Other tools: `xfig`

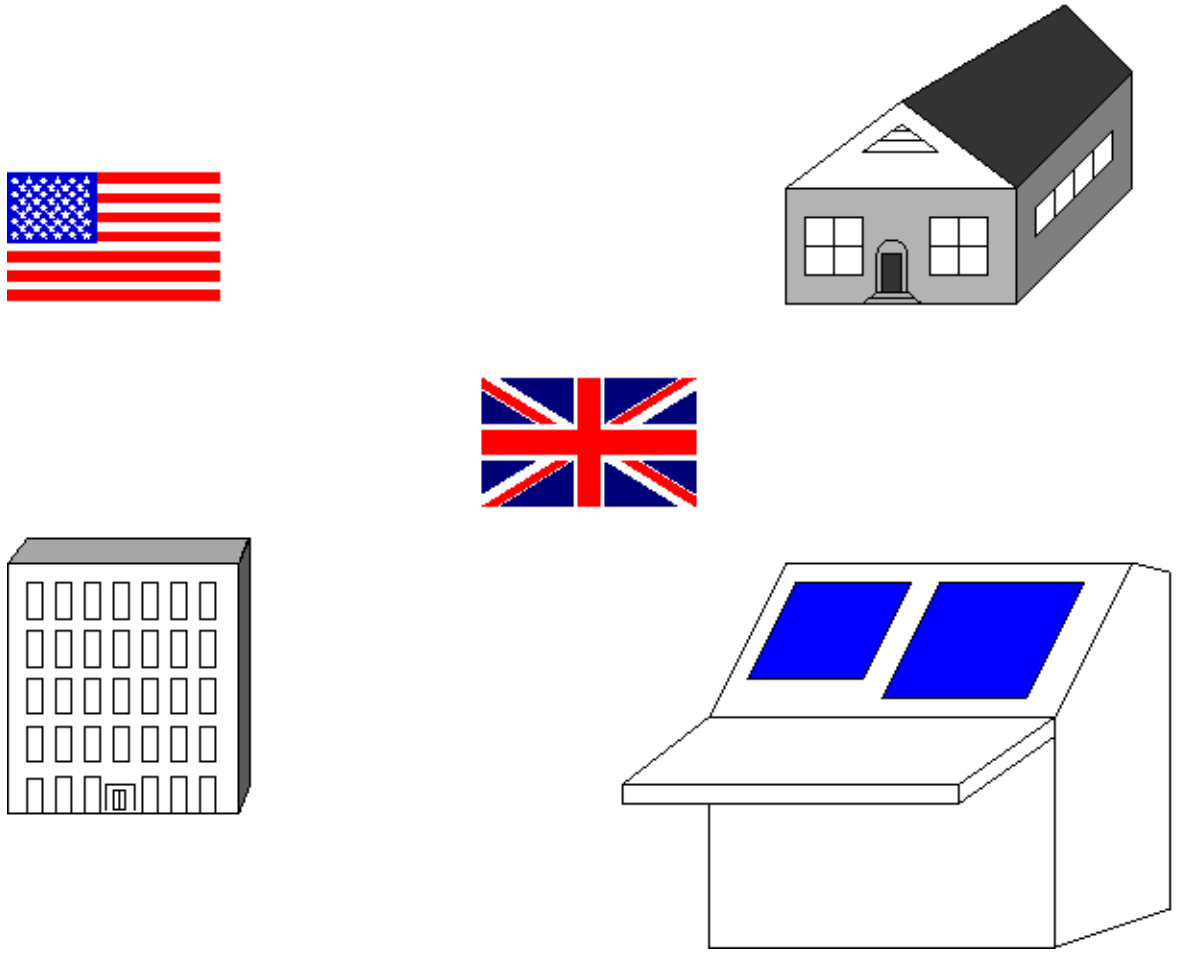
`xfig` is a menu-driven tool that allows a user to interactively create and manipulate figures. Features include:

- Drawing lines, ellipses, splines, polygons, rectangles, arcs, and arrows.
- Entering text and arrows.
- Components can be scaled, moved, copied,

