

# Best Practices for Submitting Graphic Files to The Guilford Press

## **BEST PRACTICES FOR FLOWCHARTS, FAMILY TREES, HIERARCHICAL PYRAMIDS, VENN DIAGRAMS, AND OTHER GRAPHICS COMPOSED OF SHAPES AND TEXT**

All graphics that use lines, shapes, and arrows to illustrate relationships between text entities should be supplied as editable vector artwork, that is, made up of lines and shapes not pixels (see below for instructions regarding file formats). In general, such artwork should aim for efficient simplicity; extraneous graphic effects should be avoided where possible and uniformity should be emphasized. For example, do not use different shapes around essentially equivalent text elements unless those shapes carry significance and that significance will be evident to the reader. Below are some recommendations for producing simple, elegant graphics that will look good across formats and printing scenarios.

- Avoid multiple shades of gray or colors that do not carry significance. If multiple shades are required for the graphic to work, bear in mind that in book publishing it is only possible to achieve four or five distinct tones. Any further distinctions may require that patterns be introduced or the graphic reimagined.
- Avoid shaded backgrounds or fills behind text where a defined outline is sufficient.
- Avoid white (or light) text on a dark background whenever possible. If this effect is necessary to create graphic contrast, use it minimally.
- Avoid multiple sizes of text that do not carry significance. It is best to use a single typeface, weight, and size of type throughout a graphic. If you wish to emphasize certain text, it is best to do so by changing the weight (to bold or italic, for example) as a first option, to change the size only when those

options are exhausted, and to change the typeface or use all capital letters only when all other options are exhausted.

- Where possible, use a conventionally available sans serif typeface—Arial is preferred. Do not set all text within a graphic in bold or italic weight; instead, reserve those weights for selective emphasis.
- Do not add extraneous raster effects—such as drop shadows, gradients, outer and inner glows, or blurs—to the graphic. Any such effect should be used sparingly and only to carry significance within the graphic. Raster effects that do not adhere to a sufficient resolution standard may have to be removed or replaced.

### ***File Formats***

Most file formats associated with vector-based artwork are acceptable, including for example Adobe Illustrator (.ai), EPS, or SVG. If you wish to supply a file in an unusual format (perhaps associated with a web-based graphic service or a field-specific application), please speak to your editor to confirm that it is acceptable and also determine if it is possible to supply a duplicate file in an alternate vector-based format (PDF or EPS are common). Note that nearly all vector-based file formats can also include raster content; please make certain that the file you supply retains full vector functionality rather than a rasterized representation of the graphic.

Although programs in Microsoft's Office suite (Word, Excel, PowerPoint) do not automatically produce print-ready or high quality graphics, files produced using those programs are generally acceptable when the best practices below are followed. Any graphic originally created in an Office program should be supplied in the native file format associated with that program.

- Where possible, avoid using SmartArt graphics. If you must use such graphics, please attend to the stylistic notes that follow and bear in mind that the SmartArt graphics add many undesirable graphic effects by default. It may be necessary to remove those effects.
- Do not use raster effects (like drop shadows, glows, or gradients) applied in Office programs, they are often low resolution and cannot be retained. If such an effect is crucial to the graphic, please highlight the significance in a note so that it can be retained or replaced in the production process.
- Avoid shaded backgrounds or fills behind text where a defined outline is sufficient.
- Avoid multiple shades or colors that do not carry significance.

### ***Color***

It is best to assume that all graphics composed of shapes and text will be printed in black and white (with shades of gray). All such graphics should be adapted to

communicate fully in gray even in the rare case where full-color versions of such graphics may be used in alternate formats like ePub or ePDF. Please bear in mind that a simple conversion from color may not produce an acceptable black and white graphic and that any information communicated only through color contrasts must be reconsidered.

### **BEST PRACTICES FOR BAR GRAPHS, PIE CHARTS, SCATTER PLOTS, AND OTHER GRAPHICS THAT REPRESENT NUMERICAL DATA**

When supplying graphs and charts produced using Microsoft Excel, it is best to supply the original Excel (.xlsx) file that includes the underlying data. For graphs and charts produced using other programs or applications, the native files may not be usable and it may be necessary to supplement that file with a vector-based output file (in formats like CSV or EPS) or a raster file representing the graphic alone.

