

Camera Control: Learning to Use the Camera in Alice



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Duke University, August 2008

Camera Controls

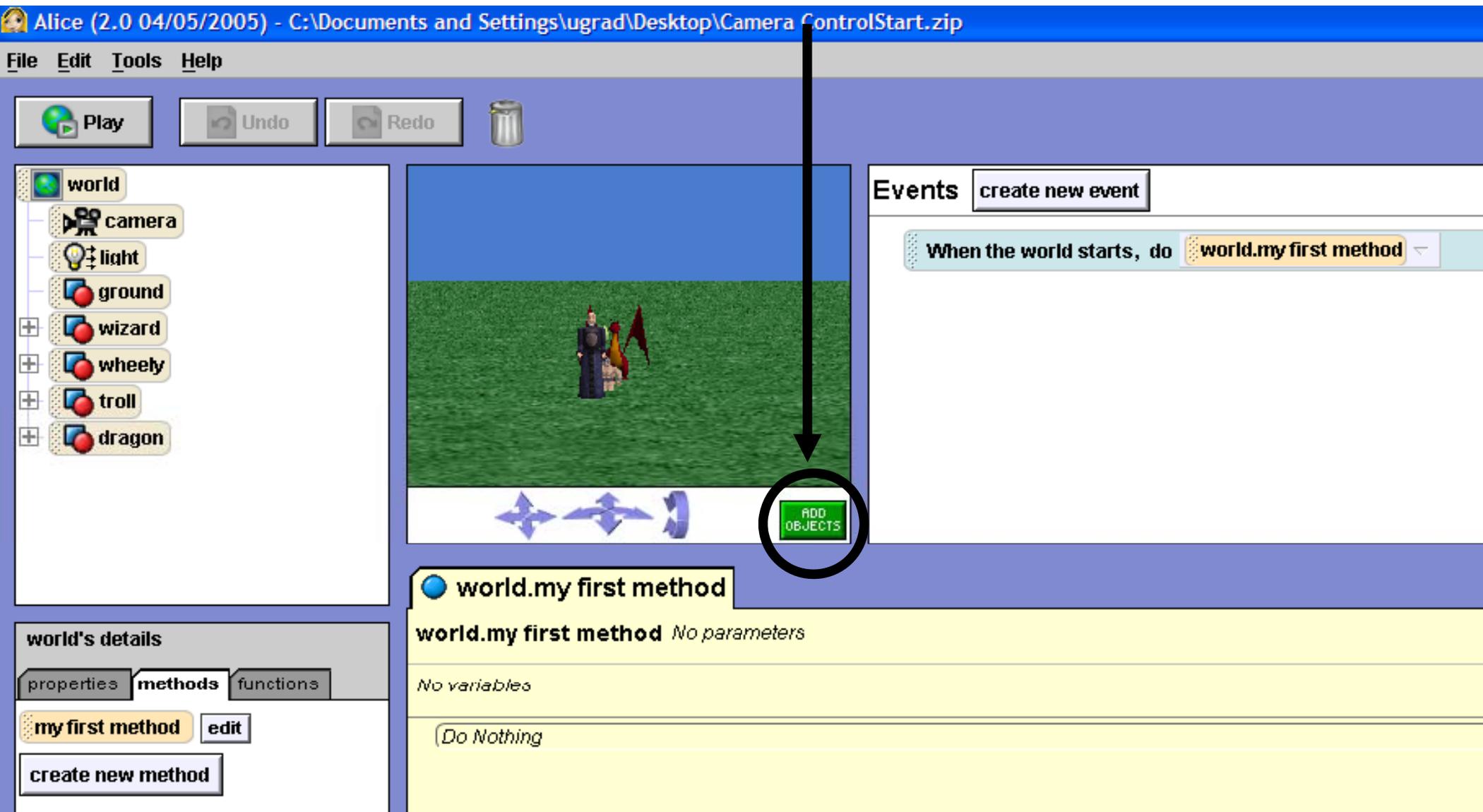
This tutorial will go through different ways of using the camera in Alice, such as changing and saving camera positions. Download and open the starting world that goes with this tutorial, and we will get started.

These characters will be in the downloaded world.



