# week::four
Troubleshooting Vector Artwork

Hints & Tips for Creating Perfect Vector Artwork in Illustrator

Managing Transparency
- o Understand transparency before using it.
  - § If managed correctly, high quality, error-free transparent output can be created using transparency and select output file formats.
- o Use the **Window > Flattener Preview** panel to analyze artwork and identify areas of transparency.
- o Make sure the Effect > Document Raster Effects Settings... are set correctly.
  - § Specifically, the Resolution should be at least 300ppi for most artwork.
  - § Match the Color Model to the output model.
  - § Manage flattener presets using Edit > Transparency Flattener Presets...
- o Use **Tints** instead of Opacity to specify lighter versions of colors.
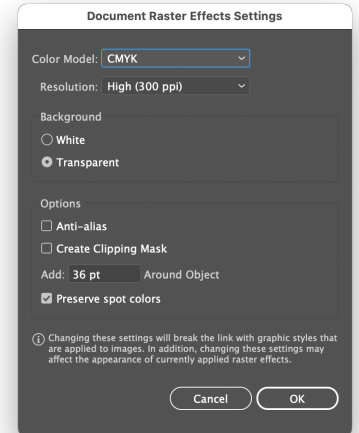
Use the Appropriate File Format
- o If you know the print workflow supports native file formats (aka: placement into InDesign), it is OK to save and place your vector artwork as **native Adobe Illustrator** (.ai) files.
  - § This method has some workflow advantages, including eliminating unnecessary duplicate copies of artwork files and enhanced editing abilities in InDesign.
  - § Always make sure the **Create PDF Compatible File** option is selected.
- o If you are saving for final output, or to share with modern, non-professional print applications, **PDF** is an acceptable vector format.
  - § In addition to InDesign, many other common desktop programs (Microsoft Word and PowerPoint, Apple Pages & Keynote) can import PDF files and output them as vector artwork to desktop printers.
- o In the case of older print workflows or certain specialty printing methods, save vector artwork as an **Encapsulated PostScript** (.eps) file.
  - § Save EPS files with an 8-bit TIFF preview, and always include the .eps file extension.
  - § Remember that EPS files can contain **both vector and raster** imagery. Never assume that an EPS contains vector artwork.
 - § However, EPS is a pretty old format, and while it still works well it's not ideal for modern workflows.

Rasterize Complex Files
- o Use **File > Export...** to save image in a raster format.
- o If printing, be sure to export the file with enough resolution to print at the highest quality possible:
  - § Step One is making sure the artboard is at its **final, printing size**.
  - § Step Two is to select the **appropriate output resolution** (PPI).
  - § 300 PPI is fine for artwork with a painterly or photographic appearance. 600 PPI (or higher) is better for artwork with text or crisp vector lines.
- o TIFF files (.tif) are still the most reliable raster format for printing.
  - § If transparency is required, save the image as a PSD file with transparency enabled, then convert it to TIFF in Photoshop, preserving transparency when saving.
- o Native Photoshop files can also work and support full transparency.
- o For most styles, do NOT anti-alias the artwork when the intent is print.
  - § Anti-aliasing is meant for on-screen viewing and will soften the look of artwork when printed.
  - § Some styles of artwork (ones that have a painterly quality), however, might benefit from anti-aliasing.

— Lecture Outline —
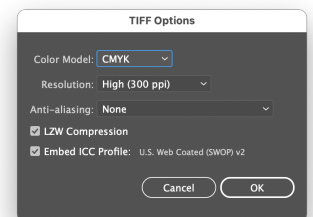
Reduce Anchor Points

- o   Keep the number of **points to a minimum.**
- o   Use Object > Path > Simplify to remove extra points.
  - ▪ …but don't overdo it. Don't reduce the quality of the image just to remove points.
  - ▪ Object > Path > Clean Up… can also be helpful in removing unwanted points and other non-essential information.
  - ▪ This is especially useful on artwork from other applications or designers that may have not been created cleanly, auto-traced, or made with poor-quality vector software.

