



Technology Training
January-February 2003



Web and Graphics Tools Adobe PhotoShop 7.0

Presented by Northwest ISD
In conjunction with ESC XI

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About Steve Smiley

- ❖ Band Director
- ❖ Programmer (EDS, RadioShack, HCP)
- ❖ Webmaster
- ❖ Adjunct Instructor for ESC XI
- ❖ Soccer Coach



Technology Training
January-February 2003



Who are you?

- ❖ Name
- ❖ Teaching Field
- ❖ Favorite Eating Implement (knife, fork, spoon)



Technology Training January-February 2003



Schedule

- ❖ Pre-Workshop – Story Boards and Site Design
- ❖ January 14/15 – Overview and Adobe Photoshop
- ❖ January 28/29 – Macromedia Flash
- ❖ February 11/12 – Macromedia Freehand
- ❖ February 25/26 – Macromedia Dreamweaver

Internet and Web Design

- ❖ NOT complicated
- ❖ Must be concerned with:
 - ❖ The user
 - ❖ What they want
 - ❖ How to get it easily
 - ❖ Presentation
 - ❖ The owner
 - ❖ Intended Purpose
 - ❖ Maintenance

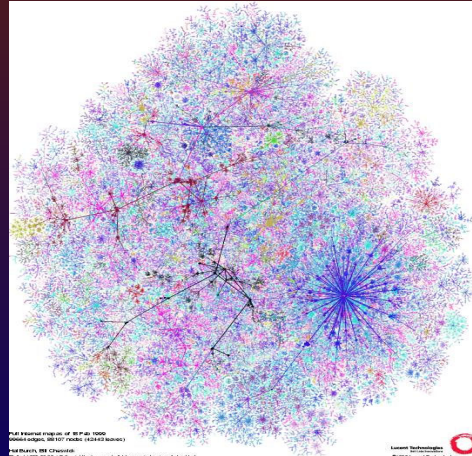


Image provided by Lumeta Corporation (<http://www.lumeta.com>)

The Internet is made up of 15-20 simple technologies. It seems complicated because of the flexibility and extensive use of these technologies. Topologies, structures that grow in complexity exponentially, are an excellent example of a complex structure such as the Internet. A complex topology consists of an infinite level of simple curves and lines connected into increasingly complex angles and edges.

A web page, or site, is equivalent of the complex topology's lines and curves. Each web page and site should have a defined structure and organization based on:

- The information contained within the site or page
- The developer's goals in presenting the information
- And the long-term intent of the site.



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Information Design

- ❖ Message – What do you want to say
- ❖ Audience – Who are you trying to reach
- ❖ Purpose – What do you want them to do with it
- ❖ Background – Why you are here
- ❖ Structure – How it is organized

Information is defined as the stuff on a page. Usually there is an innate organization to this “stuff”.

Does the information to be contained on a site have a hierarchy, I.e. some concepts and ideas are more important or critical than others?

Can the information be organized into equal junks in importance?

Must the information be displayed in a “building block” fashion, I.e. concept #1 must be learned before concept #2 before concept #3?

How the information you intend to display can be organized determines what type of web page or site you will create.

Navigation Schemes

❖ Linear Structure

- ❖ 1, 2, 3, 4, etc.

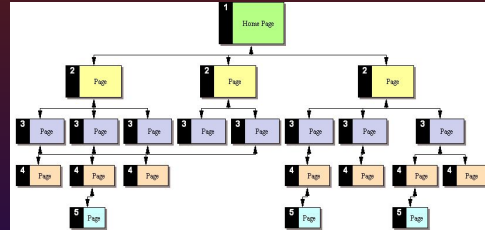


Linear Structure Examples:

- Powerpoint Presentations
- The chapters in a book
- Directions for building a house

Navigation Schemes

- ❖ Linear Structure
 - ❖ 1, 2, 3, 4, etc.
- ❖ Hierarchical Structure
 - ❖ Most common
 - ❖ DB and information design

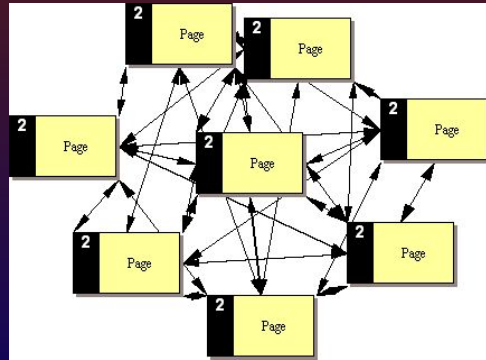


Hierarchical Structure Examples:

- Business/School Organizations
- Most school subjects
 - History
 - War of 1812
 - Generals
 - World War II
 - Generals
 - Vietnam War
 - Generals
- Physical Science subjects

Navigation Schemes

- ❖ Linear Structure
 - ❖ 1, 2, 3, 4, etc.
- ❖ Hierarchical Structure
 - ❖ Most common
 - ❖ DB and information design
- ❖ Random
 - ❖ Everything is = to everything

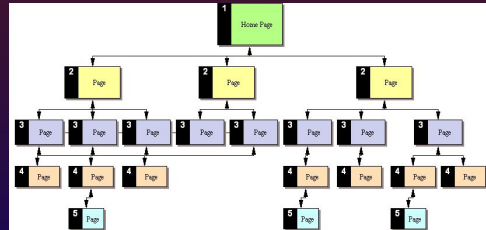


Random Structure Examples:

- Definition of parts of a sentence
- Marble collection

Navigation Schemes

- ❖ Linear Structure
 - ❖ 1, 2, 3, 4, etc.
- ❖ Hierarchical Structure
 - ❖ Most common
 - ❖ DB and information design
- ❖ Random
 - ❖ Everything is = to everything
- ❖ Mixed
 - ❖ Contains two or more structures



Most sites are a collection of each of these elements.

