3. Illustrations

3.1 **ARTWORK MUST BE COMPLETE.** *All* illustrations must be supplied with the final manuscript.

3.2 **TYPES OF ART ORIGINALS.** Varieties of art originals are divided into three categories:

1. *Digital images* have already been scanned or were created through a strictly digital process and will be adjusted by the typesetter or printer using imaging software.
2. *Reflective art* includes prints and drawings to be scanned by the typesetter or printer.
3. *Transparencies* (i.e., slides) are printed on transparent film and will also be scanned by the typesetter or printer.

Digital Images

Photographs

3.3 **FILE FORMATS.** Digital images may be submitted in any of five commonly used file formats: TIFF (saved for Macintosh; no compression), JPEG (maximum quality, baseline optimized), PSD; PNG; and PDF (each image saved as a single page). Do not embed digital photographs into a Microsoft Word document.

▶ If the image comes from a technically reliable source, such as a museum or stock image agency, whatever format that is supplied will be accepted.

3.4   **SIZE AND RESOLUTION.** Digital images must be at least 4 ½ inches wide at 200 ppi (pixels per inch) resolution. Optimal resolution is 300 ppi at no less than 5 inches of width.

▶ Even though an image may appear to be large enough when viewed on a computer monitor, it will not be adequate for reproduction in print unless the specifications above are met. Most images downloaded from web pages have a resolution of just 72 ppi. If the image's resolution is changed using an image editor such as Photoshop, its dimensions must be adjusted in inverse proportion according to this formula:

(old ppi ÷ new ppi) × old image width = new image width

Thus, an image that is 5 inches wide at 72 ppi must be reduced to about 1.2 inches if the resolution is increased to 300 ppi, because 72 ÷ 300 = .24, and 5 × .24 = 1.2.

3.5   **COLOR VERSUS BLACK AND WHITE.** When color originals are to be reproduced in black and white, the digital image should be submitted in color; conversion to grayscale should be handled by the typesetter. Do not scan color originals as grayscale or convert digital color images to grayscale before submitting to your editor's assistant.

Line Art

3.6   **DEFINITION.** Line art may include charts, graphs, maps, and pen-and-ink drawings.

3.7   **FORMAT.** Line art must be furnished as original artwork. Photocopies, computer printouts, and photographs of line art will not be accepted unless the art is to be reformatted (see 3.12).

3.8   **FILE FORMATS.** Editable Adobe Illustrator EPS is the preferred format for digital line art such as maps and diagrams. Other acceptable formats are TIFF, AI, PDF, and Bitmap (BMP).

Digital line art created by means of spreadsheet software, such as Microsoft Excel or drawing functions in Microsoft Word, is generally not acceptable unless it has been converted to PDF or Illustrator EPS.

▶ Line art should not rely on color to highlight or differentiate elements from each other since the colors will not be represented when the art is converted to grayscale.

3.9 **GIS AND CAD.** Digital line art generated by means of highly specialized applications such as GIS (Geographic Information System) and CAD (Computer-Aided Design) poses special problems for reproduction in a book. In general, *the Press discourages the "repurposing" of such specialized graphics*; native files from such applications will not be accepted under any circumstances. To even be considered, such files must be converted—by a skilled technician—to PDF or Illustrator EPS. In addition, please note the following known issues with providing files converted from these sources:

1. Fine lines generated by GIS and CAD applications often disappear when the converted file is processed for offset printing, especially if the image is reduced in size. Most printers can only tolerate a minimum line weight of .25 pt.
2. If conversion is made to Illustrator EPS, copies of any fonts used in the original graphic must be provided separately.
3. Converted files may not be editable; if edits are required, you may be asked to provide corrected art (see 3.13).

3.10 **SIZE AND RESOLUTION.** Digital line art requires higher resolution for good reproduction and must be at least 4 ½ inches wide at 1200 ppi. Note that if artwork is to be reduced in size, labels and other lettering must be large enough in the original to be legible after reproduction.

