Computers & the Humanities 281

Working with Images in Revolution

Displaying Images

As discussed in a previous lecture, an image is one of the objects that you can place within a stack. Images contain bitmapped data and appear on a card. Since images do not contain any other objects, they are at the bottom of the object hierarchy. As a control object they are contained in a group or card.

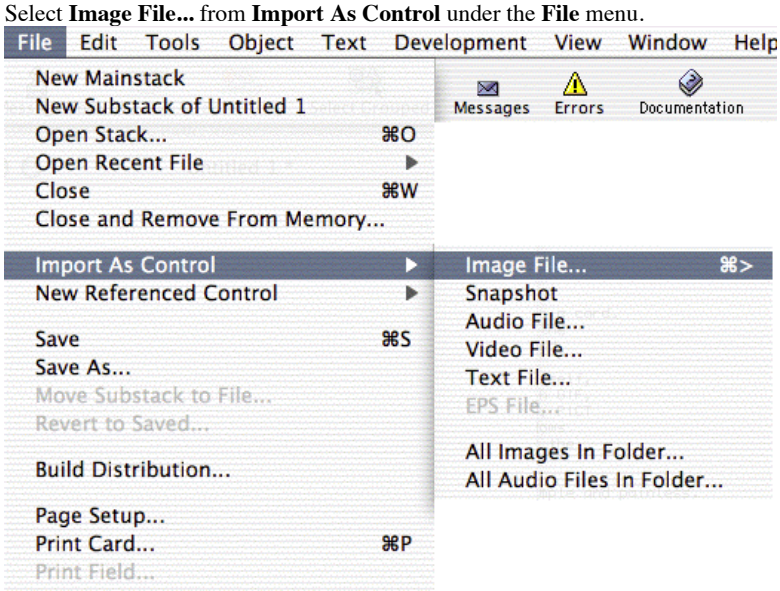
An image can display either its own data, contained in the image object itself, or data contained in an external picture file. Images can display data in GIF, JPEG, PNG, BMP, XWD, XBM, XPM, PBM, PGM, or PBM formats. On MacOS systems, PICT files can also be displayed (but they cannot be displayed on Unix or Windows systems). This great versatility allows the developer to greatly augment the visual presentation of the stack.

The process of displaying an image in a Revolution stack is relatively simple and painless. There are two ways to approach it: You may either import the image itself and have its data part of the stack, or you may simply reference an image's data that resides outside the stack.

Importing an Image

As stated before, importing an image will make the image data part of your stack. The more pictures you import, the larger your stack will become. This is particularly important when size is an issue. Since most of you will be using jpegs, and since your stacks are relatively small, this will not be a problem. Therefore, for the purposes of this course, this is the recommended method of displaying images in your stacks. The process is simple:

1. Move to the card where you wish to place the image.
2. Select **Image File...** from **Import As Control** under the **File** menu.



3. Locate your image in the resulting dialog box and click "OK".

With the image now on your card, you can move it around and resize it as necessary.

If you have several images that you wish to import, it can become tedious repeating the above process several times. Revolution has the means whereby you can import all at once all image files contained within a folder:

1. Place within one folder all the images you wish to display in your stack.
2. Follow the same process outlined above to import the images, except select **All Images In Folder...** instead of **Image File...**.
3. This time the dialog box will ask you to choose a folder. Locate your folder with the image files, select it, then click "Choose". This will place on the current card all the images from the folder you chose.
4. Cut and paste the image objects as needed to place them in their correct locations throughout your stack.

With the image now within your stack, you do have the ability to edit that image to some extent. With the image selected, choose **Paint Tools** under the **Tools** menu. This will reveal a palette with access to a number of useful graphic editing tools which may or may not be familiar to you. While these may be convenient for small touch-ups, they are no substitute for a powerful graphics editing program. For major editing of graphic images, use software designed for that specific purpose.

Referencing an Image

If you choose not to have the image exist as part of your stack's data, you may reference it instead, particularly useful if you do not want to inflate the size of your stack. However, this process creates an absolute path to that image based upon the environment in which you create the link. The implications of this are that as soon as you move the image, the link is no longer valid and the image will not be displayed. There are ways around this, but it becomes a little complicated. Consequently, for the purposes of your first major assignment, this is not the

best way to display images in your stacks. Please import the image rather than make a reference to it. We will discuss the process of referencing external data later in the course.

