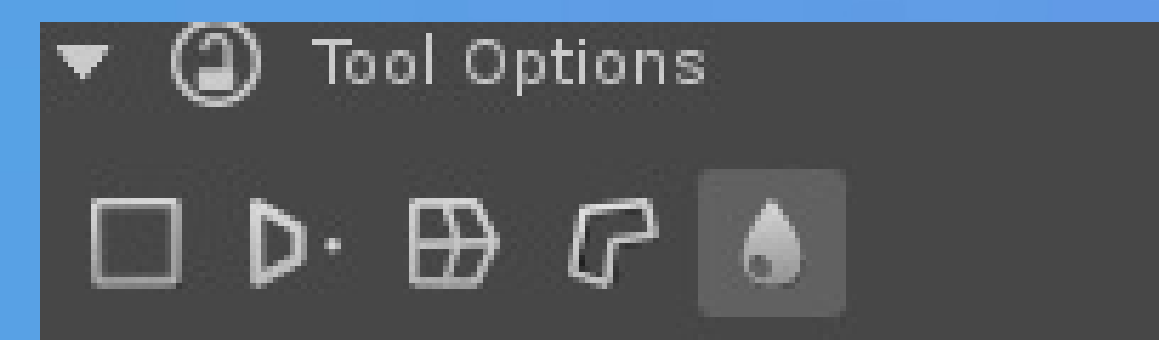
Case Study : Jewelry/Snowflake

- Tool Options Docker
 - Drag number slider at the bottom to choose Brush Count
- Draw!