For example, click around the Adobe site (<http://www.adobe.com>)

It was created with a hierarchy in mind, but the tutorials are organized in linear fashion. The dictionary attached to the tutorials can be used as a hierarchical structure or random structure, depending on if the search is used.

This site is a good (not great, but good) example of the different structure.



Presentation Design

- ❖ Navigation – determined by information type
- ❖ Color Scheme – contrast and usage
- ❖ Font Selection – standard versus enhanced
- ❖ Graphics Selection – appropriate to subject
- ❖ Multimedia Effects – good and bad
- ❖ Layout – where is everything
 - ❖ English/International/Cultural

How you want your page to look is partially determined by the information that you are trying to display. However, there are as many ways to create a page as there are people creating pages!

Basic areas to include:

A top logo region

 Show the owner/creator and the basic intent of the site

A top or left navigation area

 Displays the available information on the site and allows the user a way to access it

A “body” area where most content and information is displayed

Optional parts:

A top navigation area that contains important, but not critical, links to other functions, such as contacts, help, etc.

A bottom bar that contains copyrights and direct contact information

Before you create.....you need

- ❖ A storyboard image or graphic
- ❖ Element list
 - ❖ Navigation
 - ❖ Pictures
 - ❖ Page List or overview
 - ❖ Content blocks
- ❖ An audience checklist
- ❖ Development and Maintenance Timeline

Inspiration 6.0 is one way to develop a visual representation of your page or site. Most people have an easier time working with a visual view of a page than a written narrative.

Pencil and paper still work, even in the 21st century! Create a drawing of your page and site structure. This will be the equivalent of the mental map that you are asking your viewers to build as they click through your site. If you don't understand the structure of your creation, don't expect your site visitors to understand it either

SIMPLIFY, SIMPLIFY, SIMPLIFY!

PhotoShop General Concepts

- ❖ Layer-based graphics development tool
- ❖ Vector or Raster (Bitmap) formats
- ❖ PSD is the default save configuration
 - ❖ Remembers all editing information
 - ❖ Large
 - ❖ NOT portable
- ❖ Current Version 7.0

Layers are a holdover from several areas – printing, architecture, and, most importantly, painting/drawing.

IN oil painting, the colors that are seen in the finished painting are layers of multiple colors, blended and dried at different times. This concept is as old as painting. In Photoshop, layers are physical elements of a digital graphic that allow you to separate and control individual parts of a graphic – applying blends, colors, and transforms to single parts without destroying the overall effect.

Remember that PSD, Photoshop's default format, is not a finished element. It is not portable or viewable on the web. PSD is used to preserve the image during its development and allow for easy maintenance after web or print ready images are created from the PSD.

Graphics Formats

❖ Vector Formats

- ❖ Composed of mathematical instructions for drawing the image
- ❖ Highly-scalable with no distortion
- ❖ Examples:
 - ❖ Direct Vector: CDR, EPS, PCT, WMF
 - ❖ Combination Vector/Raster: PSD, PNG, TIF

❖ Raster (Bitmap) Formats

- ❖ Pixel-based (size of pixel determined at creation)
- ❖ Direct Raster: GIF, JPG, BMP

Raster formats are the most common on the Internet. They are not scalable and are designed to reproduce in a “good enough” fashion.

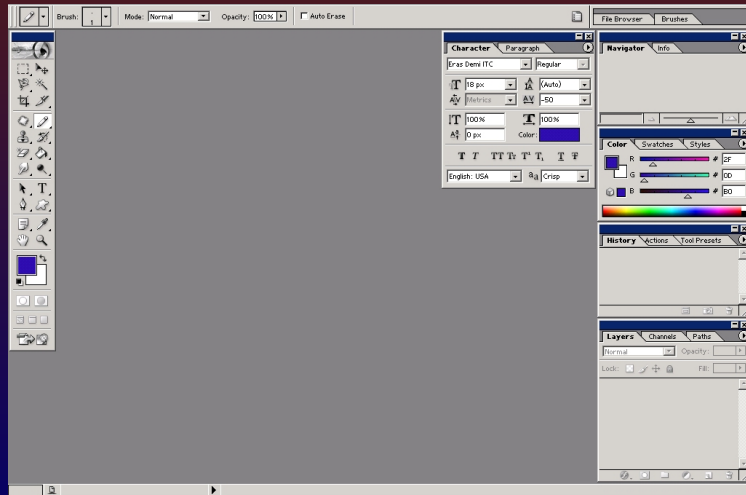
Photoshop has some restrictions on using raster and vector images:

The background of a raster image **CONTAINS** the image. Background is not separate from image in the raster format.

Shapes created within Photoshop are, by default, vector elements. Problem, they cannot be integrated into a layer and transformed until they are turned into raster elements.

Anti-aliasing is possible in both formats, but it is considered part of the background in raster images, and part of the anti-aliased element in vector images.

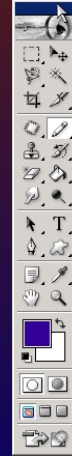
Photoshop Walkthrough



ToolBox

Contains all of the tools needed to create images

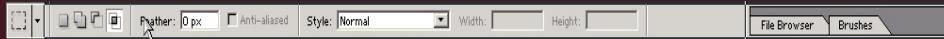
- ❖ Top section – Image manipulation
- ❖ Middle section #1 – Drawing and color tools
- ❖ Middle section #2 - Text and scribbling tools
- ❖ Bottom section – notation and collection tools
- ❖ Active color section
- ❖ Options and external applications section



The major rule in Photoshop is:

DON'T FORGET TO CHANGE TOOLS!

