Cornell University Press

GUIDELINES FOR SUBMITTING ILLUSTRATIONS

These guidelines will help you collect, organize, and submit illustrations for your publication. Following them closely will help avoid potential delays in editing and production and maximize the quality of the images in your publication. If you have any questions, check with your Cornell acquisitions editor.

Tips for Getting Started

- Submit illustrations as early as possible for review.
 We want to identify and resolve any issues with your illustrations in a timely manner.
- 2. The size needed for digital illustration files depends on the intended trim size (dimensions) of the print publication. In most cases, aim for a minimum of 1200 pixels on the longest edge.

 Most images taken directly from a website are low resolution and will not be acceptable for printing. If you have any concerns about the dimensions, submit the best version you have available. Submit original, unaltered digital files, or the version closest to the original that you have. Do not artificially enlarge small images.

 Resolution at the intended size of reproduction (which must be at least 3 x 3 inches) must be at least 300 dpi.
- 3. Submit line art, icons, logos, and final charts, graphs, and diagrams as vector image files (see page 3 for a list of vector image file types), not as TIFFs or JPEGs.

 Adobe Illustrator is a good choice for creating non-photographic illustrations. Provide the source file (that is, the original file in the program used to create it) along with a PDF (export to PDF or print as PDF). See other acceptable file types on page 2.
- 4. Do not embed images in your manuscript.
 - Images placed directly into Microsoft Word documents have to be extracted, which can lower their quality. Instead, include an in-text callout (place marker) near where you want each illustration to appear (e.g., <Fig. 1.1 about here>, on its own line following the paragraph that talks about figure 1.1).
- 5. Submit tables in word-processing format.
 - Create tables in Word using rows and columns of cells. **Do not** submit pictures or screenshots of tables.
- 6. Submit captions in word-processing format.
 - Submit captions and alt text for all illustrations in a Word document (in a separate document, according to Cornell Author Guidelines and Alt Text Style Guide) and include any necessary credit lines or source notes (see CUP Copyright and Permissions Guidelines).
- 7. **Make sure the figure numbers, file names, captions, and manuscript callouts all match.**Number figures in order, and make sure that each image number matches the number in the corresponding caption, callout, and information in the art and permissions log.

Adapted from guidelines created by the 2020–2021 Editorial, Design, and Production Committee of the Association of University Presses: Jennifer Comeau, Julia Cook, Kelly Finefrock, Laura Furney, Elena Goranescu, Kristin Harpster, Amanda Krause, Mary Lui, Neal Novak.



© 2021 Association of University Presses. This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/4.0/.

Adapted from the digital image standards of the University of Chicago Press. Figures 5–7 and 12–13: *Migrant Mother* by Dorothea Lange. Courtesy of the U.S. Farm Security Administration Collection, Library of Congress.

What Type of File Should I Submit?

There are several formats for illustration files, outlined in the table below. Cornell University Press prefers TIFF format (for digital photos, scans, or line drawings) and EPS format (for vector images or maps). Page 3 describes the definitions of and differences between raster image files (TIFF) and vector files (EPS).

File Type	Extension	Definition	
Portable Document Format	.pdf	A file format that preserves vector graphics, text, and fonts in a self-contained document	
Encapsulated PostScript	.eps	Vector image format that can be opened outside of Adobe Illustrator	
Adobe Illustrator	.ai	Default file type used by Adobe Illustrator, a vector graphics editing program	
Scalable Vector Graphics	.svg	XML-based vector image format that can be viewed by most web browsers and can be edited in Adobe Illustrator	
Tagged Image File Format	.tif or .tiff	File format for storing raster images in high resolution; this format offers the option of LZW compression (compression that reduces file size without losing data)	
Joint Photographic Experts Group*	.jpg or .jpeg	Raster image format best suited for displaying photographic images on electronic screens; this format uses irreversible compression (see note below)	
Graphics Interchange Format*	.gif	Raster image format best suited for displaying simple images on solid colors without gradients on electronic screens; it does not support the CMYK color profile used in professional printing	
Portable Network Graphics*	.png	Raster image format best suited for displaying simple images on electronic screens; it does not support the CMYK color profile used in professional printing	

Note: *Find out from your publishing contact whether these formats are acceptable for submission. As they are best suited for simple images on a screen, most do not meet production needs for printing. However, they may be acceptable for online supplemental material.