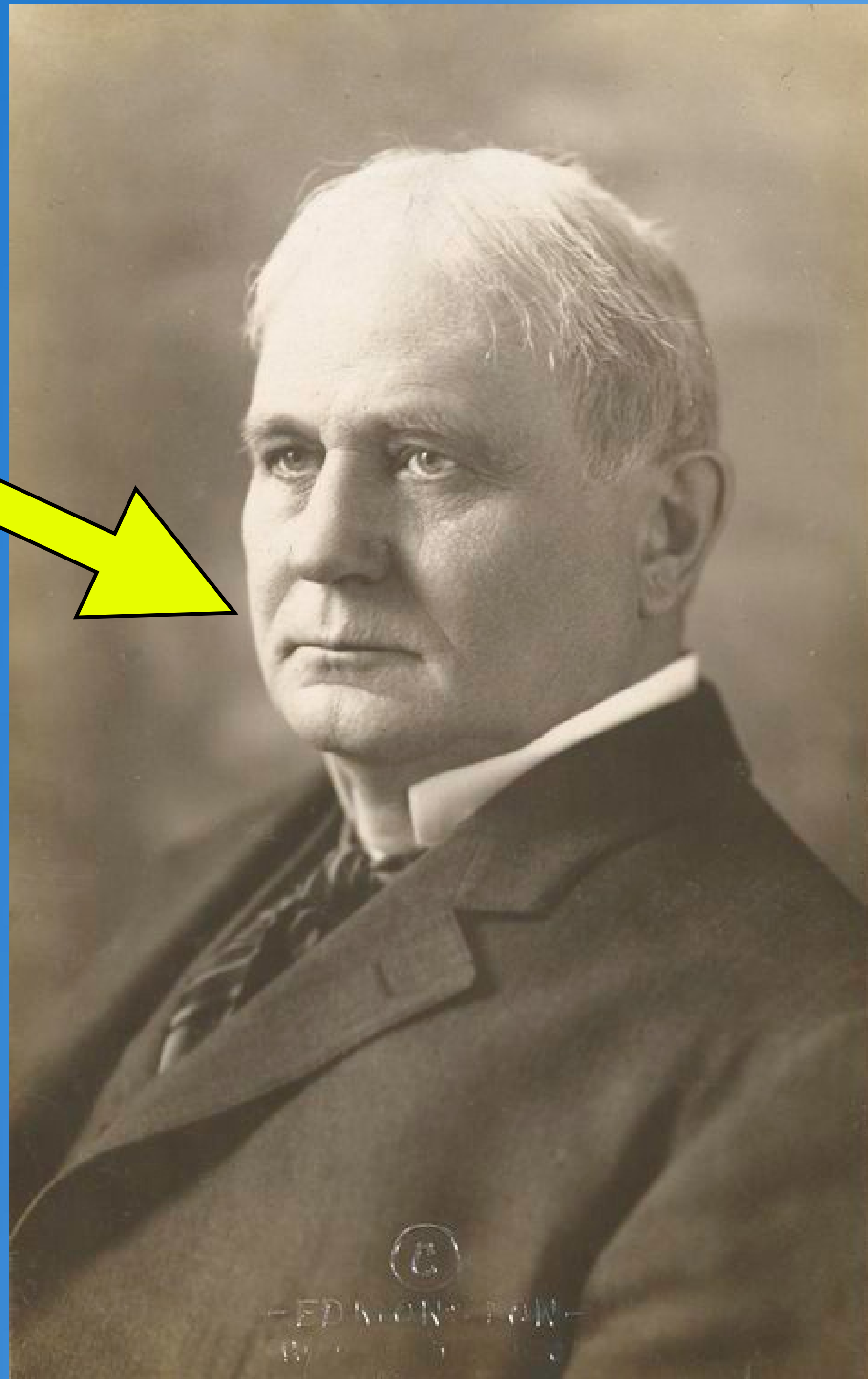


Case Study: Frown to Smile

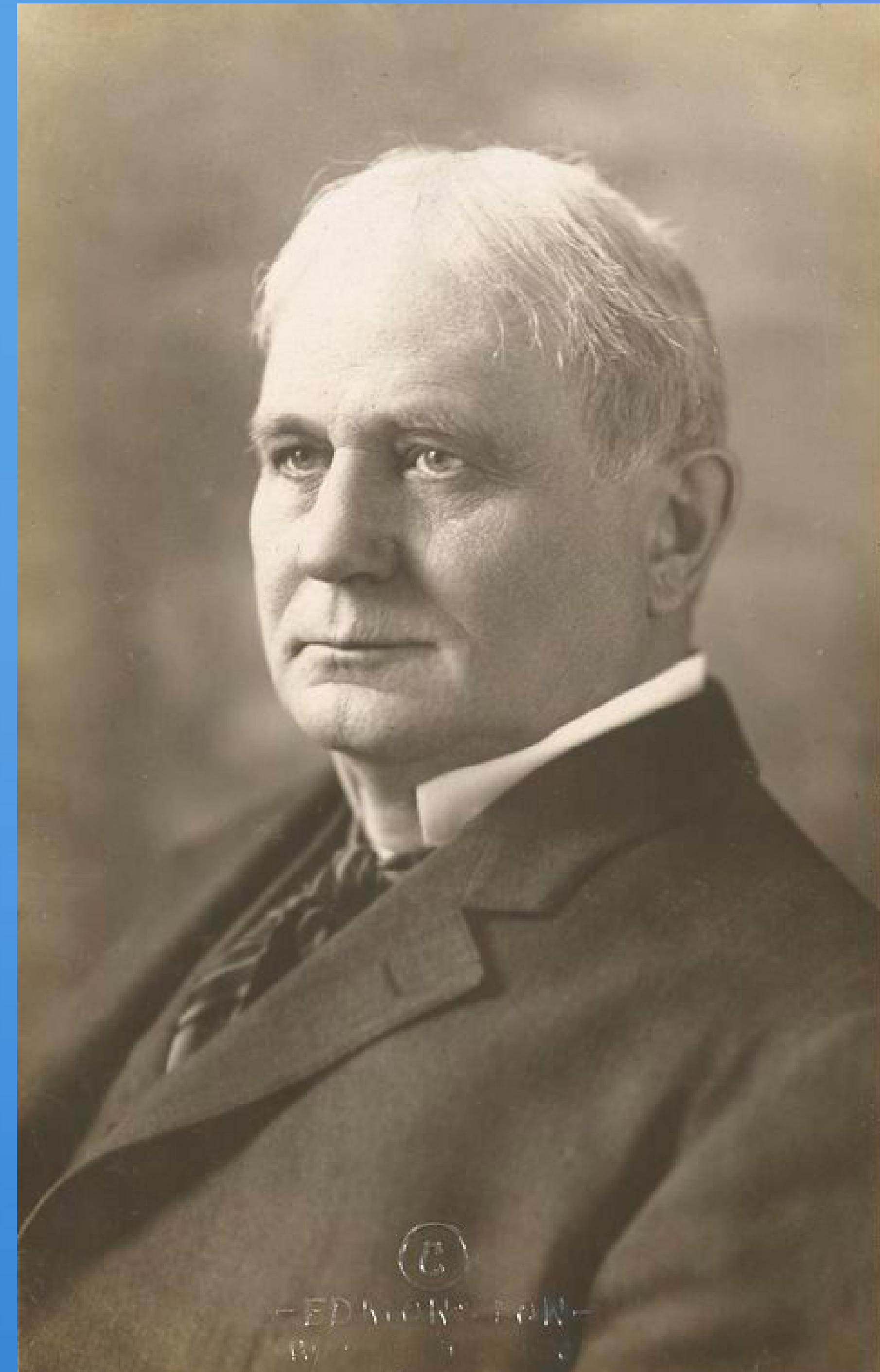
- Use the Transform Tool (Ctrl+T)
- Shift+Mouse Button to Change Brush Size
- Docker: Tool Options > Liquify
 - Mode: Build Up
 - Size: Choose a Good Size (Experiment!)
 - Tweak Cheek Up - Avoid the Joker Effect
- Docker: Tool Options > Warp
 - Anchor Points: Draw
 - Create Points
 - Lock Points
 - Drag Points
 - Hit Enter