Tool Options Bar



Options bar changes based on the selected tool from the toolbox

- ❖ Feathering – the smoothness or hardness of an object's edge
- ❖ Tolerance – the number of colors relative to the selected color
- ❖ Aliasing – feathering around individual elements or fonts
- ❖ Presets – a set of options pre-configured for a tool
- ❖ Modes – blending, overlays, exclusions
- ❖ Opacity – the transparency of a selected object

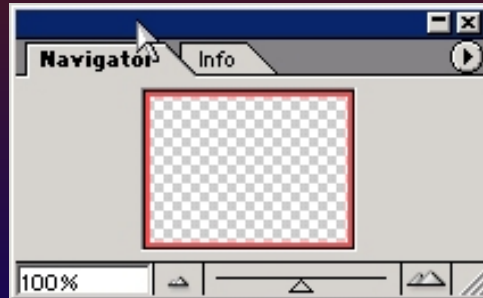
The Toolbar Options selections are different for every tool selected in the toolbox.

One option for learning ALL of the options available is to go through the toolbar, selecting each tool, and changing each of the options that appear on the tool options bar.

Definitions for the most common terms are contained on the slide.

Navigator Window

- ❖ Shows the image in its completed form
- ❖ When zoomed, image can be navigated through this window with the mouse
- ❖ Info tab shows image options at present and cursor location



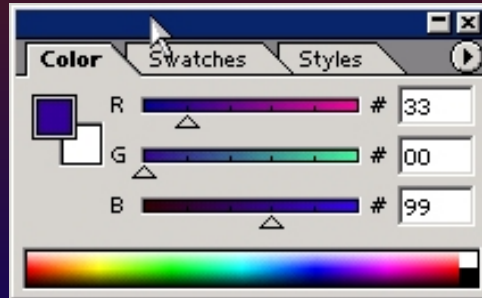
The navigator window shows you what you can see.

Open an image and zoom in using the Ctrl++ key. The red box in the navigator window will show you which portion of an image you are viewing.

This tool is very useful when you are using painting tools, zoomed in so that you can affect single pixels.

Color

- ❖ Allows for direct selection of color in multiple modes
- ❖ Shows the current foreground and background selections
- ❖ Can output numerical values in multiple color palettes



The color tab allows for the control of color using slider bars and numerical selections. It can control the color for the creation of new shapes, or control the changes in color during a Free Transform or Transform operation.

Remember that the colors as applied to the image are controlled by the color palette associated with the image, I.e. new images created using the CMYK palette will have a different set of colors than an RGB image.

Color Palettes

- ❖ Final usage of image determines the best color palette to use
 - ❖ Grayscale – 256 levels of gray (white to black)
 - ❖ Indexed – 256 color mode using a CLUT
 - ❖ CMYK – Cyan, Magenta, Yellow, Black (print)
 - ❖ RGB – Red, Green, Blue (screen)
 - ❖ Web (safe) – limited 256 palette which is recognized by older browsers

Colors associated with an image can be changed using the Image | Mode menu selection. Also, the “strength” of a color (luminosity, hue, saturation) can be controlled from the Image | Adjustments menu selection.

Existing colors, such as in a grey scale image, are not affected by the color model selected from the menu. Example: the Ranch House.jpg in the Adobe | Samples directory is grey scale. If you select any other mode from the Images | Mode menu selection, the existing image is still grey scale. However, additions to the image will use the newly selected color mode.

Swatches

- ❖ Simplified version of the color tab
- ❖ Shows the basic set of colors available within a color model
- ❖ NOT flexible



With ease of use comes lack of flexibility. This is a quick and easy way to select colors. As a general practice, use the Color tab.

Styles

- ❖ Preset selection of styles that can be applied to a selection
- ❖ Easy way to import and apply textures
- ❖ Used to create buttons
- ❖ Can be expanded with your own styles



You can select other textures/styles/colors by clicking on the black triangle in the upper right corner of this window. The displayed menu allows to to import styles that you have created or downloaded. Available styles are shown at the bottom of the menu. There are thousands of available styles for Adobe Photoshop on the internet.

The Adobe Studio (<http://share.studio.adobe.com/Default.asp>) has a large number of styles that can be downloaded and used immediately.

The simplest uses for styles are:

- The creation of a default button image
- The application of a texture to all or part of an image
- The use of a consistent style across multiple images

History

- ❖ For beginners, the most important tab!
- ❖ Allows rollback to any previous state during an editing session.
- ❖ If you do something dumb, click on the history tab at the point before you did it!



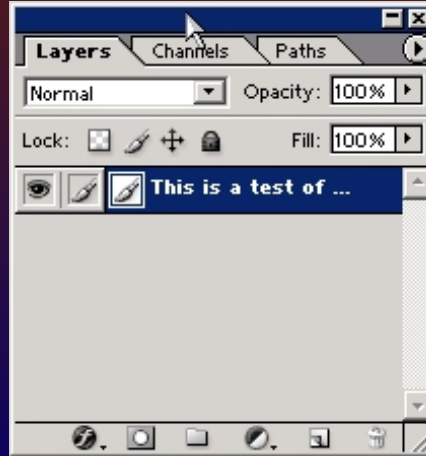
Do NOT confuse the History and Layer tabs. This was a problem during class.