Going to the “Add Objects” Screen

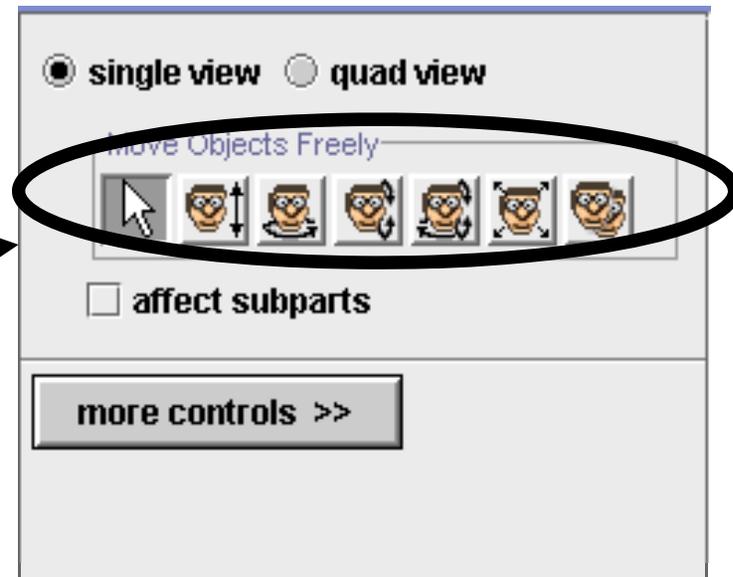
First, click on the green **add objects** button in the upper left area of your screen. This will bring us to the **add objects** screen, where certain things can be done to the camera.



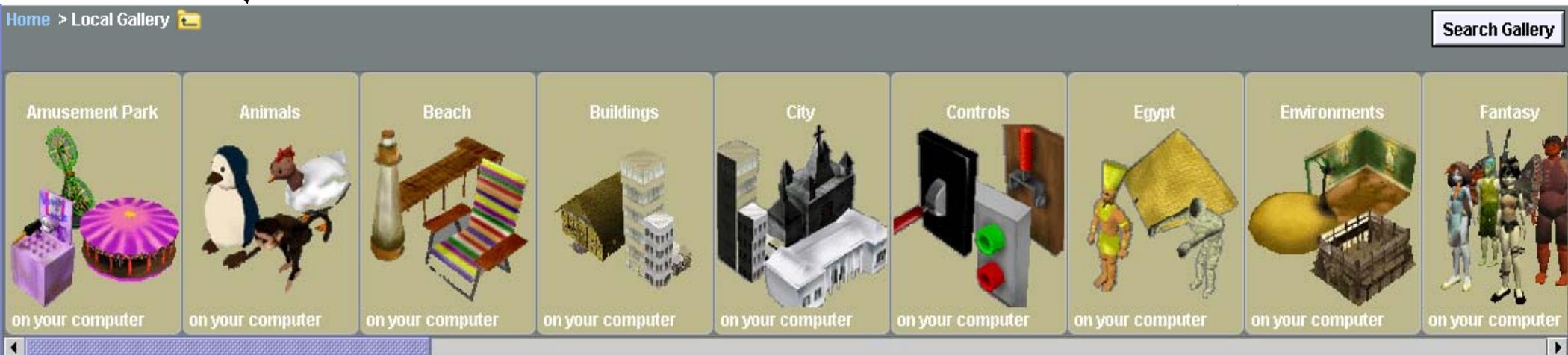
The “Add Objects” Screen

This is the **add objects** screen. There are buttons that are used to move objects in different ways on the right-hand side, and at the bottom you can see folders that contain all of the possible objects you can add to an Alice world.