Case Study: Frown to Smile



BEFORE



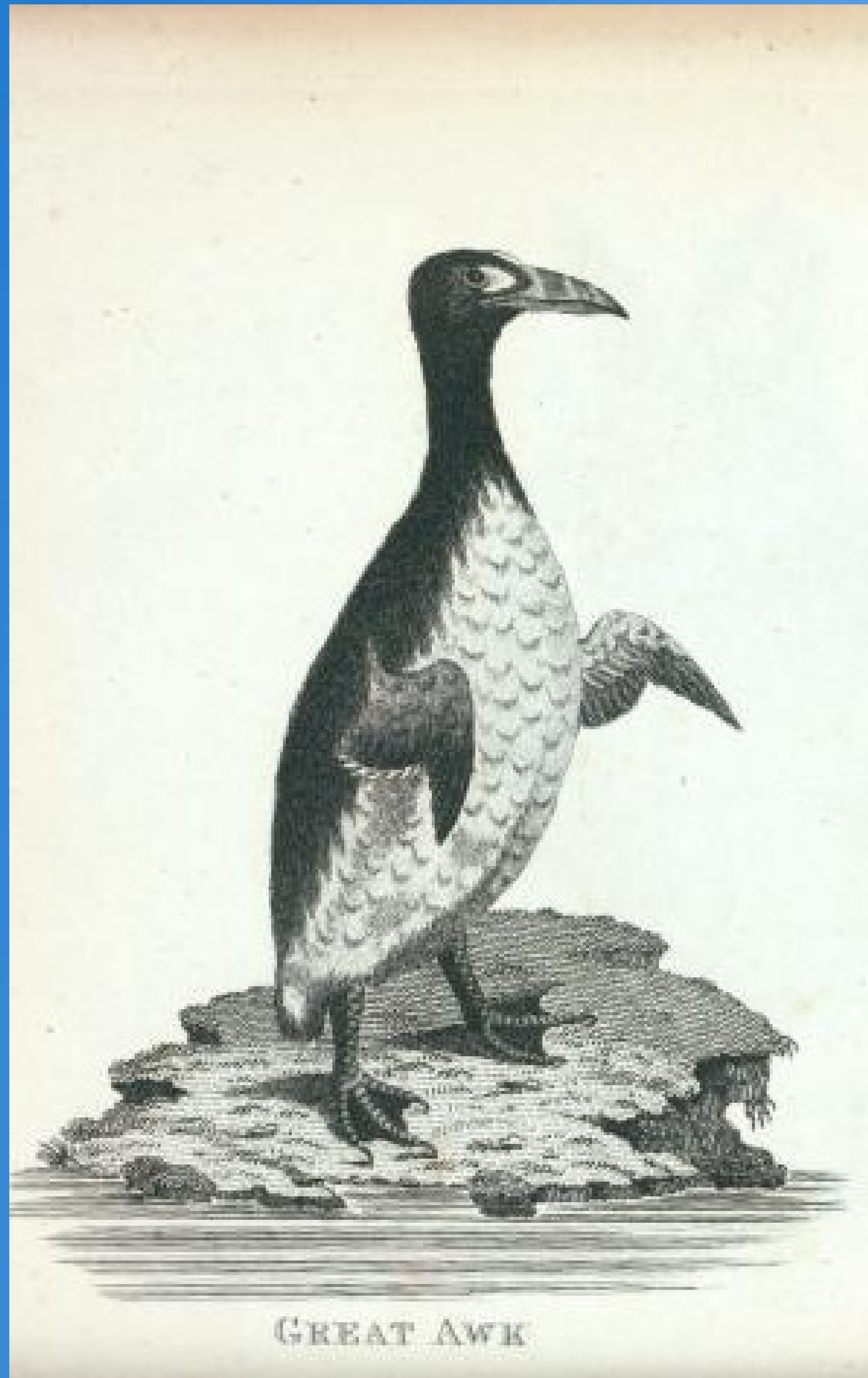
AFTER

Case Study: Penguin Looks Up

- Works Well With Lone Sketches on a Blank or Transparent Background
- Use the Transform Tool (Ctrl+T)
- Docker: Tool Options > Cage
 - Draw Cage Around Object
 - Close the Cage
 - Tweak the Cage for Desired Effect
 - Use Clone to Clean Up Where Necessary...