Note the following guidelines when using the History palette:

- Program-wide changes, such as changes to palettes, color settings, actions, and preferences, are not changes to a particular image and so are not added to the History palette.
- By default, the History palette lists the previous 20 states.
- Once you close and reopen the document, all states and snapshots from the last working session are cleared from the palette.
- By default, a snapshot of the initial state of the document is displayed at the top of the palette.
- States are added from the top down..
- Each is listed with the name of the tool/ command used to change the image.
- By default, selecting a state dims those below. By default, selecting a state and then changing the image eliminates all states that come after.
- If you select a state and then change the image, eliminating the states that came after, you can use the Undo command to undo the last change and restore the eliminated states.
- By default, deleting a state deletes that state and those that came after it.

Layers

- ❖ Shows which layers are visible
- ❖ Controls the order in which layers are displayed
- ❖ Shows the effects which have been applied to a layer
- ❖ Allows for detailed control of which parts of an image are visible within a composition.
- ❖ Hardest part of Photoshop to master.



The Layers palette lists all layers, layer sets, and layer effects in an image. You can accomplish many tasks--such as creating, hiding, displaying, copying, and deleting layers--using the buttons in the Layers palette. You can access additional commands and options in the Layers palette menu and the Layers menu.

You can access the layers menu either from the menu at the top of Photoshop or by clicking on the black triangle at the upper right corner of the layers window.

Selection Tools

- ❖ Selection is one of the most important aspects of Photoshop
- ❖ If you can select, you can create images that capture attention and highlight your point.
- ❖ More than 75% of your work in Photoshop with existing images consists of selection and placement activities



Special Keyboard Keys

- ❖ Alt-key – generally used to subtract from a selection
- ❖ Shift-key – generally used to add to a selection
- ❖ Ctrl-key – usage varies depending on the selection tool used

The status bar at the bottom of Photoshop describes what keyboard enhancements are available for a specific selection tool.

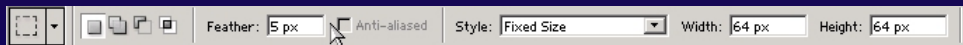
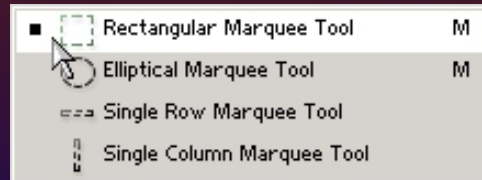
Remember that each tool has a different set of alternate actions for these keys. Always check the Photoshop status bar at the bottom of the image window to determine what keys you can use and for what purpose.

Marquee

❖ Used to constrain and select an area.

❖ Types:

- ❖ Rectangle
- ❖ Ellipsis
- ❖ Single Row
- ❖ Single Column

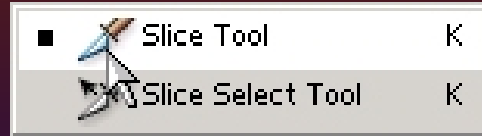


To use the marquee tools:

1. Select a marquee tool: Rectangle marquee to make a rectangular selection, Elliptical marquee to make an elliptical selection, or Single row or single column marquee to define the border as a 1-pixel-wide row or column.
2. In the options bar, specify whether to add a new selection, add to a selection, subtract from a selection, or select an area intersected by other selections .
3. Specify a feathering setting in the options bar. Turn anti-aliasing on or off for the rounded rectangle or elliptical marquee.
4. For the rectangle, rounded rectangle, or elliptical marquee, choose a style in the options bar:
5. For aligning your selection to guides, a grid, slices, or document bounds, Choose View > Snap, or choose View > Snap To and choose a command from the submenu. The marquee selection can snap to a document bound and more than one Photoshop Extra..
6. Make a selection by dragging over and area and using the alternate keys to add or subtract from your selection.
7. To reposition a rectangle, rounded rectangle, or elliptical marquee, first drag to create the border, keeping the mouse button depressed. Then hold down the spacebar and continue to drag. If you have finished drawing the border, drag from inside the selection.

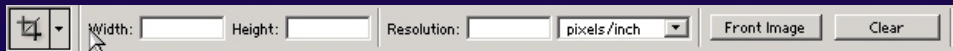
Slice

- ❖ Slices are used to save a single image in multiple pieces
- ❖ Not used from Photoshop a great deal
- ❖ Eases the creation of background images in web pages that cross textual or perceptual boundaries.



Crop

- ❖ Used to remove extraneous sections of a picture or image
- ❖ Select one corner and drag to the opposite corner
- ❖ Once the specified area is highlighted, hit Enter.
- ❖ The canvas automatically resizes to the selected area.

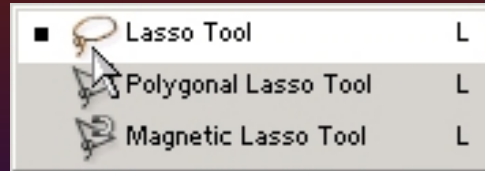


Lasso

Important Tool!

❖ Three types:

- ❖ Lasso
 - ❖ freehand selection of an area
- ❖ Polygonal Lasso
 - ❖ “connect-the-dots” selection
- ❖ Magnetic Lasso Tool
 - ❖ Relative to previous color selection



Using the lasso, polygonal lasso, and magnetic lasso tools

The lasso and polygonal lasso tools let you draw both straight-edged and freehand segments of a selection border. With the magnetic lasso tool (Photoshop), the border snaps to the edges of defined areas in the image.

The magnetic lasso tool is especially useful for quickly selecting objects with complex edges set against high-contrast backgrounds.

Lasso is a freehand tool.

The polygonal lasso tool uses points that are created by clicking the mouse to create points and angles.