Object-controlling
buttons

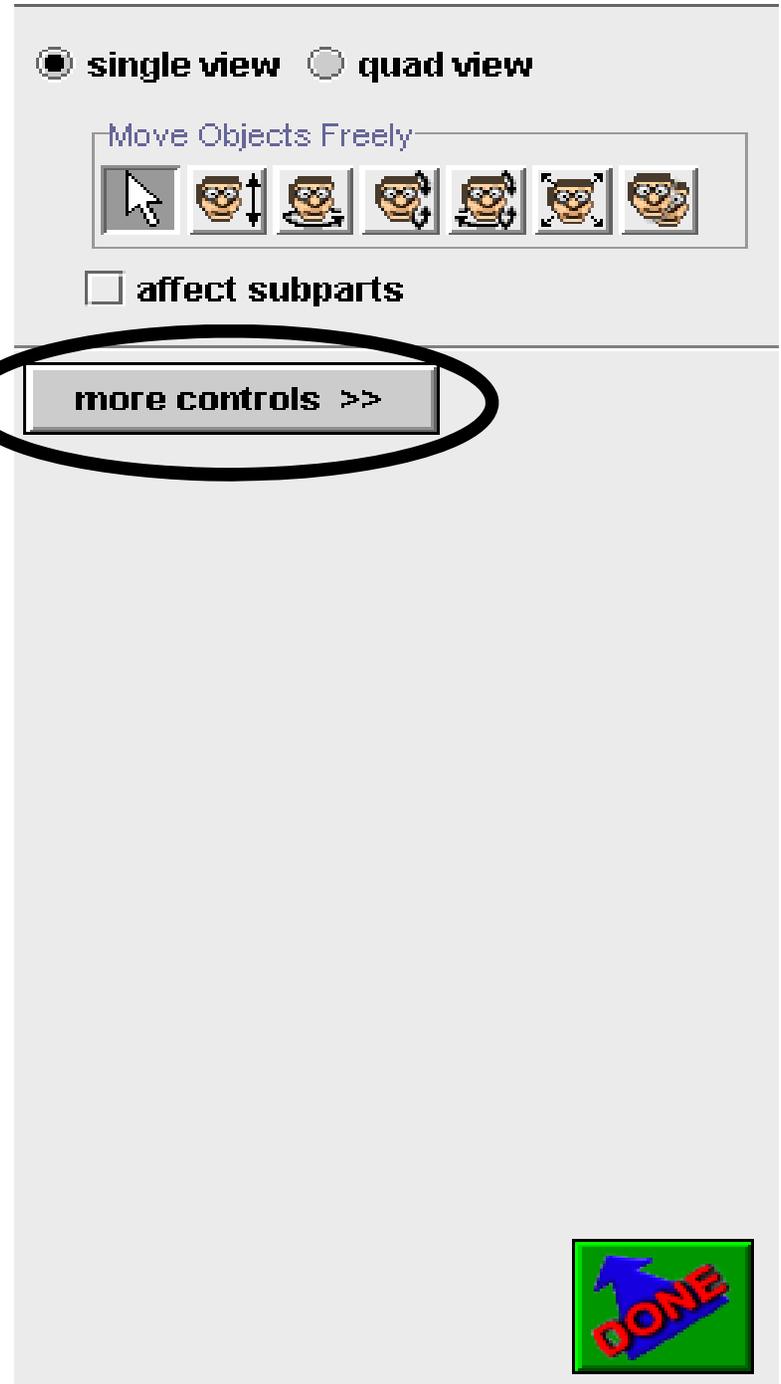


Folders of objects



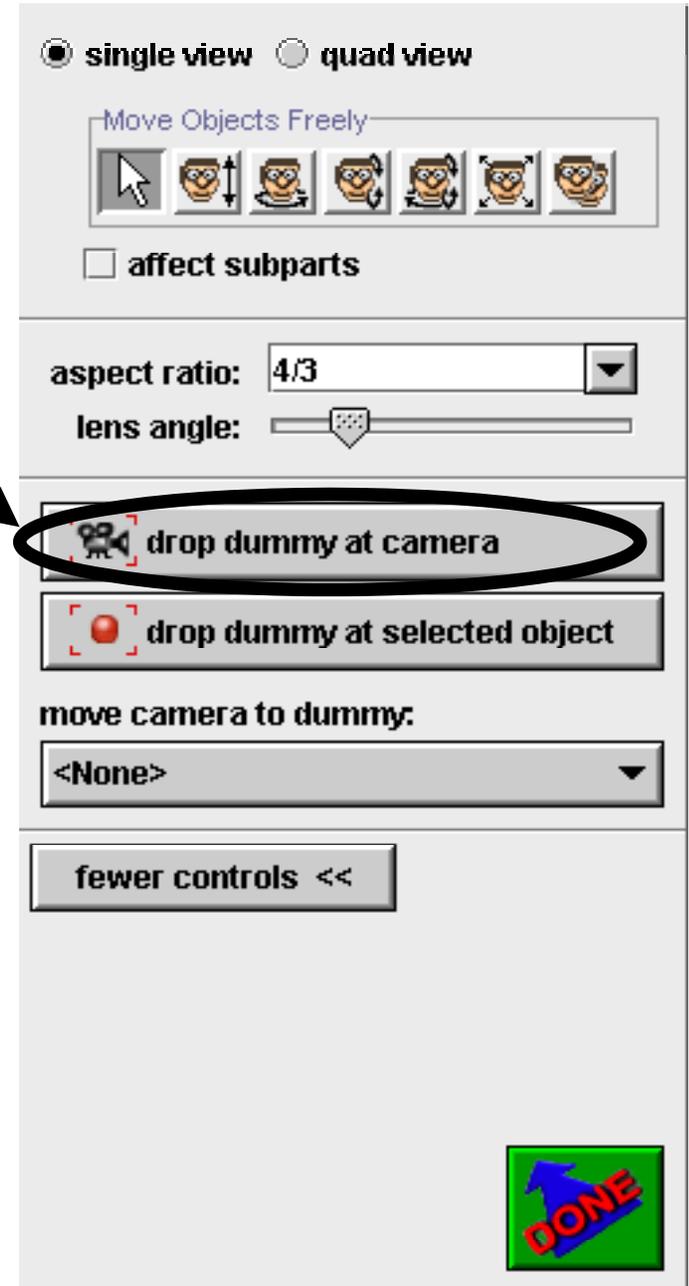
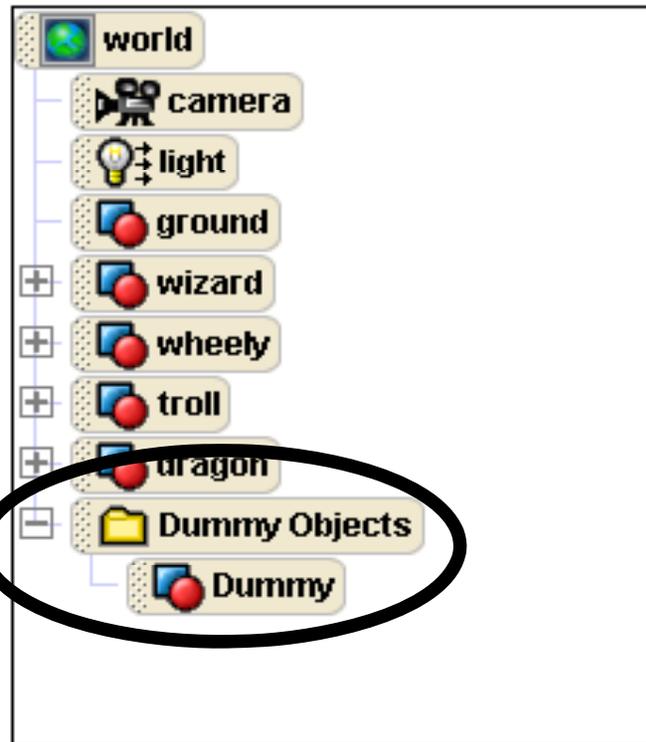
Saving a Camera Position