Case Study: Penguin Looks Up

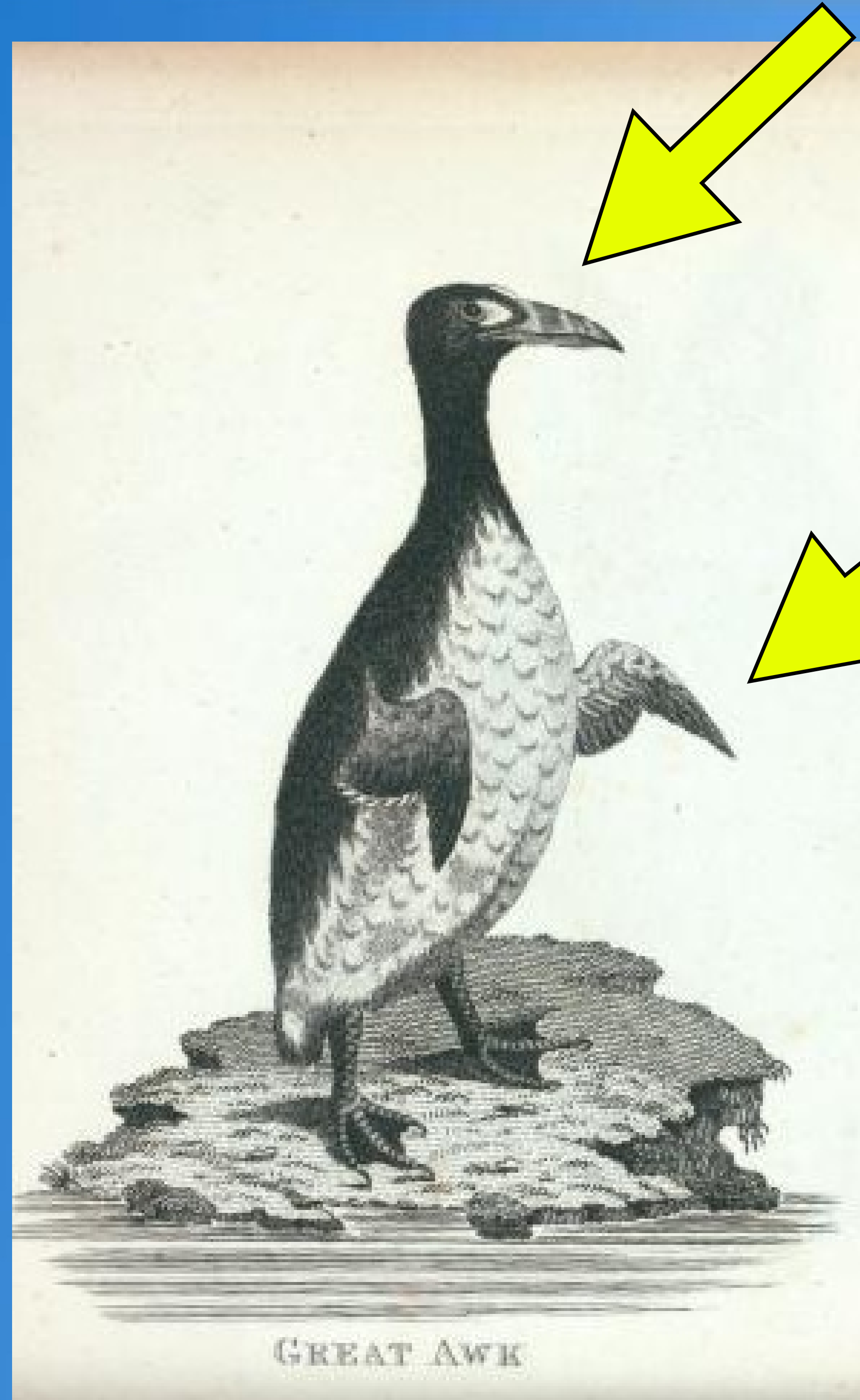


BEFORE



CAGE STRATEGY

Case Study: Penguin Looks Up



