# week::three
Troubleshooting Vector Artwork

Hints & Tips for Creating Perfect Vector Artwork in Illustrator

Managing Transparency

- o **Understand transparency before using it.**
    - ▪ Transparency is one of the most trouble-causing features in print publishing.
    - ▪ However, if managed correctly high quality, error-free output can be created using transparency and select output file formats.
- 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.
- o Use the **Window > Flattener Preview** panel to analyze artwork and identify areas of transparency.
- o Use **Tints** instead of Opacity to specify lighter versions of colors.
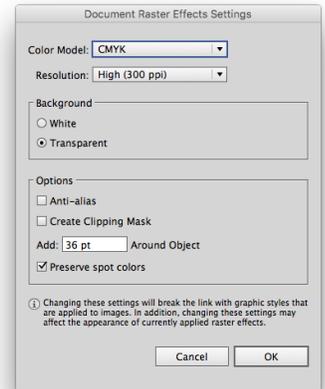
Use the Appropriate File Format

- 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 accepted 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 If you do NOT know the print workflow in which you file will be printed, save vector artwork as an **Encapsulated PostScript** (.eps) file.
    - ▪ Save EPS files with an 8-bit TIFF preview.
    - ▪ 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

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 PNG 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 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.

— Lecture Outline —
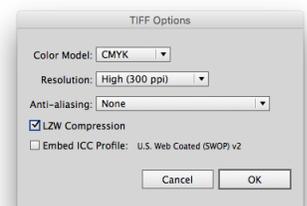
Reduce Anchor Points

- 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.


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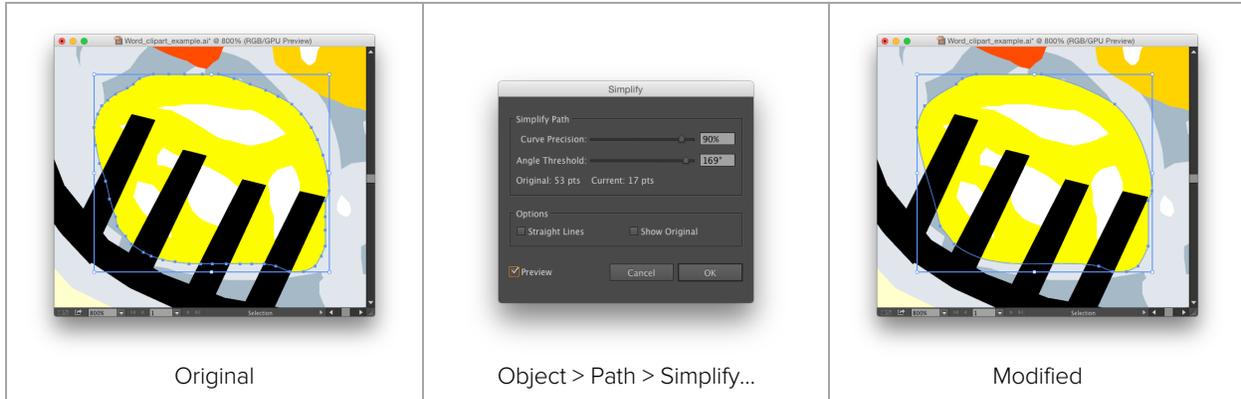
Object Shape Simplification

- 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.

Typography

- 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)
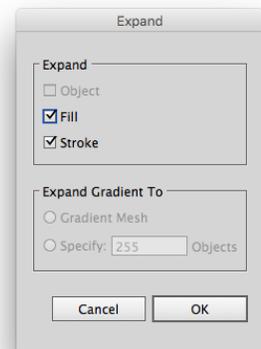
Linking Issues

- o **Embed raster imagery** into EPS files to avoid potential link issues.
- o **Don't link to other vector files** within EPS files.
    - ▪ This is called *double-embedding*.
    - ▪ 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 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!