A Word on JPEGs

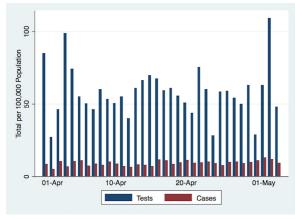
If you acquire an image from a library, museum, or stock photo agency, request TIFF or EPS format. If JPEG is the only file format available, **do not open, edit, and save** the image before submitting it. Download the file directly. If you need to rename the file, use Finder (Mac) or File Explorer (PC).

The JPEG format is commonly used for file transfer because of its high compression qualities (smaller file sizes are easier to transfer). Unfortunately, JPEG compression discards some of the data that makes up the image. Each time a JPEG is opened, edited, and resaved in the JPEG file format, the image degrades.

The type of file you should submit depends on the type of image. The table below explains the difference between vector and raster image files.

Image Type	Definitions	File Extensions
Line art, charts, graphs (vector)	Files that contain defined paths and points that establish a	.pdf
	grid. If you magnify or zoom in on the image, the lines and	.eps
	points stay smooth.	.ai
		.svg
Photographs and scans (raster)	Files that contain a grid of pixels. If magnified, the image	.tif
	appears blurry and grainy.	.jpg
		.gif
		.png

Charts, graphs, diagrams, timelines, and other images based on quantitative information are often created using a vector-based drawing application. These applications build images by using mathematical formulas to describe points, lines, and shapes. Unlike digital photos or scans, which depend on proper resolution for realistic rendering, vector graphics can be enlarged to any size without loss of quality.



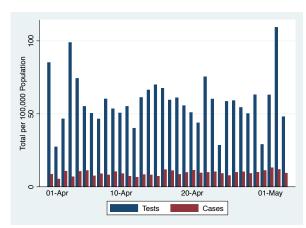


Figure 1

Figure 2

The two images above show the same graph. Figure 1 has been rasterized, resulting in fuzzier lines. Figure 2 is the original vector file. The graph can be enlarged and the lines remain crisp at any size.

How Do I Determine How Large the Figures Need to Be and What Resolution to Use?

On a PC

- Open Windows Explorer and locate the image file.
- 2. Right-click on the file and select "Properties" from the drop-down menu.
- Click the "Details" tab at the top of the dialog box.
- 4. The dimensions of the file are listed under the "Image" section of the dialog box.
- 5. Using these pixel dimensions, calculate the maximum reproduction size of the file by dividing the number of pixels by the ppi required. For example, if a color or grayscale image file's dimensions are 4320×2180 , this image can be reproduced as an image measuring 14.4×7.26 inches or smaller $(4320 \div 300 = 14.4$ and $2180 \div 300 = 7.26)$. Resolution at the intended size of reproduction must be at least 300 dpi.

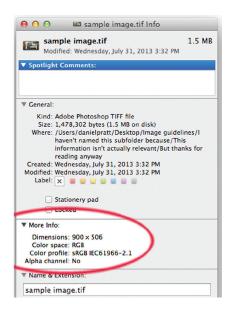


Figure 4

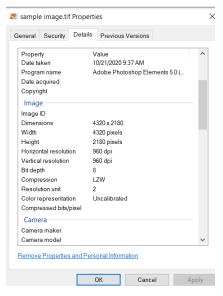


Figure 3

On a Mac

- 1. Open Finder and locate the image file.
- 2. Right-click on the file—or press the "Control" key and click on the file—and select "Get Info" from the drop-down menu.
- 3. The dimensions of the file are listed under the "More Info" section of the dialog box.
- 4. Using these pixel dimensions, calculate the maximum reproduction size of the file by dividing the number of pixels by the ppi required. For example, if a color or grayscale image file's dimensions are 900 × 506, this image can be reproduced as an image measuring 3 × 1.68 inches or smaller (900 ÷ 300 = 3 and 506 ÷ 300 = 1.68). This would thus be rejected for publication, as the reproduction size must be at least 3 x 3 inches.