BEFORE



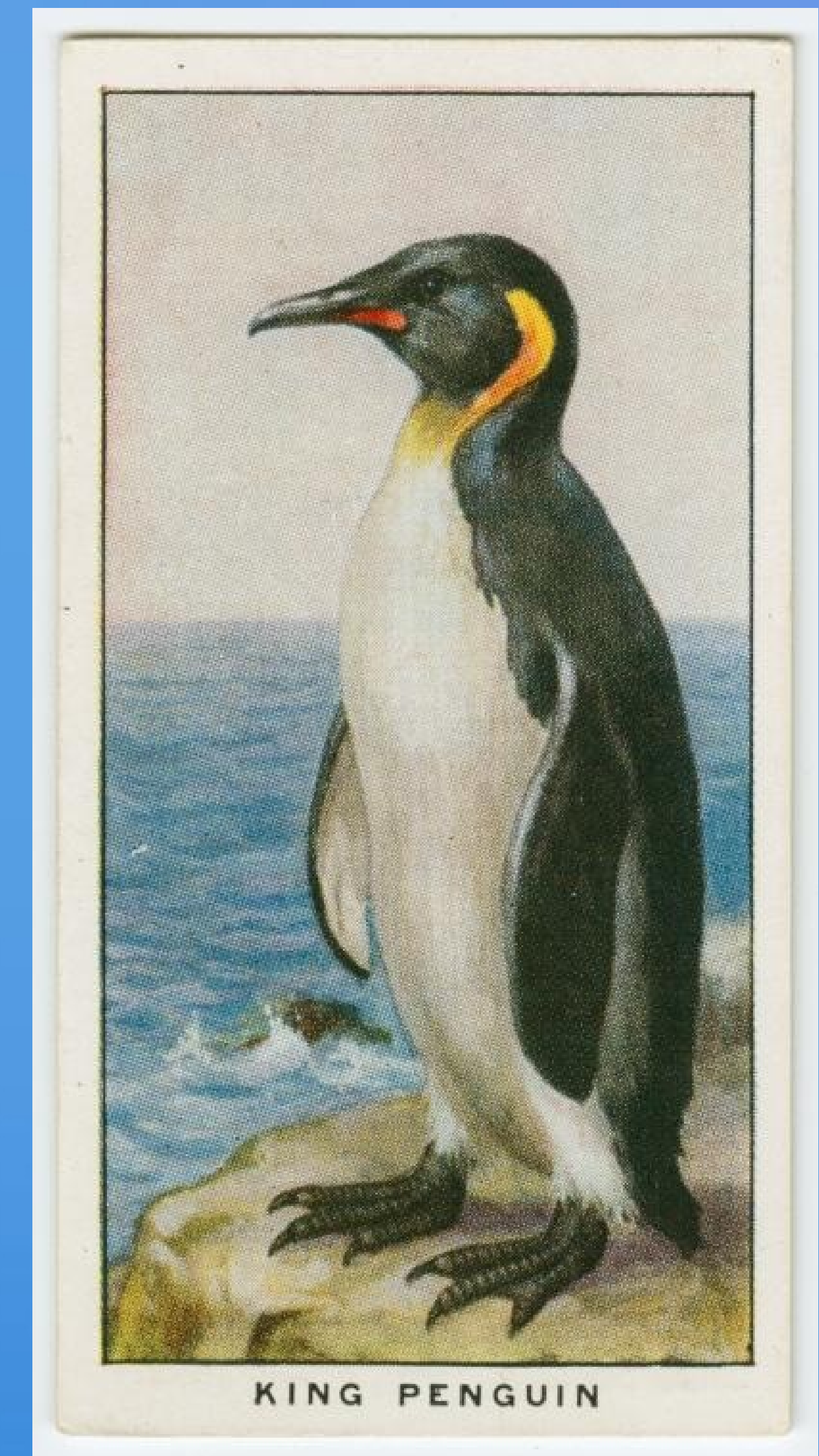
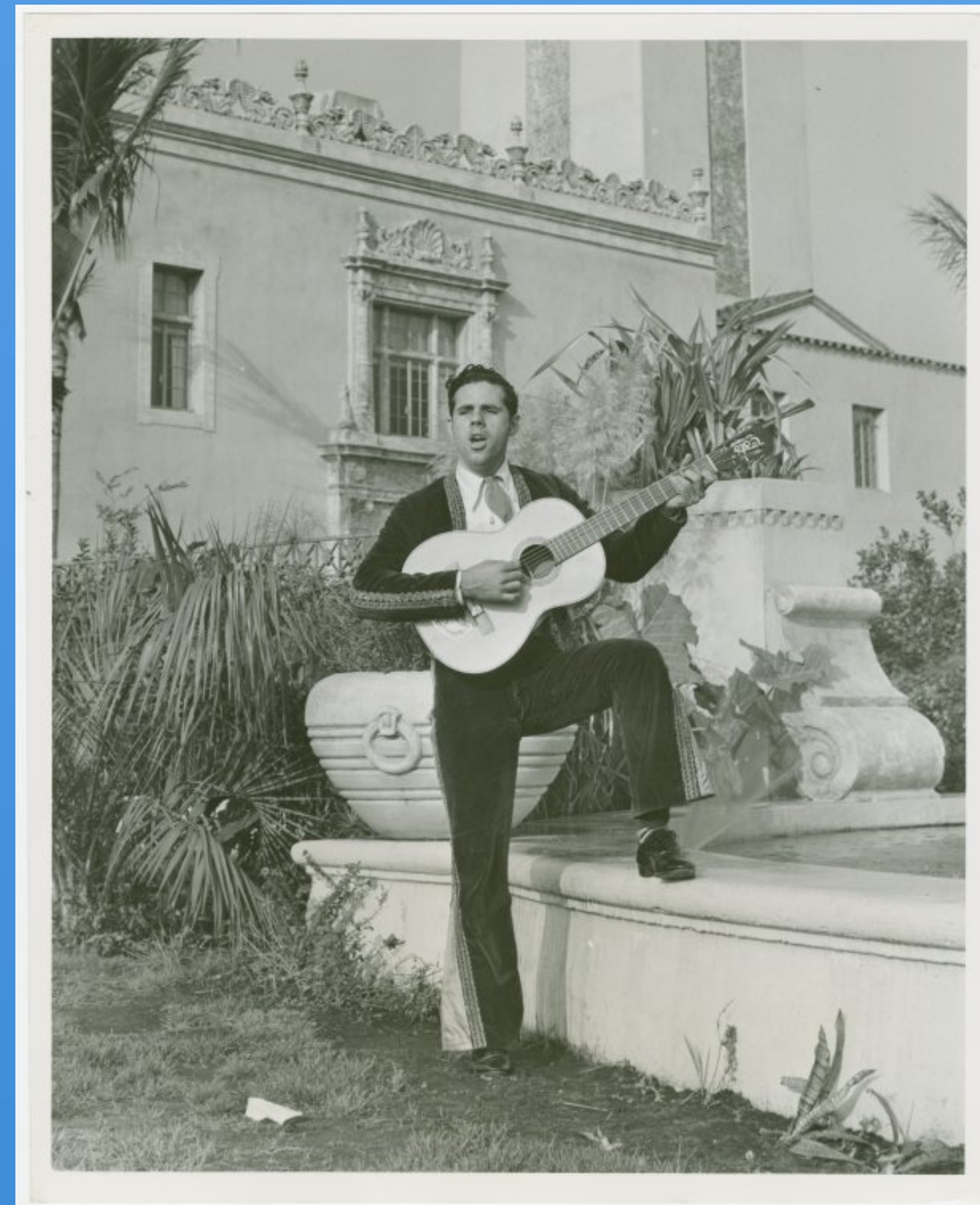
AFTER