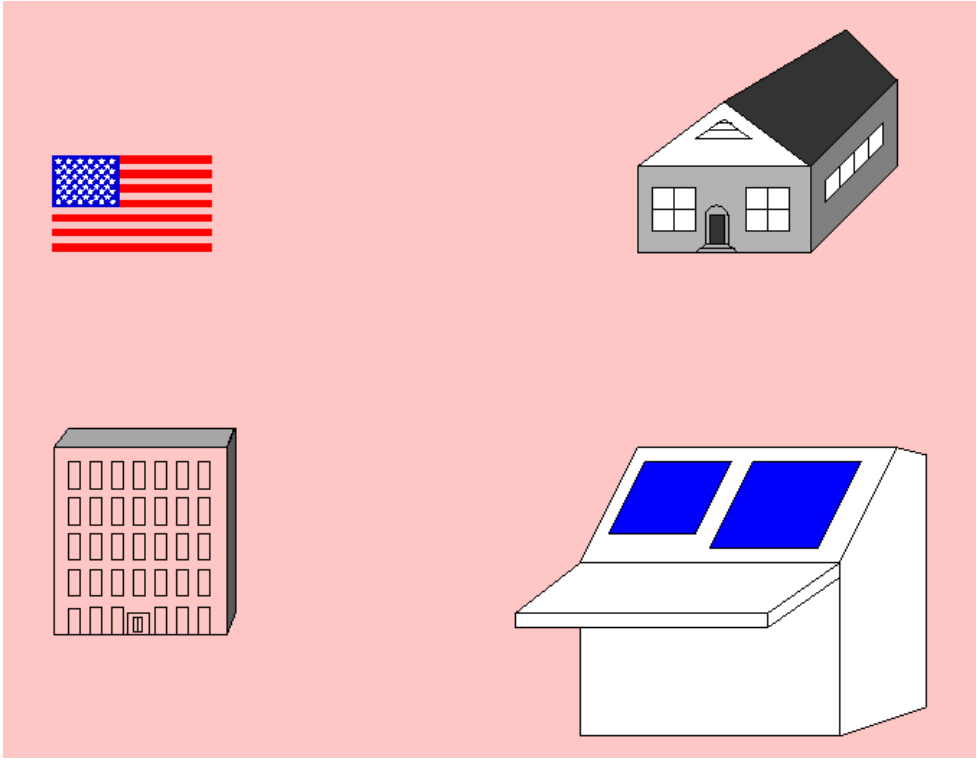
deleted, flipped, rotated, and aggregated into larger components.

- A variety of line styles are supported.
- Libraries of icons are also supported.
- Items can also be floodfilled with colors or patterns.

`xfig` example



`xfig` example



Other `xfig` capabilities

- Can export into different formats (default is fig format, but in this slide presentation, the fig files were exported as png files), including LaTeX picture format, MetaPost, MetaFont, gif, encapsulated PostScript, Portable Document Format, png, and jpeg.
- Can use a grid to control placement ("snap to grid".)
- Can change the characteristics of existing objects.

- Can perform group operations on aggregations of objects.

xv, gimp, krita and inkscape

There are a number of programs to display or manipulate images. The program xv is one of the oldest; it has steadily gained features over the years.

Another is the gimp, which has as its strongest point manipulation, although many people have criticized its interface.

Recently krita has become quite popular. Like gimp, it also has its strongest manipulation of images.

A different kind of program is `inkscape`, which while it can take in an image graphic, its strong point is creating scalable vector graphics (SVG).

`spell` **and** `ispell`

The `spell` utility will check a file for spelling problems. It is usually just a script pointing to `aspell/ispell` running in batch mode.

The `aspell` program is a replacement from GNU for `ispell`. Its default mode is interactive. `aspell` is very featureful, and interfaces well with emacs.

Printing control with lpr/lprm/lpq

- `lpr` – The traditional BSD method of queuing print items to printers. Some popular options are:

```
-#NUM          a number of copies
-PQUEUE        specify a print queue by name
-p             run a formatter over the file before its printed so that p
```

- `lpq [-PQUEUE]` – Lets you look at the print jobs for a given queue QUEUE. It gives a job number for each that is useful for deleting items with `lprm`.

- `lprm [-PQUEUE] [-]` – Lets you remove items

from a print queue. You can either specify job numbers (determined from `lpq`), or with just "-", which removes all of your items from a queue.

pr

pr is a common formatter for print jobs that does various tasks, such as placing header/footer information such as page numbers and doublespacing.

Common options:

```
-W NUM      set page width to NUM
-l NUM      set page length to NUM
-h HEADER   specify header rather than the default, which is the filename
-d          doublespace output
-COLUMN     multicolumn output: print with COLUMN number of columns
-w NUM      set page width to NUM for multiple column output
```

a2ps

The program a2ps converts text files to PostScript. It allows you to do things such as printing multiple virtual pages on a single page.

For example:

```
a2ps --print-anyway yes -5 -o termcap.ps /etc/termcap
```

will reformat the /etc/termcap file to five pages per sheet.

Common options for a2ps

```
-r              landscape mode

-f #            use font size #

-o OUT          write output to file name OUT rather than
                printing to ‘‘lpr’’

--columns N     N columns per page

-#              prints # pages per sheet of paper
```