The magnetic lasso tool traces edges of a similar color. The color used for the next point is based on the points traveled by the mouse.

To bail out, hit ESC.

To end a selection, hit ENTER.

Lasso Sample

Originals



After Lasso and Combine



Magic Wand

Another important tool!



- ❖ lets you select a consistently colored area (for example, a red flower) without having to trace its outline
- ❖ Uses a color “tolerance”, a variance from the initially selected color, to determine what is selected.

Using the magic wand tool

Note: You cannot use the magic wand tool on an image in Bitmap mode.

To use the magic wand tool:

1. Select the magic wand tool .
2. In the options bar, specify whether to add a new selection, add to an existing selection, subtract from a selection, or select an area intersected by other selections . The magic wand cursor changes depending on which option is selected.
3. For Tolerance, enter a value in pixels, ranging from 0 to 255. Enter a low value to select colors very similar to the pixel you click, or enter a higher value to select a broader range of colors.
4. To define a smooth edge, select Anti-aliased.
5. To select only adjacent areas using the same colors, select Contiguous. Otherwise, all pixels using the same colors will be selected.
6. To select colors using data from all the visible layers, select Use All Layers. Otherwise, the magic wand tool selects colors from the active layer only.
7. In the image, click the color you want to select. If Contiguous is selected, all adjacent pixels within the tolerance range are selected. Otherwise, all pixels in the tolerance range are selected.

Clone Stamp

- ❖ Allows for the selection of a single offset from the cursor
- ❖ Will paint whatever is that distance from the cursor under the cursor
- ❖ Can transfer a portion of a picture EXACTLY to another portion

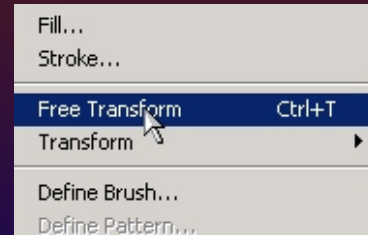


Using the clone stamp tool

1. Select the clone stamp tool , and do the following in the options bar:
 - Choose a brush and set brush options.
 - Specify a blending mode, opacity, and flow.
 - Determine how you want to align the sampled pixels. If you select Aligned, you can release the mouse button without losing the current sampling point. As a result, the sampled pixels are applied continuously, no matter how many times you stop and resume painting. If you deselect Aligned, the sampled pixels are applied from the initial sampling point each time you stop and resume painting.
 - Select Use All Layers to sample data from all visible layers; deselect Use All Layers to sample only from the active layer.
2. Set the sampling point by positioning the pointer in any open image and Alt-clicking (Windows) or Option-clicking (Mac OS).
3. **Note:** If you are sampling from one image and applying to another, both images must be in the same color mode.
3. Drag in the image.

Transforms

- ❖ An action that can be taken on a selection
- ❖ Two Types:
 - ❖ Free Transform
 - ❖ Creates a bounding box to modify the selection
 - ❖ Transform Menu
 - ❖ Scale
 - ❖ Rotate/Flip
 - ❖ Skew
 - ❖ Distort
 - ❖ Perspective



Transforms in Photoshop are defined as any manipulation of the image beyond drawing or color changes.

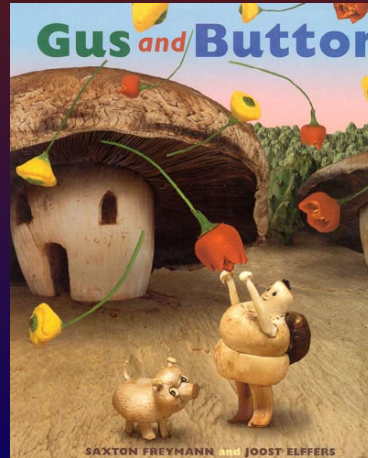
You can transform:

- Entire canvas
- Entire layers
- Selections
- Pastes into an image
- Shapes (once rastered)

Remember that the selection box around any transformed object will contain circle points at the midpoints and corners until the transform is “committed” by hitting the ENTER key or responding to an Adobe pop-up box.

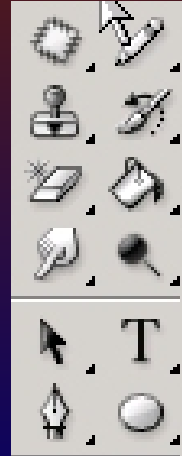
Mushroom Man

- ❖ Mushroom Man Exercise
- ❖ Create a mushroom person and attendants using the provided pieces
- ❖ Emphasis on:
 - ❖ Selection
 - ❖ Transforms
- ❖ Time: 30 minutes



Drawing Tools

- ❖ Patch Tool
- ❖ Pencil/Pen
- ❖ Clone/Stamp
- ❖ Art History/History Brush
- ❖ Eraser
- ❖ Paint Bucket
- ❖ Smudge/Blur/Sharpen
- ❖ Dodge/Burn/Sponge



Using the paint tools is a series of easy decisions:

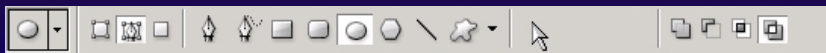
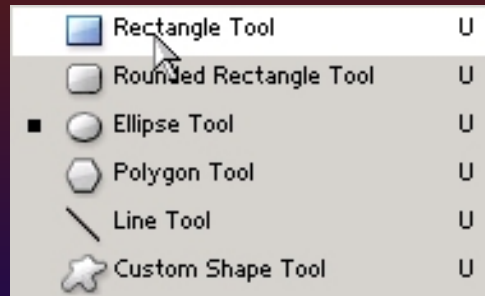
1. Specify a foreground and background colors.
2. Select the brush tool or pencil tool .
3. Do the following in the options bar:
 - Choose a brush and set brush options.
 - Specify a blending mode.
 - Specify an opacity.
 - For the brush tool, specify a flow rate
 - Drag in the image to paint.