While image editing programs give you the opportunity to view an image's size, **do not** edit the image or tinker with the resolution, as doing so may affect its quality. Low-resolution and enlarged images can exhibit pixelation, creating a stair-stepped or jagged look that occurs when individual pixels in the image become visible. When you look at an image at 100% size, it should not be pixelated or blurry (see figures 5–7 below for an example).







Figure 6—72 ppi (note blurred edges and loss of detail)



Figure 7—scanned at 72 ppi and artificially enhanced to 300 ppi

Preparing Line Art, Charts, Graphs, and Diagrams

Proportions

Keep in mind that illustrations will be printed to fit the book or journal page, not to fit your screen or manuscript paper. If you create an illustration at a larger size, it will have to be reduced to fit within the dimensions and margins of the print publication.

When creating graphics, consider the relationship between the font size, the weight (width) of rules (lines), and the publication's final printed dimensions. See below regarding shading.

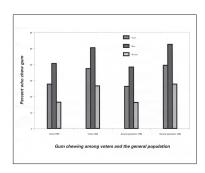


Figure 8

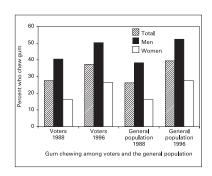
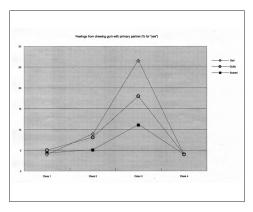


Figure 9

Figure 8 shows a chart reduced to the dimensions of the printed page. Note the illegibility of the legend and column/row headings. The bar shadings are too similar in tone as well. When zoomed in, the text and bars are pixelated and blurry. Figure 9 depicts the same chart redrawn with the final production size in mind. Bars are clearly distinguishable, all text is legible, and the line rules are not faded. When zoomed in, the text and bars are clear and legible.



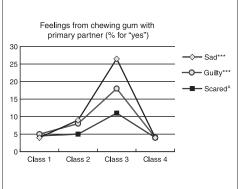


Figure 10 Figure 11

Figure 10 illustrates a line graph reduced to fit the publication. It will print poorly if no adjustments are made; the type is unreadable, and the graph points are lost within the background shading. Figure 11 depicts the same graph laid out according to the guidelines. The text is now readable and the plotted points are clearly defined.

Style Guidelines When Anticipating the Effects of Reduction

Line Rules

- 1. One consistent line weight (width) is preferred; use no more than two line weights for rules.
- 2. Rules should be no smaller than 1 point and no larger than 2 points. Rules that are too thin can disappear in printing; rules that are too **thick** add unnecessary emphasis.

Text

- 1. Text labels and legends that are part of a chart, graph, or diagram may look fine on your screen or printed to fill a manuscript page but may become unreadable when the illustration is reduced to fit the publication. Preview and adjust the font size as necessary.
- 2. Ideally, use one font size for all type throughout the figure. If you must use two different sizes, they should vary from each other only slightly (e.g., 10 pt and 12 pt, not 10 pt and 18 pt).
- 3. Use the same font in all line art. Use a font that is easy to read. Examples include Arial, Avenir, Helvetica, Helvetica Neue, Myriad Pro, and Minion Pro.
- 4. Be sparing in the use of font styles (bold, italics, underlining). In most cases, they are unnecessary.
- 5. Do **not** use ALL CAPS, as this decreases overall legibility.