3.11 **NO COLOR OR SHADING.** Line art should not include gradient shading, screens, or tints. These will create an undesirable effect called moiré in the scanned image and may impair the graphic's legibility. Line art should not rely on color to differentiate elements from each other on line graphs, pie charts, maps, etc. since the colors will not be represented when the art is converted to grayscale and the colored elements may be indistinguishable from each other. Rather than color, use patterns such as crosshatching or stripes to distinguish elements (see Figures 3.1 and 3.2).

3.12 **REFORMATTING.** Certain line illustrations may be reformatted in typesetting in order to enhance their legibility on a book page and/or to make them conform to design specifications. Reformatting is done at the discretion of the Press and is not guaranteed.

3.13 **EDITING.** If a line illustration requires textual editing (of map labels, for example), you may be asked to provide corrected artwork during copyediting or proofreading.
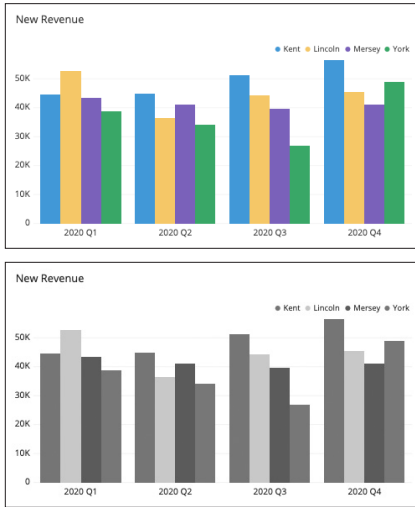
Figure 3.1. Example of color graph that will not work when converted to grayscale
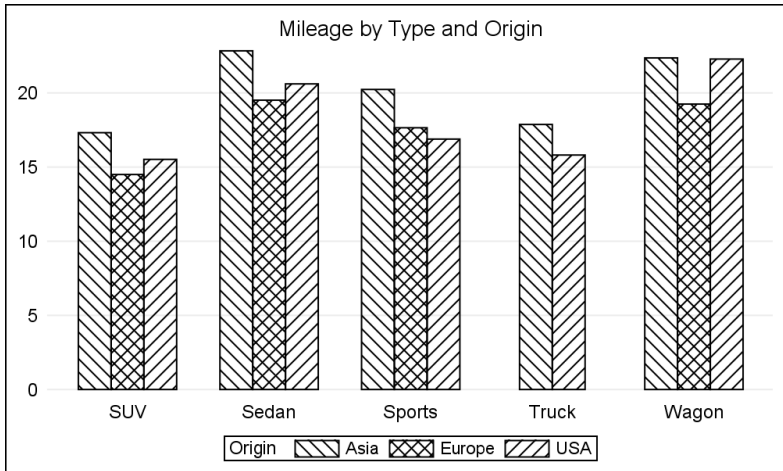

Figure 3.2. Example of bar graph that uses patterns to distinguish elements

Screen Grabs

3.14   **SPECIAL RISKS.** Screen capturing (or screen grabbing) cinema stills, video game screens, and web pages from a computer monitor is fraught with pitfalls, including but not limited to:

1. Cinematic stills may lose vital qualities of a film's original cinematography, particularly in terms of light and shadow, unless they are captured on a calibrated monitor by a skilled technician.

2. Digital artifacts and unwanted optical effects may be introduced into a cinematic image when the playback is "paused" for capture.

3. Captured images may be too small to meet basic size requirements (see 3.15) unless technical know-how is applied to ensure a good capture.

4. Captured web pages may contain small details that could be lost when the image is reduced in size to fit on a book page.

For this reason, the Press discourages submission of screen grabs as original art unless they are prepared by a skilled, knowledgeable technician. If you foresee the need for captured images in your book, you should consult with your editor's assistant prior to submission of artwork.