To save a camera position in Alice, you use something called a **dummy object**, which is just an invisible object that is placed at your camera's exact position, and stays there even if you move your camera around. To drop a dummy object, first click on the **more controls** button on the right hand side of your screen, under the object-controlling buttons.



Saving a Camera Position

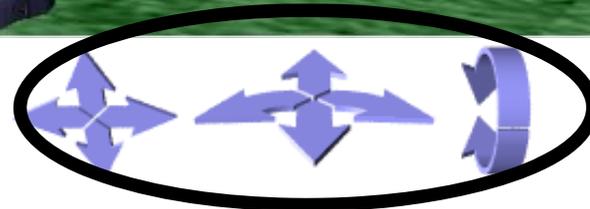
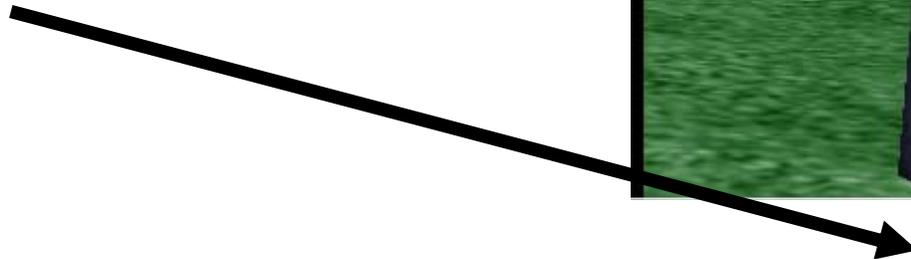
- More controls should appear on the screen. Click the **drop dummy at camera** button.
- This will make a new folder appear on your object tree, called **Dummy Objects**. Click on the plus sign next to the folder to see your new object, named **Dummy**.



Using the Dummy Object

Now try moving your camera to a different position using the blue arrows under the viewing screen. We will then show you how to get your camera back to its original position.

Use these arrows to move your camera to a new position, such as this.