Color and Shading

- 1. Always use 100% black for text.
- 2. Make sure your art works in grayscale (black and white). Use solid black and white where possible, and use other tints or shading sparingly. Minor variations can be hard to tell apart and may obscure the information the art is intended to convey. Values of 20%, 50%, and 80% black are usually distinguishable from one another and from solid white and black. Confirm that everything is legible and easy to tell apart at publication size. Opt for patterns when multiple distinctions are needed.
- 3. Our publications are printed in black and white. Avoid color in line art, charts, graphs, and diagrams.

How to Submit Final Line Art

Submit your line art both as a source file—that is, in the program(s) used to create the art—and as a PDF. If source files are not available, submit line art as one of the acceptable vector image file types listed on page 2. **Never** submit screenshots of line art.

Adhere to the following guidelines:

- 1. Follow the tips on proportion and style described above.
- 2. To generate a PDF of each illustration, check the program you used for an export option. If you don't have the option to export to PDF, use the print command and see if you can choose Adobe PDF as the printer (this allows you to "print" the file to a PDF).
- 3. If you are submitting Adobe Illustrator files (.ai), package your files so that all links and fonts are included.
- 4. When you export to PDF or another vector image format, zoom in to above 100% (e.g., 200%) and make sure all lines and text remain smooth (not pixelated or blurry).
- 5. Label all figures clearly. Make sure file names match the figure numbers, captions, and manuscript callouts, as well as the art and permissions log.
- 6. If you need to hire a professional to create any line art illustrations, your publishing contact may be able to make referrals.
- 7. If some of your line art needs to be scanned, check with your publishing contact to see whether they would like you to do the scanning yourself. Typically, line art needs to be scanned at 1200 ppi at a minimum of 5 inches wide and saved as a TIFF.

Preparing Maps

Maps fall under three categories: (1) archival or historical maps, (2) digital maps with different layers from different databases, and (3) line art. If you need help preparing a map, check with your publishing contact about hiring a professional cartographer. **Never** submit screenshots of maps.

Ensure that all maps can be easily read in grayscale (black and white) and are not too dark. Make sure that text does not blend in with the background and avoid white labels on a shaded background or labels that are too small. Do not create or submit maps in color.

Archival or Historical Maps

- 1. Archival or historical maps may be available for use from <u>different databases</u>, such as the <u>David Rumsey Map Collection Database</u>, <u>BnF Gallica</u>, <u>Library of Congress</u>, <u>The Atlas of Canada</u>, etc. These sources contain high-resolution scans available for download.
- 2. Download the largest size available, and submit the original downloaded file to your publisher.
- 3. If a map you wish to use is not available in a database and is available in print form only, check with your publishing contact on how to proceed. Scanning Books and Magazines below gives some advice on scanning.

Digital Maps

- 1. If you are using multiple layers, make sure you have permission to use the layers for your publication.
- 2. If you used mapping software or Geographic Information System (GIS) software to create/add your map and layers, export the map to a high-resolution image file.

Maps as Line Art

Simple maps are best created in Adobe Illustrator. Follow the line art instructions above for any original maps that are created as line art. Remember to credit any base maps you traced or otherwise adapted.

Preparing Musical Examples

- 1. Music usually can be submitted as EPS and PDF files. JPEG and TIFF files are not acceptable.
- 2. Fonts must be embedded in EPS and PDF files. Check your software for instructions.
- 3. Use a single font throughout all music examples, preferably a serif font. For volumes with multiple contributors, we recommend having everyone use Times New Roman.
- 4. All musical examples should have the same staff depth; the recommended size is 4.3 mm.
- 5. All examples should also have the same staff thickness; lines should be no thinner than 0.1 mm.
- 6. Carefully proofread all music examples before you submit them, as corrections at the proof stage may be cumbersome, expensive, or impossible.