3.15 **SIZE AND RESOLUTION OF SCREEN GRABS.** Screen captures of cinema stills, video games, and web pages must be at least 12 ½ inches wide at 72 ppi (see 3.4 for more on sizing of digital images.) The size of a screen grab depends on the size of your monitor. Use the largest, highest-quality monitor you can. To create a screen grab to our specifications, you will need a minimum screen size of 17 inches (measured diagonally).

▶ The image to be grabbed must fill as much of the monitor's width as possible—12 ½ inches wide at minimum.

Reflective Art

Photo Prints

3.16 **BEST RESULTS.** Continuous-tone photo prints, made through a darkroom process and printed on glossy photo stock, are optimal for high-quality reproduction.

3.17 **SIZE.** Preferred sizes are 8 × 10 inches or 5 × 7 inches. Smaller prints may not hold details when enlarged.

3.18   **COLOR PRINTS.** Black-and-white prints are preferred, but not required, for black-and-white reproduction; color prints may not reproduce adequately in one-color printing.

3.19   **DIGITAL PRINTOUTS.** Printouts of digital images, such as laser or ink-jet prints, are not acceptable.

3.20   **PRINTED MATTER.** Images from printed sources such as books, magazines, and newspapers are accepted only if the illustration is absolutely essential and no other usable form is available.

Transparencies

3.21   **SIZE.** Preferred sizes are 4 x 5 inches, 2 ¼ x 2 ¼ inches, or 35 mm slides.

3.22   **COLOR VERSUS BLACK AND WHITE.** Color transparencies will not be accepted for black-and-white reproduction unless it is verified that no other form is available.

3.23   **NO NEGATIVE FILM.** Negative film originals will not be accepted. Convert negative film transparencies to positive photo prints before submitting art for publication.

Numbering Illustrations

3.24   **FEWER THAN FIFTY ILLUSTRATIONS.** If your manuscript contains fifty illustrations or fewer, you should number them consecutively throughout the manuscript.

3.25   **MORE THAN FIFTY ILLUSTRATIONS.** Manuscripts with more than fifty illustrations and all contributed volumes should use a double numeration system: the chapter number followed by the figure number. For example, Figure 1.1 is the first figure in chapter 1, Figure 2.1 is the first figure in chapter 2, and so on. Under this system, illustrations in a preface or introduction should be numbered P.1 and I.1, respectively.

3.26   **MULTIPLE IMAGES AS ONE ILLUSTRATION.** When two illustrations should appear together and are captioned together, place an "a" or "b" after the number, for example 1a and 1b or 2.1a and 2.1b.
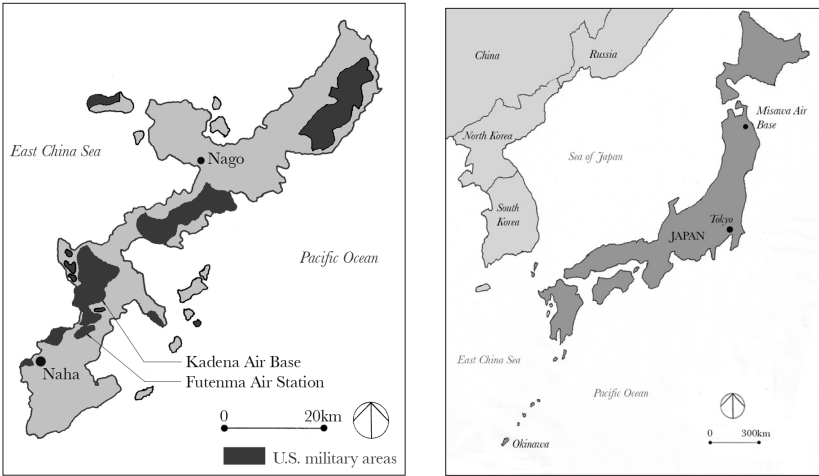
Figure 3.3. These maps were created in a consistent style expressly for a book that is otherwise illustrated with photographs. They should be labeled and numbered as maps.
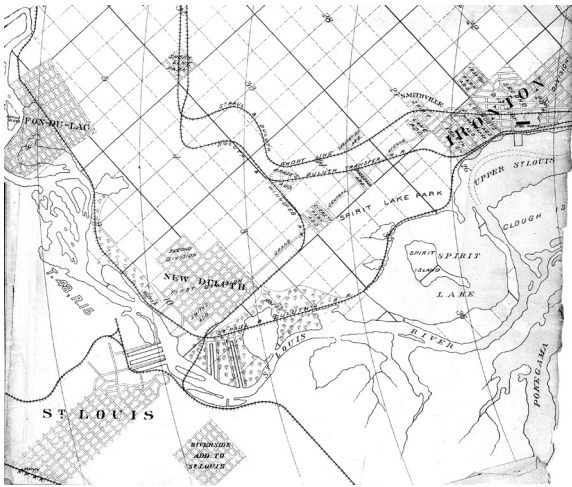