Acquiring Images

Of course, before you can display an image, you must acquire it. There are several resources available for acquiring, creating, and/or editing images to use in Revolution stacks.

Revolution's Own Tools

You may do it yourself, using the paint and vector graphics capabilities built into Revolution. This is easy enough for simple things, but not for complex, detailed drawings. It also solves all sorts of copyright issues.

Other Graphics Programs

The Macintosh computer lab has GraphicConverter. The Wintel and CLIPS labs both have access to Paint Shop Pro. These are the recommended applications. However, you may use any software to which you have access as long as it:

- Supports cut/copy/paste through the clipboard.
- Reads/writes image files in various formats.
- Provides various tools for editing an image.

Use these software tools to create, edit, or otherwise prepare images to import into a Revolution stack.

Clip Art

It is also possible to utilize the work of others. There is a veritable treasure trove of these types of images which are available, most of which may be used at no cost. These are mainly found in:

- Internet sites
- Many commercial and public domain clip art disks.

Note: Be aware of the issues that arise in using clip art.

- Generally of uneven style and quality.
- Can be overused and trite, if coming from a popular source like "Word ClipArt."
- Be aware of copyright legalities. Usually okay with clip art materials labelled and promoted as such. Beware of "unofficial" collections.

Images from the Web

Here we need to be aware of copyright issues. All images are the rightful property of the owner (usually, but not always, the author/publisher of the website) who must be credited. Current interpretations of present copyright law, specifically the "fair use" clause, indicate that materials taken from the Web may be used freely as long as it is not for commerical use and if proper credit is given. Since we are using such for educational purposes (i.e., you will not make any money commercializing anything you create for this course) and since you will acknowledge all sources, feel free to use images taken from the Web. The other limitation with Web pictures is that they are generally are not consistent in format, resolution, and size.

Scanned/Digitized Images

There is plethora of different scanners and scanning software available. Both the Macintosh Lab (3050 JKHB) and the PC Lab (3065 JKHB) have scanners and scanner software available for your use. The Mac Lab uses PageManager for Epson, and the PC Lab uses HP Precision Scan Pro. Either should work for your purposes, and with each there are steps you can follow to ensure scanning ease. The lab assistants are well-trained and well-versed (we hope!) in the use of the scanner and its accompanying software and can help you with specifics.

1. Open up the scanner software you will be using.
2. Preview scan - the scanner will prescan your image to show you what the scanned image will look like.
3. Select the area on the preview picture that you want scanned.
4. Set the document type (Color picture, line image, B&W photo, etc.).
5. Set the output type including the size and resolution (changing these after scanning may greatly reduce the quality of your image).
6. Scan.
7. Save to desired file type (JPEG, GIF, PNG, TIFF, BMP).
   JPEG = best for photos
   GIF = best for line art, graphics
   TIFF = no compression. It is a good first choice, if you plan on adjusting it in a graphics program and then using it.

Note: If you do your editing on the scanning station, you may be denying someone the opportunity to use the scanner. Use a graphics program on a different computer to do your editing, please. There are other software tools at your disposal, but you don't have to worry about those.

Legal Issues

Any drawing is the legal intellectual property of the artist. Legally, written permission to use that drawing must be granted by the artist. The same holds for photographs, particularly those taken by a professional photographer or studio. In addition, virtually all published material is also copyrighted as a whole, whether published through conventional means or digitally. As hinted to earlier, our class use is probably covered by the "fair use" clause of copyright law, but it is always a good idea to acknowledge sources (you really don't want to be the initial court case to define "fair use").

For anything used in a *commercial* application (i.e., something for which you expect to receive remuneration):

- Do it yourself. Have faith in your creative powers, be they artistic or photographic.
- Get written copyright clearance from the rightful owner.
- Hire an artist or photographer. This gives you a contract right to use the drawings and/or photographs (as the employer). It also solves problems of uneven style and quality.

You can also exercise your agency and live dangerously, but be prepared to suffer the consequences. Consider yourself informed.

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