Preparing Photographs, Film Stills, Frame Grabs, and Scans

Photographs from Other Sources

Obtain all images from professional sources: archives, libraries, museums, stock photo agencies (e.g., ArtResource, Getty Images, etc.). Request the highest possible resolution. See page 4 for how to determine how large the figures need to be and how to calculate required resolution.

If a unique image that is important to your content is not available at the recommended resolution, discuss options with your publishing contact.

Most images taken directly from a website are low resolution (around 72 ppi) and will not be acceptable for printing.

Taking Photographs Yourself

Only take photographs of people, scenery, buildings, and 3D artwork such as sculptures and performance plays. **Do not** take photographs of another published photo or text. See page 9 for advice on scanning if you need to republish a photo from another book or magazine and the original publisher cannot provide an original photo from their archive.

- 1. Before taking photographs with a digital camera, ensure that you are using the largest available image size and the highest available resolution. Use lossless compression if possible. For more information, see "Setting Image Size and Quality In-Camera."
- 2. If you use your smartphone or tablet to take photographs, go to the settings in the camera app to change the picture size to the largest size and aspect ratio before taking the photograph (e.g., Samsung phone or iPhone).
- 3. Ensure that the lighting is appropriate (i.e., the overall photo is not dark and the subject of the photo is not in a shadow).
- If your photo contains identifiable people, consult your publishing contact about whether photo or model releases are needed.

Prints and Negatives

- 1. For older photographs, if you have access to the negative, it may be possible for you to <u>digitize the negative</u> in high resolution with a negative scanner or drum scanner. Using professional services and equipment will ensure that the photographs retain the same quality digitally.
- 2. If you have access to a print only, scan the photo at the highest settings possible (minimum 300 ppi) and save as a TIFF. Retain the print in case it needs to be rescanned.

Film Stills

Excellent sources of images pertaining to film are digital images from filmmakers, production companies, distribution companies, DVD production companies, press kits, and archives such as Cinematheques and the BFI online image archive. Your caption must clearly distinguish between production stills (or other promotional artifacts) and frame grabs. Production stills should be used only to illustrate a point that is being made about promotion or some connected issue, and the text must not conflate such images with actual visual evidence from a film.

Frame Grabs

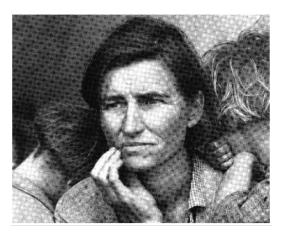
Frame grabs or screenshots provide actual visual evidence from a film. To get the clearest version possible, take frame grabs from a computer with a large, high-resolution monitor.

Note: Screen capture programs make it easy to accidentally capture the mouse cursor; double-check your frame grabs to make sure they are cursor-free and don't contain other extraneous items.

Scanning Books and Magazines

When possible, avoid using scans of previously printed images (such as illustrations from books and magazines) as your original art, as they can have unwanted pattern effects called **moiré**. Printed photographs contain a dot pattern, so scanning a printed image creates an overlapping array of patterns. When these two patterns overlap, a moiré is formed. While **descreening** techniques can be used in the scanning process to minimize the effect, these techniques usually result in a softening of detail in the image. Ask the original publisher if they can provide you with a high-resolution photograph.

Sometimes, a previously printed image of historical significance is not available in another format. If a printed publication is the only source available for an image that is important for your work, dicuss options with your publishing contact.



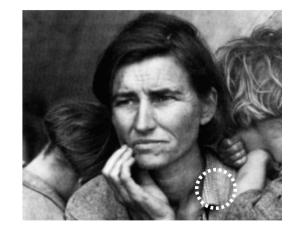


Figure 12

Figure 13

Figure 12 has a moiré pattern that is unpleasant to look at and unsuitable for print production. Figure 13 has been descreened, but the photographic details have been diminished as a result.

Submitting Files to Cornell University Press

Check with your acquisitions editor for the preferred delivery method.