Figure 3.4. This illustration is a historical map from an 1890 atlas and therefore should be labeled a figure.

Maps

3.27 **FIGURES VERSUS MAPS.** Maps created specifically for your book should be labeled as maps. Such maps should be consistent in their style of cartography and labeling (see Figure 3.3). Map reproductions or

historical maps should be labeled as figures (see Figure 3.4). Consult your editor's assistant if you are unsure whether an illustration should be labeled a map or a figure.

3.28   **NUMBERING.** The same rules for numbering figures also apply to maps: In single-author books with only a few maps, the maps should be numbered consecutively throughout the book. For contributed volumes, maps should use a double numeration system. For example, Map 1.1 is the first map in chapter 1, Map 2.1 is the first map in chapter 2, and so on.

Tables

3.29   **TABLES VERSUS FIGURES.** Do not label simple lists, columns, or grids of text or numbers as tables (see Figure 3.5). An illustration should be labeled a table only when numerical data are being compared in multiple columns (see Figure 3.6). If you are unsure whether an illustration should be labeled a table or a figure, consult your editor's assistant.

Medium	Pros	Cons
News releases	• Inexpensive • May reach broad audience or very focused focused public	• Publication can (usually will) edit news release • Strong competition for editors' attention • High impact difficult to achieve
Speech or slide show	• Potential for dramatic portrayal of your program • High impact • Can target public • Q&A opportunity • Longer message possible • Inexpensive	• Takes time to arrange and time to write speech • Requires effective public speaking • If sensitive topic, Q&A can be disastrous if not capably handled
Videotapes	• Potential for dramatic portrayal of your program • High impact • Can target public • Longer message possible	• Expensive to produce and distribute • Requires equipment

Figure 3.5. Because this illustration simply contains lists of text in a columnar format, it is a figure, not a table.

Table 26. Closeness to political parties by sector affiliation of the participants (Genoa 2001)

Political party	Sector affiliation (%)			Total (%)
	Eco pacifist	Anti-neoliberalist	Anti-capitalist	
Rifondazione Comunista (RC)	53.6	72.4	64.2	63.5
Democrats of the Left (DS)	11.8	12.1	4.5	10.2
Girasole (Sunflower)	6.4	0.9	4.5	3.8
Partito dei Comunisti Italiani	5.5	1.7	–	2.7
Margherita (Daisy)	5.3	–	–	2.7
Others	6.3	2.5	4.5	4.7
None	9.1	9.5	22.4	12.3
(Numbers of interviewees)	(110)	(116)	(67)	(293)

Note: Cramer's V is 0.27 significant at the 0.001 level.

Note: Three of today's political parties stem from the Italian Communist Party (PCI): the social democratic majority of the Democrats of the Left (DS), Rifondazione Comunista (RC) as the union of those opposing the break with the communist tradition by the social democratic majority of the PCI decided in 1991, and Partito dei Comunisti Italiani, founded in 1998 in opposition to the decision of RC to withdraw its support for the center-left government of Romano Prodi. The Margherita is a federation of moderate parties of the center-left coalition Ulivo. The SDI emerged from the collapse of the Italian Socialist Party.