### **BEST PRACTICES FOR PHOTOGRAPHS AND OTHER RASTER IMAGES**

#### ***File Formats***

Photographs, scanned images, and other raster graphics should be supplied in a file format intended for raster-based content. Some common examples include PNG, TIFF, and JPEG. Where possible, the most original file format should be preferred or the native format in which the final modifications were made. Note, however, that the JPEG/JPG file format uses “lossy” compression (meaning original data will be permanently lost) while TIFF compression, for example, can be lossless.

Photographs and raster graphics may be supplied as Photoshop files (.psd). Layers in Photoshop files need not be flattened, but please consider labelling layers clearly if there could be confusion.

#### ***Resolution and Size***

For purposes of print production, raster images should be supplied at 300 dpi (or higher) at an appropriate size. (1-bit graphics saved as “Bitmap” artwork should be 1,200 dpi.) In general it is reasonable to equate DPI (printed dots per inch) with PPI (pixels per inch) when considering raster graphics. For example, a TIFF file representing a photograph of a yardstick that is 450 pixels wide could only be about 1.5 inches wide on the printed page and all detail would likely be lost ( $450 \text{ pixel width} \div 300 \text{ dots per inch} = 1.5 \text{ inches wide}$ ).

Resolution of an existing graphic cannot be increased without a reduction in size. Do not resample low-resolution images to artificially inflate the resolution, the actual quality of the image will not improve. It is preferable to supply the unmodified low-resolution graphic as is if you cannot provide an alternative.

While the appropriate size for a graphic must necessarily be judged based on the content—a one inch width might be exactly right for a photo of a postage stamp but not for an Ansel Adams landscape—some general guidelines for image widths in various trim sizes are supplied below. Bear in mind that the available depth in broadside/landscape orientation may be reduced if the artwork must share the available space with a caption or similar content.

- A width of approximately 6 inches at 300 dpi (or about 1800 pixels) is sufficient for an image that will appear in an upright (portrait) orientation at any trim size. Bear in mind, however, that details only distinct at full size may be hard to distinguish when the image is reduced to fit a narrower page.
- A width of 9 inches at 300 dpi (or about 2700 pixels) is sufficient for an image that will appear in a broadside (landscape) orientation at any trim size. (The same caveat regarding detail applies.)
- For a book with a trim size of 6 inches by 9 inches, an upright width of about 4.5 inches at 300 dpi (or about 1350 pixels) and a broadside width of about 7.5 inches at 300 dpi (or about 2250 pixels) are suitable.
- For a book with a trim size of 7 inches by 10 inches, an upright width of about 5.5 inches at 300 dpi (or about 1650 pixels) and a broadside width of about 8.5 inches at 300 dpi (or about 2550 pixels) are suitable.
- For a book with a trim size of 8 inches by 10.5 inches, an upright width of about 5.75 inches at 300 dpi (or about 1725 pixels) and a broadside width of about 8.5 inches at 300 dpi (or about 2550 pixels) are suitable.

### ***Color***

While the overwhelming majority of photographs will be reproduced in black and white, full-color versions of photographs may be appropriate for use in alternate formats like ePub or ePDF. In addition, it may be possible to manipulate a color image to improve its appearance in black and white with methods beyond a simple conversion to grayscale format. For that reason, it is generally best to supply the graphic file in the most original colorspace (RGB, CMYK, Grayscale). Note, however, that concerns about sufficient contrast and distinct edges nonetheless apply.

### ***Centering, Contrast, and Distinct Edges***

- In general, all content within a photograph should be in focus. At a minimum, the intended subject of the photograph should be in focus.
- It is often best if the intended subject appears near the center of the image.
- Photographs with a high degree of contrast distinguishing the subject(s) from the background tend to produce the best result across formats.
- Photographs with highly defined edges differentiating the represented objects tend to look best across formats and colorspace.