Tips & Techniques 1: Special Effects: Text and 2D Graphic Images

While it is beyond the scope of this text to cover all the special capabilities of Alice, we would like to show you some particular features of Alice as we work through examples. At the end of each chapter, Tips and Techniques sections will present fun ways to build great animations with special effects. While not essential to learning to program, Tips & Techniques sections are important to read because some of these techniques are used in example worlds. Topic subheadings in **red** are used in text examples, subheadings in **green** are used in exercises. Other topics with subheadings in **black** are provided as a guide for those who want to learn more about animation with Alice. Additional details of using Alice are also provided in Appendix B, where you can learn how to search the gallery and how to export a world to the web. The Tips & Techniques sections along with Appendix A and Appendix B can be considered a mini-User's Guide for Alice.

An important part of an animation is communicating information to the person viewing the animation (the user). Text, sound, and graphic images help you communicate. The following sections show how to add text and graphic images to your world.

Text
The *Say* instruction (introduced in Getting Started, Appendix A) is one way to create text in a scene. The text created by a *Say* instruction appears inside a comic-book-style bubble. 3D text is another kind of text display. To add a 3D text object to a world, click on the Create 3D text folder in the local gallery, as seen in Figure T-1-1.
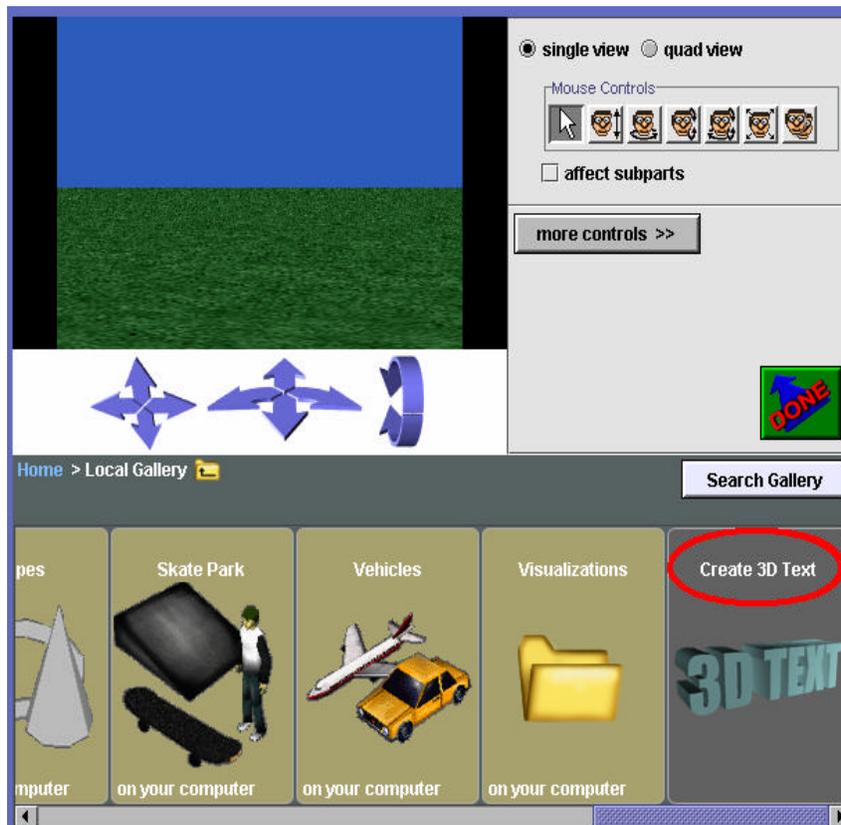

Figure T-1-1. 3D text in the local gallery

A text dialog box pops up for entering text, as in Figure T-1-2. The dialog box allows font, bold, and italic selections, and a Text box where words can be typed.

Figure T-1-2. A text dialog Box

When the Okay button is clicked, Alice adds a text object to the world and an entry for the object in the object tree. The name of the object is the same as the text string displayed, as can be seen in Figure T-1-3.
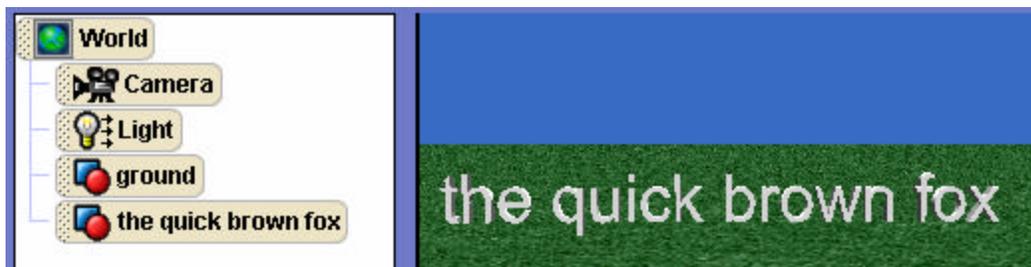