Figure 3.6. This illustration compares and analyzes numerical data over a series of columns and is a table.

3.30 **TABLE BEST PRACTICES.** Submit tables as editable Microsoft Word documents. Keep tables simple; avoid multiple layers of column heads. Be sure that all figures and percentages are labeled adequately within the table itself so that readers do not need to refer to the body text in order to understand the table. The body text can provide an expanded explanation of the table and its context but not its fundamental meaning.

3.31 **ACCURACY.** Ensure that columns total correctly and check that columns are aligned for maximum clarity.

3.32 **TITLES.** Provide a brief title for each table. Do not include in the title any explanatory material that is better placed in the body text or below the table as a general note. Do not caption tables as you would a figure.

3.33 **NOTES.** Use superscript lowercase letters (not asterisks, daggers, double daggers, or other symbols) for notes within your table. If the table is taken from another publication, cite this source on a separate line below the table after the other notes.

3.34   **RULES.** Do not use vertical rules to separate columns; horizontal rules are sometimes appropriate, but their use should be kept to a minimum.

3.35   **NUMBERING.** In single-author books with only a few tables, the tables should be numbered consecutively throughout the book. For contributed volumes, tables should use a double numeration system: the chapter number followed by the table number. For example, Table 1.1 is the first table in chapter 1, Table 2.1 is the first table in chapter 2, and so on.

Callouts

3.36   **PLACEMENT AND FORMAT.** Indicate approximately where an illustration should appear in the text by inserting the following placement instruction after the end of the nearest paragraph:

[INSERT FIGURE X NEAR HERE]

Your callout should be bracketed, in bold type, in all caps, and centered on the page. Leave one line space above and below a callout. Do not insert a callout in the middle of a paragraph; your callout should appear after the paragraph in which the illustration is described:

A much-reproduced postcard of the time (Figure 1.2) shows the south side of Pine Avenue fenced by a rather primitive wooden palisade. Montrealers arrived at the hospital by foot or by horse-drawn carriage, past a tiny polygonal gatehouse that marked the entrance to the site from the busy, steeply sloped, urban thoroughfare.

[INSERT FIGURE 1.2 NEAR HERE]

The Royal Vic on its opening day, December 2, 1893, offers a unique opportunity to explore the character of hospital design. . . .

The first time I visited the Johnsons turned out to be an evening of magic. A young fisherman who'd fished for Milford a few years back was visiting with some friends. Spontaneously, a little party started. Five men sat around a table as the kerosene lamp glowed orange, shooting off huge shadows on the walls and hewed-beam ceilings of the cabin.

[INSERT FIGURE 19 NEAR HERE]

Milford was speaking, spinning out intricate tales in his grizzly-bear voice. We younger folk listened, not only out of respect, but with fascination. . . .

Captions

3.37   **PURPOSE AND OBJECTIVE.** Captions should be brief but identify what is in the illustration and why it is important. A reader should not have to rely on the text to understand what an illustration is about. Tables should not have captions.

3.38   **SOURCE CREDITS.** Include the source to be credited and any additional information requested by the source or creator of the illustration, including copyright.

> **NOT.** Figure 3.13. The Third Avenue Bridge.
>
> **BUT.** Figure 3.13. In this view, the arches of the Third Avenue Bridge take shape across the Mississippi River in Minneapolis. Photograph by C. J. Hibbard & Company; courtesy of the Minnesota Historical Society.

3.39   **MANUSCRIPT.** Include a separate Microsoft Word document with captions for all illustrations in your manuscript. Do not embed captions in the body of the text or add them to digital image files.