TRICKS:

- Click the airbrush button to use the brush as an airbrush. Alternately, select the Airbrush option in the Brushes palette.
- For the pencil tool, select Auto Erase to paint the background color over areas containing the foreground color.
- To draw a straight line, click a starting point in the image. Then hold down Shift, and click an ending point.
- When using the brush tool as an airbrush, hold down the mouse button without dragging to build up color.

Shapes and Fills

- ❖ Shapes have a set of options for each type
- ❖ Be careful: A shape and a marquee are not the same thing!



Setting shape tool options

1. Pick a shape tool.
2. Set tool options in the options bar. The available options vary by tool. In Photoshop, click the inverted arrow next to the shape buttons to view the options:
 - **Arrowheads Start and End** - Renders a line with arrowheads. **Note:** In Photoshop, you can also edit an arrowhead directly using the vector selection and drawing tools.
 - **Circle** - Constrains an ellipse to a circle.
 - **Defined Proportions** - Renders a custom shape based on the created proportions.
 - **Defined Size** - Renders a custom shape based on the size at which it was created.
 - **Fixed Size** - Creates a fixed shape based on the values in the Width and Height text boxes.
 - **From Center** - Creates the selected shape from the center.
 - **Indent Sides By** - Renders a polygon as a star.
 - **Proportional** - Creates shape proportional, based on values entered in Width/ Height boxes.
 - **Radius** - Rounded rectangles = the corner radius. Polygons = distance from the center of a polygon to the outer points.
 - **Sides** - Specifies the number of sides in a polygon.
 - **Smooth Corners or Smooth Indents** - Renders a polygon with smooth corners or indents.
 - **Snaps to Pixels** - Snaps rectangle or rounded rectangle to the pixel boundaries.
 - **Square** - Constrains a rectangle or rounded rectangle to a square.
 - **Unconstrained** - Sets the width and height of a selected shape by dragging.
 - **Weight** - Determines the width of a line in pixels.

Shapes and Fills - Options



- ❖ Object Type (Layer, Paths, Fill)
- ❖ Object Shape
- ❖ Mode (Color and exclusion)
- ❖ Opacity
- ❖ Aliasing

Remember that opacity and aliasing must be taken into account when creating shapes, BEFORE the shape is drawn. The History tab allows for the easy deletion of mis-created shapes, but it is always less trouble to create it as desired the first time.

House and Cars

- ❖ Build your own house
using:
 - ❖ Lines
 - ❖ Shapes
 - ❖ Fill
 - ❖ Layers

- ❖ Time: 10 minutes





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Font

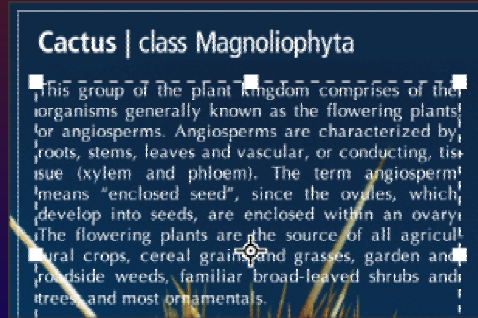
One complete collection of letters, punctuation marks, numbers, and special characters with a consistent and identifiable typeface, weight, posture, and size.

Computer & Internet Dictionary (©1995)

Adding Type

When you create type, a new type layer is added to the Layers palette. In Photoshop, you can also create a selection border in the shape of the type.

Note: In Photoshop, a type layer is not created for images in Multichannel, Bitmap, or Indexed Color mode, because these modes do not support layers. In these image modes, type appears on the background.



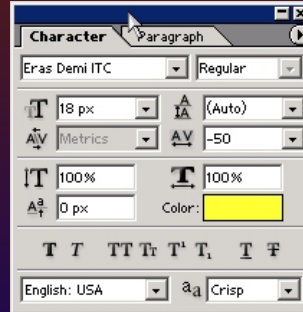
To commit changes to a type layer:

Do one of the following:

- Click the Commit button in the options bar.
- Press the Enter key on the numeric keypad.
- Press Ctrl+Enter on the keyboard (Windows) or Command+Return (Mac OS).
- Select any tool in the toolbox, click in the Layers, Channels, Paths, Actions, History, or Styles palette, or select any available menu command.

Type Tool

- ❖ An insertion point is created when the type tool is selected.
- ❖ The Character Window controls the font, color, weight, and orientation of a single font creation.

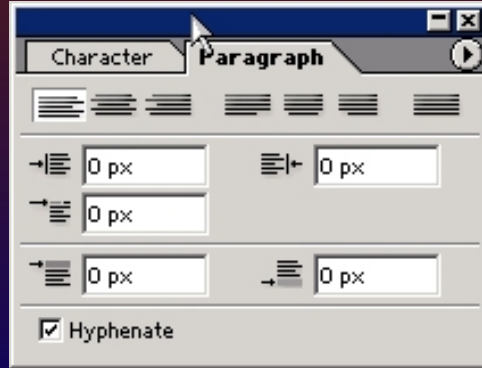


Once you create a type layer, you can edit the type and apply layer commands to it. You can change the orientation of the type, apply anti-aliasing, convert between point type and paragraph type, create a work path from type, or convert type to shapes. You can move, restack, copy, and change the layer options of a type layer as you do for a normal layer. You can also make the following changes to a type layer and still edit the type:

- Apply transformation commands from the Edit menu, except for Perspective and Distort. (To apply the Perspective or Distort commands, or to transform part of the type layer, you must rasterize the type layer, making the type uneditable.)
- Use layer styles.
- Use fill shortcuts. To fill with the foreground color, press Alt+Backspace (Windows) or Option+Delete (Mac OS); to fill with the background color, press Ctrl+Backspace (Windows) or Command+Delete (Mac OS).
- Warp type to conform to a variety of shapes.