| Original | Object > Path > Simplify… | Modified |
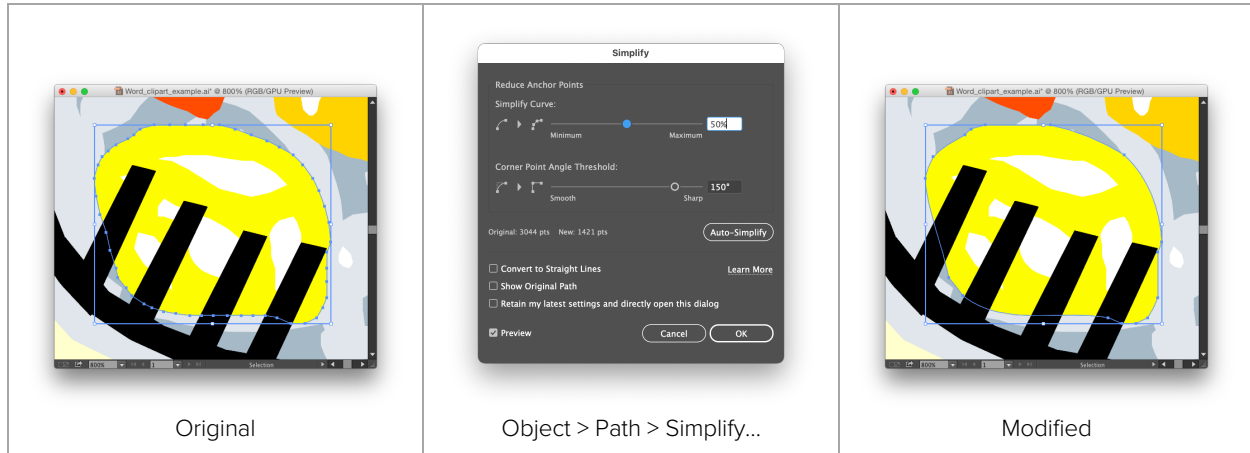
Object Shape Simplification

- o   Use the **Pathfinder > Shape Modes** to reduce objects to their simplest forms.
- o   **Remove strokes** from artwork that will be used by other designers (corporate logos, for example)
 - ▪ Use Object > Expand… to expand Strokes to Fills.

Understanding Effects

Overview

- o   **Effects** alter only the appearance of an object, not the underlying path structure.
  - ▪ Effects are dynamic—they adjust their appearance to match the underlying path. If you edit the path, the effect is automatically updated.
- o   Printers and programs other than Illustrator have difficulty viewing and printing some file that utilize certain effects.

Effect Hints

- o   You can alter an Effect by double-clicking on the Effect in the **Appearance panel** (Shift-F6).
- o   Only use the Effects that are located in the top-half of the menu (the ones labeled *Illustrator Effects).*
  - ▪ These do not need to rasterize an object to be applied.
  - ▪ The Effects under the *Photoshop Effects* heading are from Photoshop. They can be applied to both imported images and artwork drawn in Illustrator, but the application of them almost always involves some rasterization of artwork. Avoid using them if you can.
- o   You can permanently apply an effect by expanding it, using the **Object > Expand Appearance** command.

— Lecture Outline —
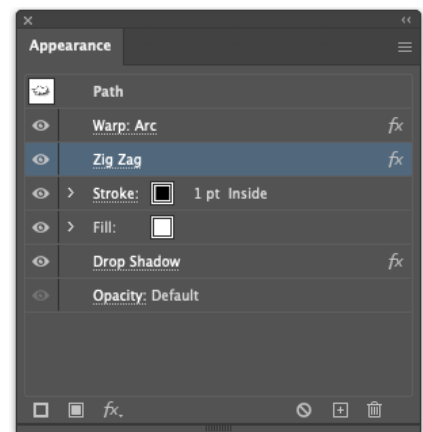
Typography

Type Hints

- o **Convert all fonts to outlines** when creating logos or sending certain artwork to press.
- o EPS & PDF files can embed fonts for printing, but not for editing.
- o Type > Create Outlines (Command-Shift-O)

Linking Issues

- o While linking to external raster and vector files is fine and even encouraged during the design phase, once an Illustrator file is ready to share all links should be embedded within the file.
- o **Embed vector and raster imagery** into AI and EPS files to avoid potential link issues.
  - ▪ This issue is called *double-embedding*.
  - ▪ For vectors, open them natively in Illustrator and copy/paste the artwork into your file, or use the Embed option in the Links panel.

Tips for Preparing Logos for Print Production

Final logos should be in their simplest, easiest to print form

- o Outlined text
- o Pathfinder tool used to combine like-shapes
- o Vector format
- o Stray points eliminated
- o All lines/shapes are closed

Once you have completed a logo and your client has approved it, you will need to make some slight adjustments for print purposes. Some areas to test:

- o Test at large and small sizes
- o Color reversals
- o How does it look in print?

Color Reversal

- o Most logos are designed to be seen on a white (paper) background
- o Sometimes they will need to be reversed (on a black or color background)
- o This usually means a white version of the logo is created
- o Use **Show Transparency Grid...** (Command-Shift-D) to see which objects are see-through

Print Suitability

- o Print your logo in small and large sizes to get a feel for how it lays on paper
- o Start with the Black and White and Reverse versions
- o Color-wise, always proof from the final printer and adjust color from there

File types to NOT use/share with the client

- o Native Photoshop, Illustrator, or InDesign files
- o Font files
  - ▪ Clients may request the font file that goes with the logo
  - ▪ You cannot share font files this way—they must purchase their own license to use the typeface
  - ▪ Your typefaces in logos should be outlined anyway (when sending final files)

And as always...

- o Archive your files!
- o ...in multiple places!
- o ...in multiple formats!