Here are the steps you will be following in the remainder of this tutorial: First, you will need to download, install, and fire up the Blender software. You will then generate a scene by importing the gem and creating a ground plane. After that, you will set up a suitable "sky" to ensure a varied and interesting lighting environment. LuxRender comes next. After downloading and installing the Blender-specific version, you will set appropriate parameters for the rendering before finally executing the ray trace. With any luck, you will end up with something that looks something like a gemstone.

Note: The following tutorial assumes Blender version 2.63 and LuxBlend exporter version 2.5. The location and appearance of windows, buttons, and menus may be somewhat different in your distribution. Also, by necessity, the explanations below are relatively bare-bones. For example, the text does not include instructions for moving objects within the scene, adjusting the location and characteristics of the rendering camera, and so forth. Complete documentation and tutorials for Blender exist all over the Web. Google and ye shall find…

15.5.1 Download, Installation, and Start Up

You can download Blender at www.blender.org. Installers exist for all popular versions of Windows, Mac OS X and Linux. Just follow the instructions and you should end up with a double-clickable icon in the appropriate directory. Note that it is probably worth firing up Blender and learning the interface before you start working with LuxRender.

By default, Blender unhelpfully places a gray cube in the middle of your scene at startup (Figure 15-13). I probably burned about twenty minutes figuring out what was going on and deleting the darn thing. You can do better by simply making sure that the cube is selected (**right click** on it – the cube should have an orange outline) and then hit the "**x**" key and confirm that you want to erase the selected object. Voilà! A clean three-dimensional canvas in which to set your scene.
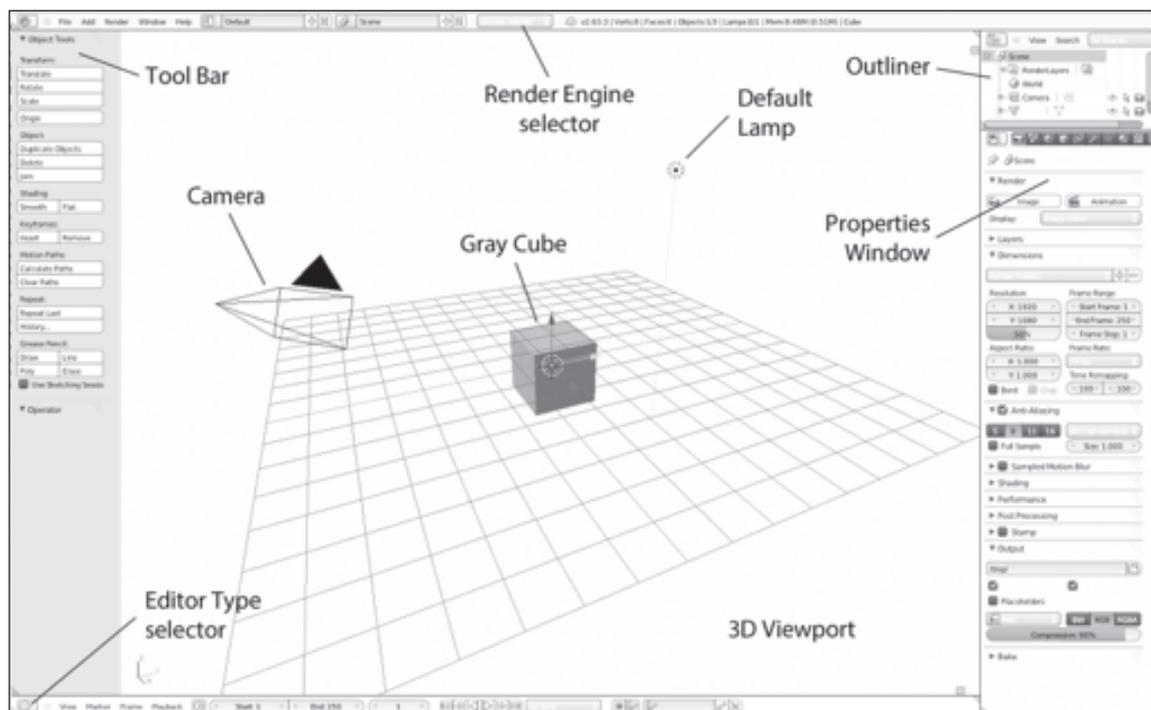

Figure 15-13 The Blender program starts up with a gray cube in an otherwise empty scene. Note that I have modified some user interface components for clarity (background colours, hiding the timeline, etc.)