Adding Paragraphs

- ❖ The Paragraph Window controls how the text is carried within the insertion box.
- ❖ Options:
 - ❖ Alignment
 - ❖ Margins
 - ❖ Leader/Trailer
 - ❖ Hyphenation

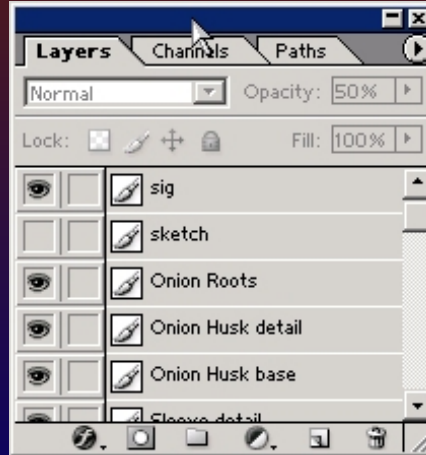


To enter paragraph type:

1. Select the horizontal or vertical type tool .
2. Do one of the following:
 - Drag diagonally to define a bounding box for the type.
 - Hold down Alt (Windows) or Option (Mac OS) as you click or drag to display the Text Box Size dialog box. Enter values for Width and Height, and click OK.
3. Select additional type options in the options bar, Character palette, Paragraph palette, and Layer > Type submenu.
4. Enter the characters you want. Press Enter on the main keyboard (Windows) or Return (Mac OS) to begin a new paragraph. If you enter more type than can fit in the bounding box, the overflow icon appears on the bounding box.
5. If desired, resize, rotate, or skew the bounding box.
6. (Photoshop) Commit the type layer.
7. The type you entered appears in a new type layer.

Text Layers

- ❖ For a successful text layer:
 - ❖ Ensure that the image is NOT in indexed mode.
 - ❖ Move the created text layer to the top of the layer window so that it is visible.
 - ❖ Lock layers where the text should never be placed.



Text is created in a special container called a Type Layer. To work with these layers as an integrated part of an image, do the following:

To convert a type layer to a normal layer:

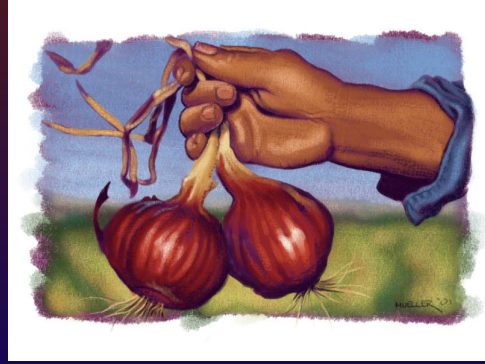
1. Select the type layer in the Layers palette.
2. Choose Layer > Rasterize > Type.

Once the type has been rasterized, it can be manipulated as an object on an image without causing changes to text width, height, or spacing.

Note: Before converting a text layer, ensure that all transforms or changes needed have been completed. Rasterized text layers are not editable; only transforms can be applied to the layer.

Add Text to The Harvest

- ❖ Open Adobe/samples/harvest.psd
 - ❖ Add banner text of your choosing
 - ❖ Use the free transform tools to experiment
 - ❖ Experiment with colors, layer usage, and placement
-
- ❖ Time: 10 minutes



Blending

- ❖ Remember:
 - ❖ Some tools have individual blending options
 - ❖ Blending is NOT an exact science

Blending

base color + applied color = resulting color

(All color elements can define a single color)

Blending Mode Definitions

- The *base color* is the original color in the image.
- The *blend color* is the color being applied with the painting or editing tool.
- The *result color* is the color resulting from the blend.

Normal: Edits or paints each pixel to make it the result color. *default

Dissolve: Edits/paints pixels to make it the result color. Result color is a random replacement of pixels with base color or blend color, depending on a pixel's opacity.

Behind: Edits or paints only on the transparent part of a layer. (layers with Lock Transparency deselected)

Clear: Edits or paints each pixel and makes it transparent.

Darken: Selects the base or blend color--whichever is darker--as the result color.

Multiply: Multiplies the base color by the blend color. The result color is always a darker color.

Color Burn: Darkens the base color to reflect the blend color by increasing the contrast. Blend with white = no change.

Linear Burn: Darkens the base color to reflect the blend color by decreasing the brightness. Blend with white = no change.

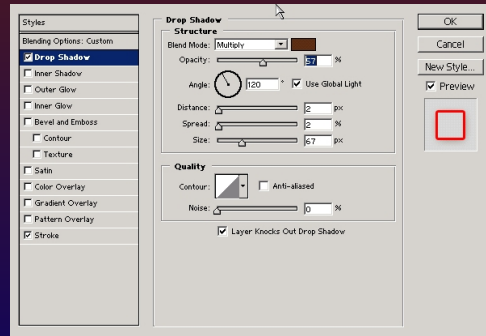
Lighten: Selects the base or blend color--whichever is lighter--as the result color.

Screen: Multiplies the inverse of the blend and base colors. The result color is always a lighter color. Black = no change.