Case Study: Collage / Visionboard

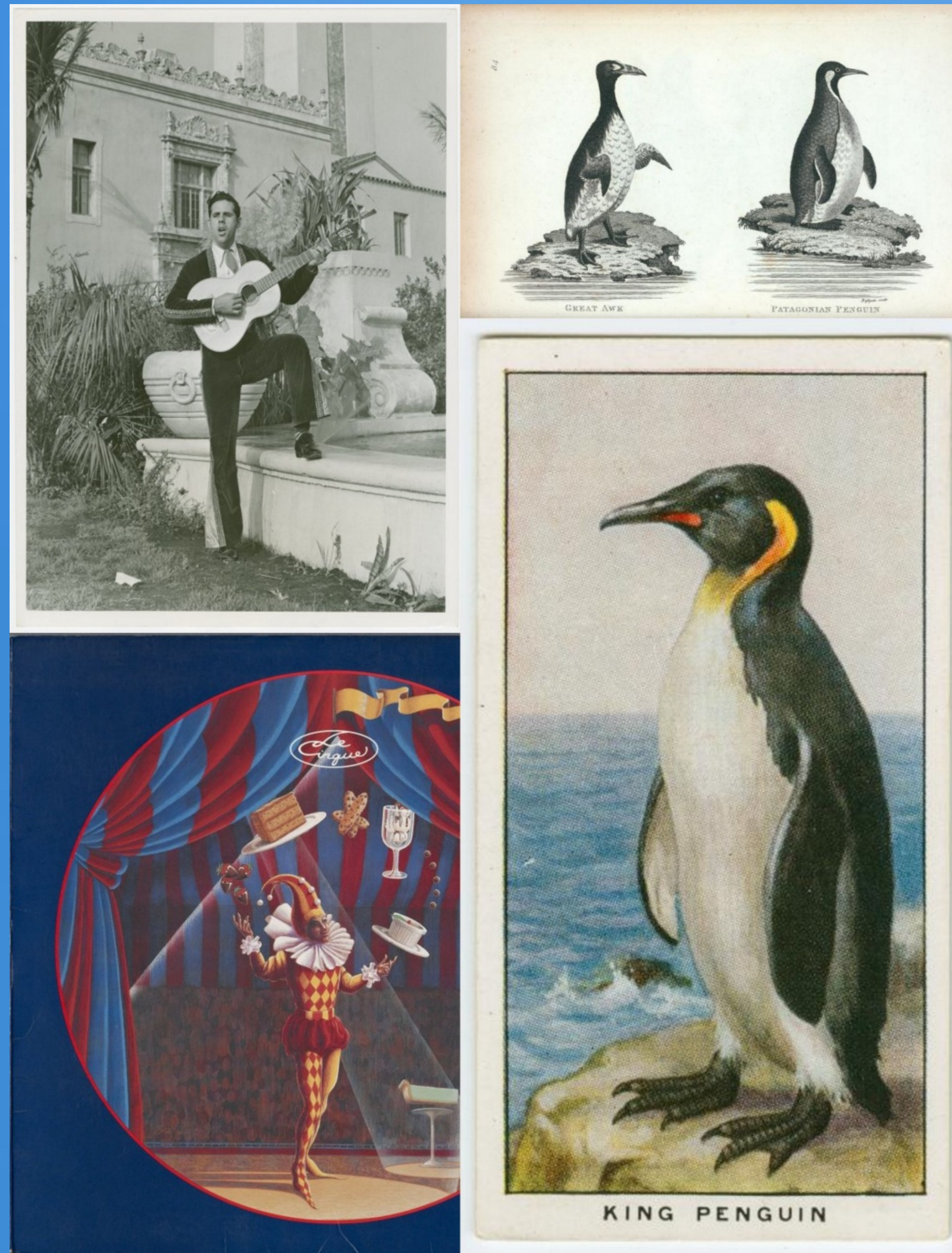
- File->New
 - Custom Size
 - Fill in appropriate Dimensions
 - Click Create Button
- Layer Menu->Import/Export->Import
 - as Paint Layer...
 - Choose Each Picture One by One
- Layer Tab
 - Highlight Layer
 - Ctrl+T
 - Shift Click and Drag the Picture's Corner Handles
 - Move the Layer to an Ideal Location
- Rotation
 - Optionally Move Rotation Axis
 - Drag Outside of the Picture to Rotate the Picture



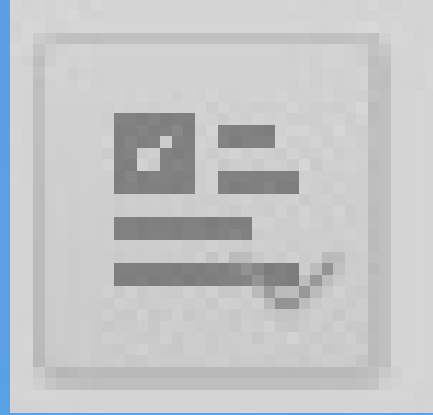
Case Study: Collage / Visionboard



Case Study: Collage / Visionboard

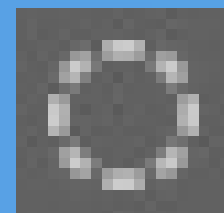


Case Study: Blemish/Debris Removal

- Toolbar->Edit brush settings 
- Click on Clone Brush Engine (on the left hand side)
- Hold down the Ctrl Key and Click on an Ideal Source (Clean Surface with No Defects Visible)
- Release the Ctrl Key
- Click on the blemish to remove...



Case Study: Transparency Mask 1 of 2

- Select Oval Selection Tool (Lower Left Corner) 
- Select a Portion of Your Photo
- Select > Feather Selection...
Type 10 or 15 (pixels) and click OK
- Choose Dropdown next to New Layer Transparency Mask  >
- New Layer (Insert Key)

Case Study: Transparency Mask 2 of 2

- Select Menu > Deselect
- Press Shift+Backspace to fill with FOREground color
- Move This Layer to the Bottom
- Optionally Rename This Layer to Background



Case Study



Case Study

- **Layer Styles**
- Layer Menu > Layer Styles...
- Use the Fx button to view your applied style...



What's Missing

- Snap to Grid
- Snap to Ruler
- Guidelines
- Nudging Layers (Scheduled for v3.0)



How Can You Help?

- Learn and Use It
- Teach It
- Develop for It
 - <https://krita.org/get-involved/overview/>
- Tell Others About It
- Fund Krita Development
 - <https://krita.org/support-us/donations/>



Conclusion

Use Krita to:

- Paint
- Edit/Retouch Photos
- Make Web Banners
- More!



Questions

??



Survey

Online Evaluation for This Presentation:

<http://goo.gl/forms/ndIR6RT1YP>



Perry Rivera

Please feel free to stop by the
Fedora table and say hello!

fedora™





Thank You!

Thank You for Attending!

Perry Rivera

Twitter: @pvrconsulting

E-mail: perry-rivera@alumni.calpoly.edu



Bonus Slides!