Alternative Text (Alt Text)

3.40   **ACCESSIBLE PUBLISHING.** The University of Minnesota Press is committed to making its publications inclusive and accessible to the widest audience possible. Working toward accessibility is an effort to build into our program flexibility to make our work maximally usable, whatever the needs or preferences of our readers. It will allow people who are visually impaired to access and navigate the graphic elements of our books, such as images, graphs, tables, and maps, through alternative text, long descriptions, or captioning accessible through their reading devices. Your editor may ask that your book be added to our accessibility program. If so, what follows are some guidelines.

3.41   **ALT TEXT FOR IMAGES.** Authors may be asked to supply alternative text (alt text) for images included in their publication. Alt text becomes an attribute of the electronic image for ebook versions of the book and can be read through assistive technology.

3.42   **GENERAL GUIDELINES FOR COMPOSING ALT TEXT.** Alt text is a textual replacement for an image that can be announced by a screen reader. It should present the content and function of the image and should be concise and without superfluous details. In most cases, a short phrase, or at most a sentence or two, is enough to describe the content and function of a graphic. **Please limit each alt text description to 150 characters (including spaces).** Describe only the most important elements of the image, but do not interpret or analyze it.

3.43   **ADDITIONAL GUIDELINES FOR ALT TEXT.**

1. Alt text is not a substitute for engagement, contextualization, and analysis of the image in the text itself.
2. Alt text should not replace an image caption that supplies a necessary explanation of what is shown, along with the required permission and source credit information.
3. Alt text should not be redundant. Do not repeat information already available in the text or the caption. It is unnecessary to include descriptors like "Image of . . ." or "Photograph of . . . ," as assistive technology will have already conveyed that information.

3.44   **IMAGES THAT DO NOT REQUIRE ALT TEXT.** If no information not already given in the text or caption is needed, or if the image is merely decorative and not necessary to the reader's understanding, then indicate that the alt text attribute should be left blank. (Although all images must have an alt text attribute in their e-versions, it is sometimes okay to leave it blank.)

3.45   **FORMATTING AND SUBMITTING ALT TEXT.** When you submit your manuscript, include a separate Microsoft Word document with alt text for all images in your manuscript in addition to the captions document. Do not embed the alt text in the body of the text or add them to digital image files. The file should include one description per line, and each line should have the image name, a tab, then the alt text.

Figure 8   Ramp with water projected on it sits on stage against purple background with stars and galaxies. Outline of human figure appears in stars above.

3.46   **EXAMPLE OF A MENTION IN BODY OF MANUSCRIPT, CAPTION, AND ALT TEXT.**

Body: Figure 10 depicts tool use by mammals. In it a sea otter uses a flat rock on which to break an oyster shell. Such tool use is not uncommon among mammals, birds, and other nonhuman animals.

Caption: Figure 10. Tool use in mammals. This sea otter is breaking an oyster shell against a rock it has found. Wikimedia Commons.

Alt text: A sea otter floating on its back. On its stomach is a flat rock. It is about to strike an oyster shell against the rock with its paws.

3.47   LONG DESCRIPTIONS. For more complex images such as maps or detailed graphs, we will want to include a long description in the ebook, which is distinct from and significantly more detailed than alt text. Ask your editor's assistant about which images require long description. Even for such images, alt text is required.

3.48   ADDITIONAL RESOURCES. For more information about drafting useful alt text, along with instructive examples, consult the following:

WebAIM's guidelines: https://webaim.org/techniques/alttext/

Describing Visual Resources toolkit: https://describingvisualresources.org/guidelines/

Diagram Center's guidelines: http://diagramcenter.org/table-of-contents-2.html

Art Log

3.49   **PURPOSE AND FUNCTION.** Your editor's assistant will give you an art log template to inventory the illustrations, original artwork, and permissions in your manuscript (see Appendix D for art log example). Examples and instructions for completing the log are located in the second sheet of the log (see tabs at bottom of spreadsheet). If you are unable to use a Microsoft Excel spreadsheet, contact your editor's assistant to discuss alternatives.