Color Dodge: Brightens the base color to reflect the blend color by decreasing the contrast. Black = no change.

Layer Blending

- ❖ Available to all unlocked layers
- ❖ Effects can be applied to individual layers or duplicated across all layers
- ❖ Used to enhance/reduce the importance of a layer



Blending Mode Definitions (Continued)

Linear Dodge: Brightens the base color to reflect the blend color by increasing the brightness. Black = no change.

Overlay: Multiplies or screens the colors, depending on the base color.

Soft Light: Darkens or lightens the colors, depending on the blend color. (soft)

Hard Light: Multiplies or screens the colors, depending on the blend color. (hard)

Vivid Light: Burns or dodges the colors by increasing or decreasing the contrast, depending on the blend color.

Linear Light: Burns or dodges the colors by decreasing or increasing the brightness, depending on the blend color.

Pin Light: Replaces the colors, depending on the blend color.

Difference: Subtracts either the blend color from the base color or the base color from the blend color, depending on which has the greater brightness value. white = inverse; Black = no change.

Exclusion: Creates an effect similar to but lower in contrast than the Difference mode. white = inverse; Black = no change. **Hue:** Creates a result color with the luminance and saturation of the base color and the hue of the blend color.

Saturation: Creates a result color with the luminance and hue of the base color and the saturation of the blend color.

Color: Creates a result color with the luminance of the base color and the hue and saturation of the blend color.

Luminosity: Creates a result color with the hue and saturation of the base color and the luminance of the blend color.

Layer Blending Sample

Before blending



After blending
Stroke and Drop Shadow



Web File Types

GIF

- ❖ Excellent choice for line-based images, such as navigation graphics or clip art
- ❖ Color table range from 2 (1-bit) to maximum of 256 colors (8-bit)
- ❖ Pixel-by-pixel representation of an image - usually larger in size than other formats
- ❖ Supports a transparency color and a range of colors around the designated "transparent" color
- ❖ No built-in image compression
- ❖ Compression available only within color table; image not affected from original
- ❖ Supports multiple images in one file (animated gifs)
- ❖ Supports interlaced images for faster display (incomplete image starts to display before complete file is downloaded)

JPG

- ❖ Excellent for full color images
- ❖ Color table size always supports 16.7 million colors (24-bit)
- ❖ Uses several algorithms to compress images into smallest size
- ❖ Cannot contain a "transparent" color
- ❖ Range of compression from 0 to 100%
- ❖ Higher compression ratios = lower image quality
- ❖ One file = one image
- ❖ Linear images only

To save a file in GIF format:

1. Save the artwork, and choose CompuServe GIF from the Format menu.
2. For RGB images, the Indexed Color dialog box appears. Specify conversion options and click OK.
3. Select a row order for the GIF file, and click OK:
 - Normal displays the image in a browser only when download is complete.
 - Interlaced displays low-resolution versions of the image in a browser as the file downloads. Interlacing makes download time seem shorter, but it also increases file size.

To save a file in JPEG format:

1. Save the artwork, and choose JPEG from the Format menu.
2. In the JPEG Options dialog box, select the options you want, and click OK.
 - **Matte** - If the image contains transparency, select a Matte color to simulate the appearance of background transparency.
 - **Image Options** - To specify the image quality, choose an option from the Quality menu, drag the Quality pop-up slider, or enter a value between 0 and 13 in the Quality text box.
 - **Format Options** - Baseline ("Standard") to use a format recognized by most Web browsers, Baseline Optimized for optimized color and a slightly smaller file size, Progressive to display series of increasingly detailed scans as the image downloads. Baseline Optimized and Progressive JPEG images are not supported by all Web browsers.
 - **Size** - To view the estimated download time, select a modem speed. (The Size preview is only available when Preview is selected.)

Note: Some applications may not be able to read a CMYK file saved in JPEG format.

Scanning/Saving/Moving

- ❖ Scanned images are generally raster images
- ❖ Bigger is better (>150 dpi)
 - ❖ 128MB minimum
 - ❖ Large HDs needed
- ❖ Save as TIF initially
- ❖ Then save as PSD before editing (IMPORTANT!)
- ❖ Once editing is completed, save for web as GIF or JPG

Importing an image using the TWAIN interface

TWAIN is a cross-platform interface for acquiring images captured by certain scanners, digital cameras, and frame grabbers. The manufacturer of the TWAIN device must provide a Source Manager and TWAIN Data source for your device to work with Photoshop and ImageReady.

You must install the TWAIN device and its software, and restart your computer, before you can use it to import images into Photoshop and ImageReady. See the documentation provided by your device manufacturer for installation information.

To import an image using the TWAIN interface (Photoshop):

Choose File > Import, and choose the device you want to use from the submenu.

Existing Images Pitfalls

- ❖ Low resolutions - Upsizing causes pixilation
 - ❖ Scan higher if possible
 - ❖ Use Crop to isolate the desired section, then sharpen to enhance pixilated areas
- ❖ Scanned text suffers from the jaggies
 - ❖ Use OCR, if available
 - ❖ Scan with lower resolution (<300dpi) to reduce jaggies
- ❖ **ALWAYS SAVE THE ORIGINAL BEFORE EDITING!**



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Logo Exercise

Create 3 different versions of the logo:

1. One specific to your discipline and school
2. One that interacts with your favorite eating implement
3. A header image for your future web page that contains:
 - ❖ The logo
 - ❖ Your name (enhanced, of course)
 - ❖ A for your future web page

Use layers, styles, color, fonts, shapes, and transforms.

BE CREATIVE AND EXPLORE THE TOOL!



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