Here's Some Fun Stuff...



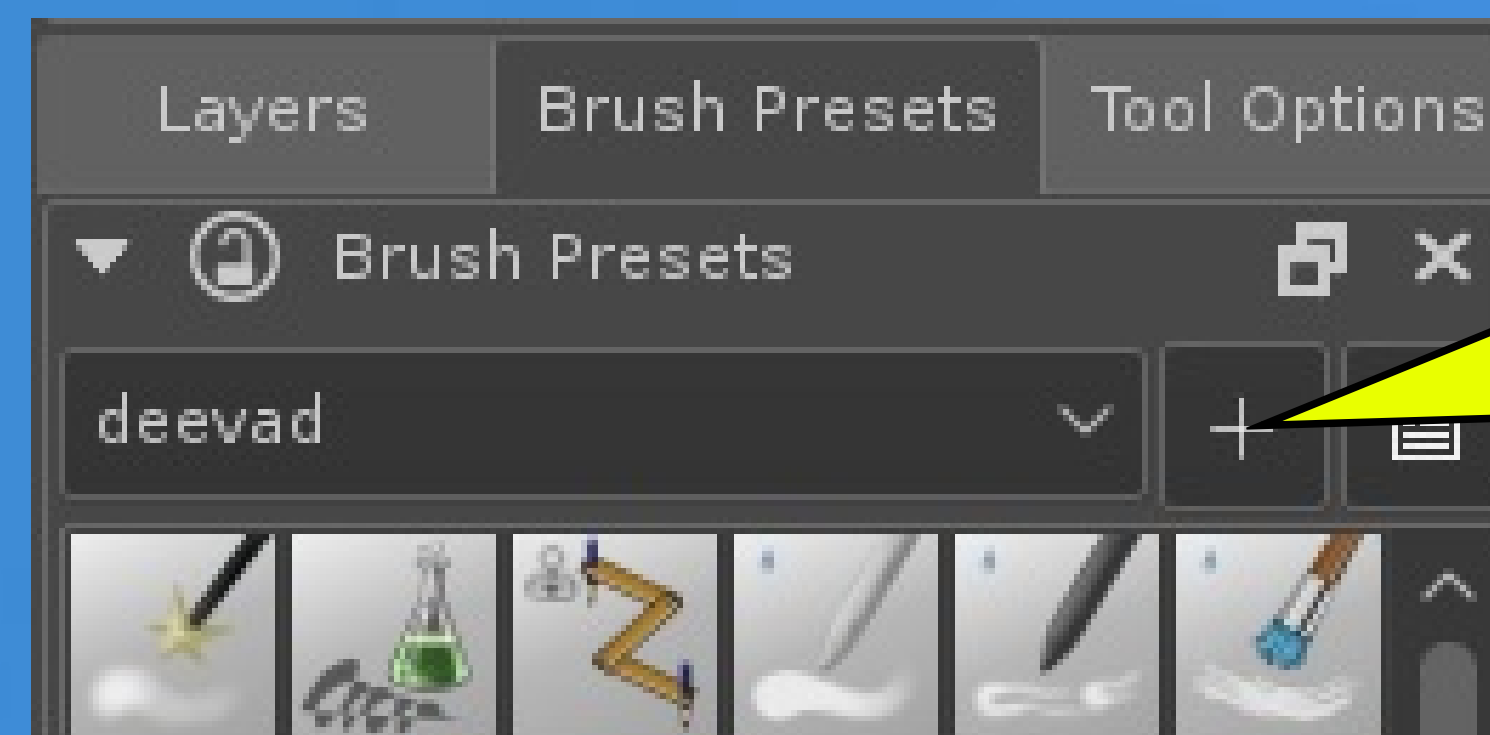
Keyboard Shortcuts

- <https://colorathis.wordpress.com/2014/02/20/krita-2-8-shortcuts-cheatsheet/>



David Revoy Brushes

- Optional, but useful!
- Download Bundle from:
<http://www.davidrevoy.com/article264/brushkit-v7-0>
- Settings Menu > Manage Resources... > Import Bundle
 - Choose Resource Bundle Under File Type.
 - Change Filter to Resource Bundle
 - Double Click on deevad.bundle
- May need to restart Krita
- New brushes show up in Brush Presets
- Change the Brush Presets dropdown to deevad



Case Study: Aging Document

- Click Similar Color Selection Tool 
- Click on Color in Picture That You'd Like to Re-COLOR
- Cut Selection to New Layer: Ctrl+Shift+J
- Choose a Color from the Color Picker
- Choose the Fill Tool 



Case Study: Aging Document

- Click on the any spot with the former color...
- Move that Layer to the bottom of the stack.
- Rename This Layer to Background.
- Click on Text Layer
- Change Text Layer Blend Mode to Multiply
- Duplicate Layer
- Change Mode to Multiply
- Click Select > Deselect
- Text Layer: Hit Ctrl+J to Duplicate, which darkens further...



Case Study: Aging Document

Saxenoria 27 March 1824.

Dear Sir,

I sometime ago wrote to you requesting the little pamphlet, my masonic address on the death of Washington. As from my not receiving it, I presume that my letter to you miscarried, permit me again to call on ^{you for it}. If you have not a more eligible conveyance, you may send it to me, inclosed & sealed, by Doctor Spencer, an apothecaryman from this county.

Please to inform ^{me} where Jane Ann Northell is now with her where now is her father and her brothers.

