

FIGURE 11-1. Emacs in use

There are three essential kinds of objects involved here: frames, windows, and buffers.

Frames are what Emacs calls the windows of your computer's graphical user interface. The screenshot shows two frames side by side. If you use Emacs in a text terminal, perhaps via a *telnet* or *ssh* connection, that terminal is also an Emacs frame. Emacs can manage any number of graphical frames and terminal frames simultaneously.

Windows are subdivisions of frames.* New windows are created only by dividing existing windows in two, and deleting a window returns its space to the adjacent windows; as a consequence, a frame's windows (or window) always fill its space completely. There is always a currently selected window, to which keyboard commands apply. Windows are lightweight; in typical use, they tend to come and go frequently.

Finally, *buffers* hold editable text. Emacs holds each open file's text in a buffer, but a buffer need not be associated with a file: it might contain the results of a search, online documentation, or simply text entered by hand and not yet saved to any file. Each window displays the contents of some buffer, and a buffer may appear in zero, one, or more windows.

It's important to understand that, aside from the mode line at the bottom of each window and other similar decorations, the only way Emacs ever displays text to users is by placing it in a buffer and then displaying that buffer in some window. Help messages, search results, directory

^{*} Note that what most graphical user interfaces call a window, Emacs calls a frame, since Emacs uses the term "window" as described earlier. This is unfortunate, but Emacs's terminology was established well before the widespread use of graphical user interfaces, and Emacs's maintainers seem uninclined to change it.