Figure T-1-3. The text object is added to scene and object tree

The text object can be positioned using mouse controls in the same way as any other object. To modify the text in the object string, click on the text in the properties list of Details area. Then, enter a new string of text in the popup dialog box, illustrated in Figure T-1-4.
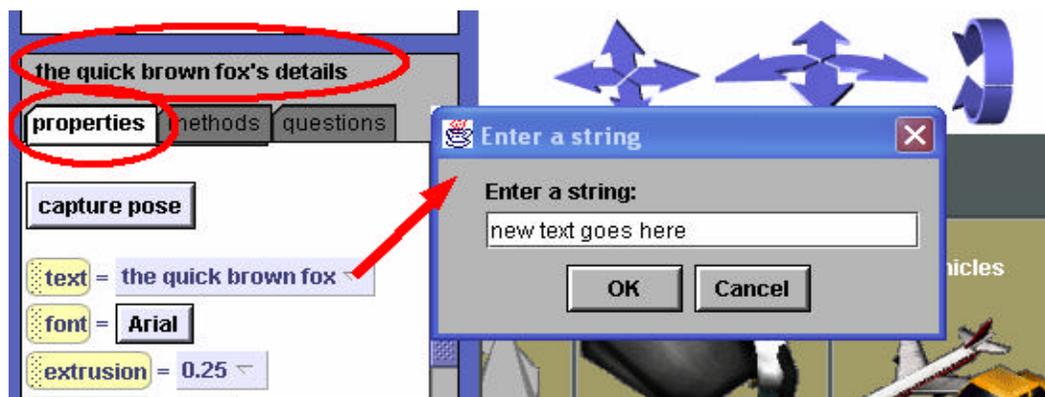

Figure T-1-4. Modifying text

Note that modifying the string in the text object does not modify the name of the object. The name is still as it was when the text object was originally created, as seen in Figure T-1-5.

Figure T-1-5. The name of text object remains the same

Graphic images (billboards)

Although Alice is a 3D system, it is possible to display flat 2D images in a scene. Flat 2D images can be created in any paint tool and saved in GIF, JPG, or TIF format. To add a 2D image (Alice calls it a billboard) to your world, select Make Billboard from the File menu, as seen in Figure T-1-6. In the selection dialog box, navigate to the stored image and then click the Import button.
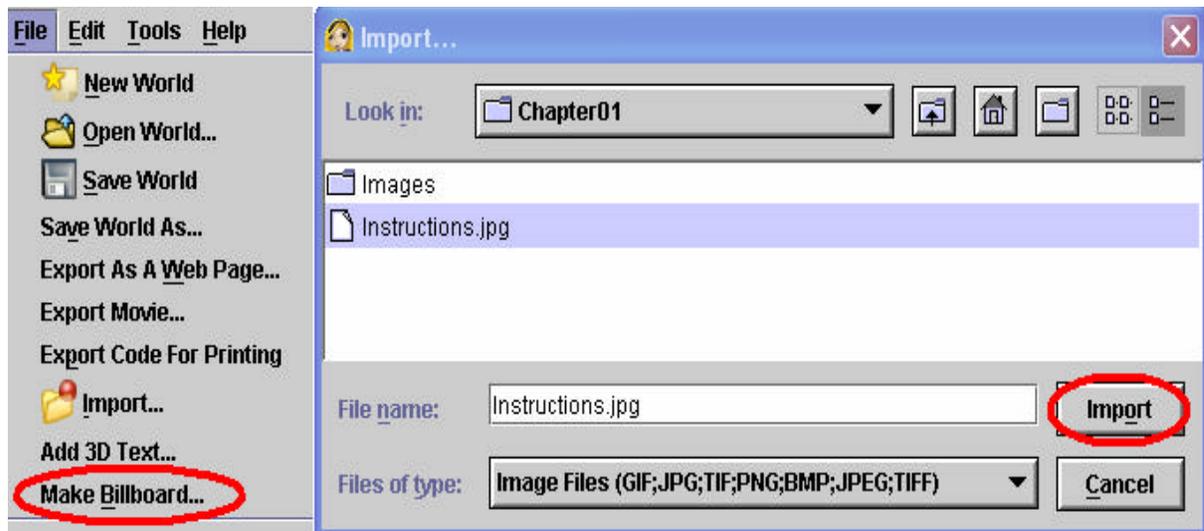

Figure T-1-6. Importing a billboard

Alice will add the flat image to the world. The billboard in Figure T-1-7 illustrates one of the uses of billboards -- providing information to the user about how to play a game or simulation. In this example, the billboard provides instructions for how to use the keyboard to control the motion of an object. (Keyboard control examples are used in Chapter 5.)
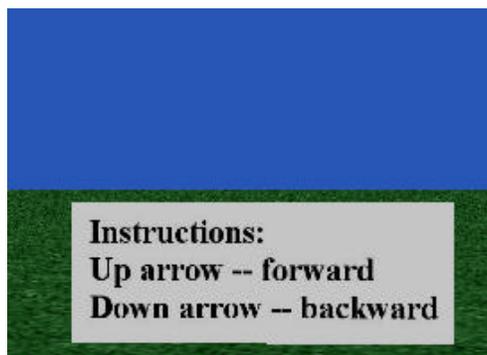

Figure T-1-7. A billboard to provide information

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