My respects to old Mr. Hilton, Jon: Brooks, Kidney, and Merrifield, our old neighbours. I hope they continue, as I do, in the old steady and uniform republican faith, and not changed or adulterated by Federalism or modern Clintonianism.

Yours most
humbly,
Peter W. Yates.

If you have not the oration, it is probable that some other of the masons have it.

BEFORE

Saxenoria 27 March 1824.

Dear Sir,

I sometime ago wrote to you requesting the little pamphlet, my masonic address on the death of Washington. As from my not receiving it, I presume that my letter to you miscarried, permit me again to call on ^{you for it}. If you have not a more eligible conveyance, you may send it to me, inclosed & sealed, by Doctor Spencer, an apothecaryman from this county.

Please to inform ^{me} where Jane Ann Northell is now with her where now is her father and her brothers.

My respects to old Mr. Hilton, Jon: Brooks, Kidney, and Merrifield, our old neighbours. I hope they continue, as I do, in the old steady and uniform republican faith, and not changed or adulterated by Federalism or modern Clintonianism.

Yours most
humbly,
Peter W. Yates.

If you have not the oration, it is probable that some other of the masons have it.

AFTER





Other Resources

- **Introduction to Krita for Adobe® Photoshop® Users**

<http://heap.kogmbh.net/downloads/IntroductiontoKritaforusercomingfromPs.pdf>

- **Brushes**

<https://krita.org/learn/resources/>



Other Resources

- **Why I'm Switching From GIMP to Krita**
<http://www.linux-magazine.com/Online/Blogs/Off-the-Beat-Bruce-Byfield-s-Blog/Why-I-m-switching-from-GIMP-to-Krita>
- **David Revoy Brushes**
www.davidrevoy.com/article264/brushkit-v7-0
- **Muses DVD**
<https://krita.org/item/muses/>
- **Muses Brushes**
<https://krita.org/item/the-muses-preset-pack/>



Other Resources

- **Blend Modes**
Painting Assistants
Multibrushes

<http://www.linux-magazine.com/Online/Blogs/Off-the-Beat-Bruce-Byfield-s-Blog/Why-I-m-switching-from-GIMP-to-Krita>

- **Krita Manual - Differences**
<https://userbase.kde.org/Krita/Manual/Differences>

- **Alpha Inheritance and Layer Management**
https://userbase.kde.org/Krita/Tutorial_2#Layer_management



Installation Hints: Fedora

- **For Linux - Living on the Edge!**
 - If you like Alpha releases, try this:
<https://krita.org/item/first-krita-3-0-pre-alpha/>
 - Save this file: http://files.kde.org/krita/3/linux/krita3-prealpha-f7f43f2-x86_64.appimage
 - Install/Enable:
 - Fuse



Appendix Slides

Fine Print and Other Stuff...



Photo Citations

- Manuscripts and Archives Division, The New York Public Library. "Letter to --" The New York Public Library Digital Collections. 1824.
<http://digitalcollections.nypl.org/items/b917eb3b-defd-ad32-e040-e00a18060e3e>
- Science, Industry and Business Library: General Collection , The New York Public Library. "Unidentified man." The New York Public Library Digital Collections.
<http://digitalcollections.nypl.org/items/510d47de-03c8-a3d9-e040-e00a18064a99>
- Rare Book Division, The New York Public Library. "Dessert held by Le Cirque at Le Cirque (RESTAURANT)" The New York Public Library Digital Collections. Undated.
<http://digitalcollections.nypl.org/items/a4958095-4675-074d-e040-e00a1806792c>
- Manuscripts and Archives Division, The New York Public Library. "Florida Participation - Troubadour with guitar" The New York Public Library Digital Collections. 1935 - 1945.
<http://digitalcollections.nypl.org/items/5e66b3e8-af78-d471-e040-e00a180654d7>



Photo Citations

- George Arents Collection, The New York Public Library. "King penguin (*Aptenodytes pennanti*).\" The New York Public Library Digital Collections.
<http://digitalcollections.nypl.org/items/510d47e3-20bb-a3d9-e040-e00a18064a99>
- The Miriam and Ira D. Wallach Division of Art, Prints and Photographs: Photography Collection, The New York Public Library. "Wife of Mr. Thaxton, farmer, near Mechanicsburg, Ohio\" The New York Public Library Digital Collections. 1938.
<http://digitalcollections.nypl.org/items/aa898c30-089d-0133-6647-58d385a7b928>
- Rare Book Division, The New York Public Library. "Beautiful Cat, *Felis ornata*." The New York Public Library Digital Collections. 1830 - 1834.
<http://digitalcollections.nypl.org/items/510d47da-9eda-a3d9-e040-e00a18064a99>
- Billy Rose Theatre Division, The New York Public Library. "Monte Blue\" The New York Public Library Digital Collections. 1937.
<http://digitalcollections.nypl.org/items/510d47d9-f3d0-a3d9-e040-e00a18064a99>



Photo Citations

- General Research Division, The New York Public Library.
"Great Awk; Patagonian Penguin." The New York Public
Library Digital Collections. 1809.
<http://digitalcollections.nypl.org/items/510d47d9-5172-a3d9-e040-e00a18064a99>



Legal Stuff

- The Stichting Krita Foundation owns the Krita trademark.
- All other trademarks are the property of their respective owners.
- There is no warranty for this software. It is always a great idea to Save your work!
- From GNU Public License v3:
 - THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.





Thank You!

Thank You for Attending!

Perry Rivera

Twitter: @pvrconsulting

E-mail: perry-rivera@alumni.calpoly.edu