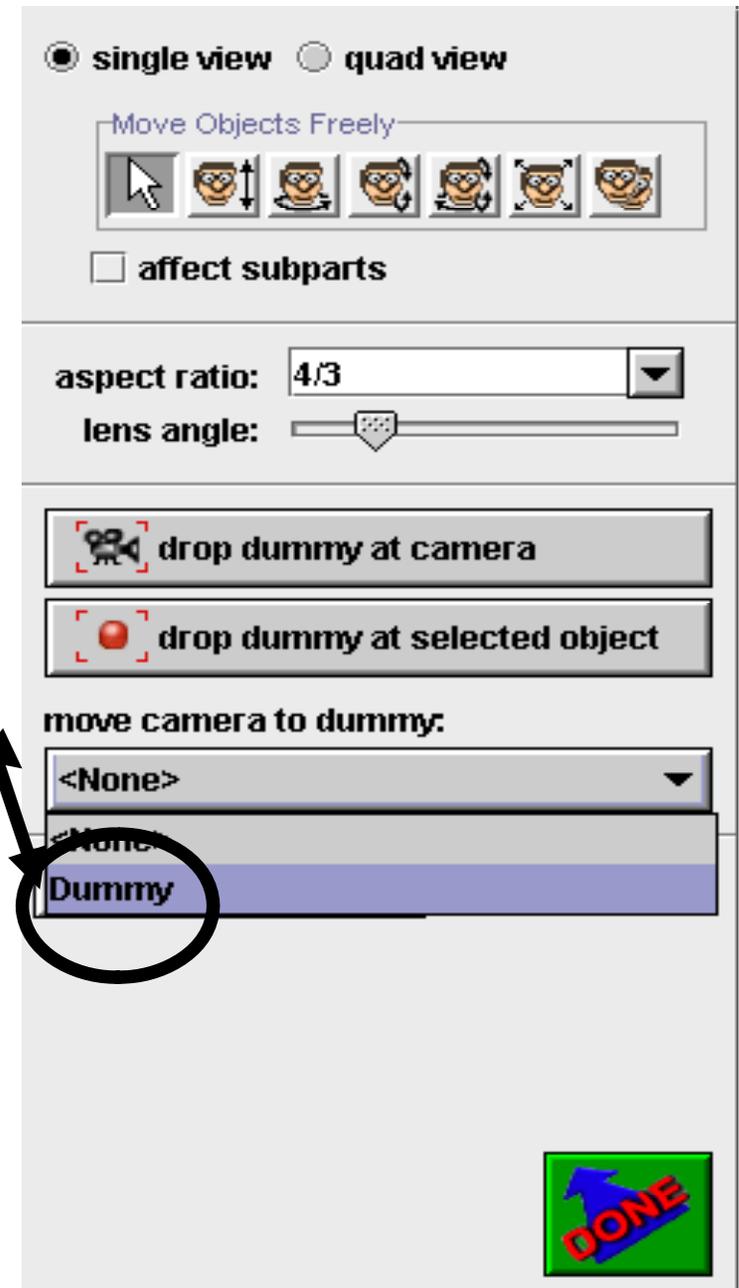
Using the Dummy Object

There are two ways to put the camera back to its original position. The first way is to right click on **camera** in the object tree, and then select **methods**, then **set point of view to**, then **dummy objects**, then **dummy**.



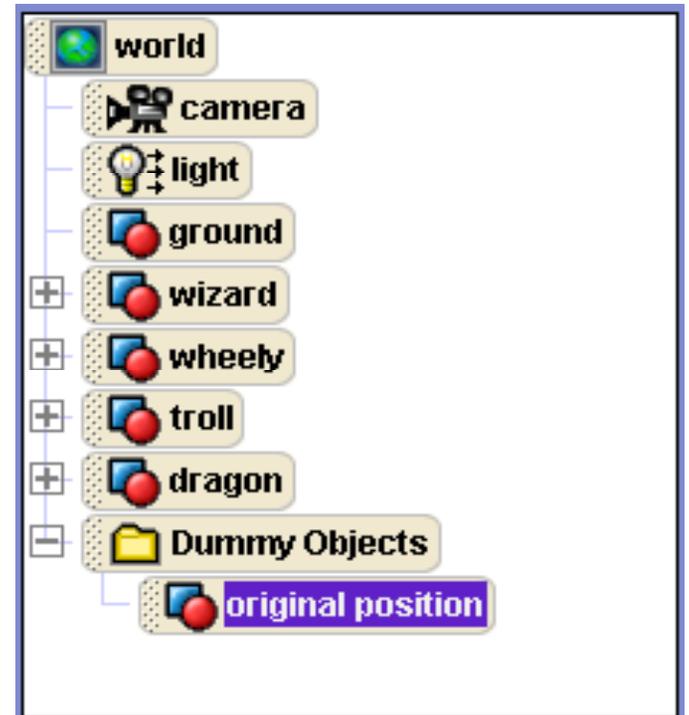
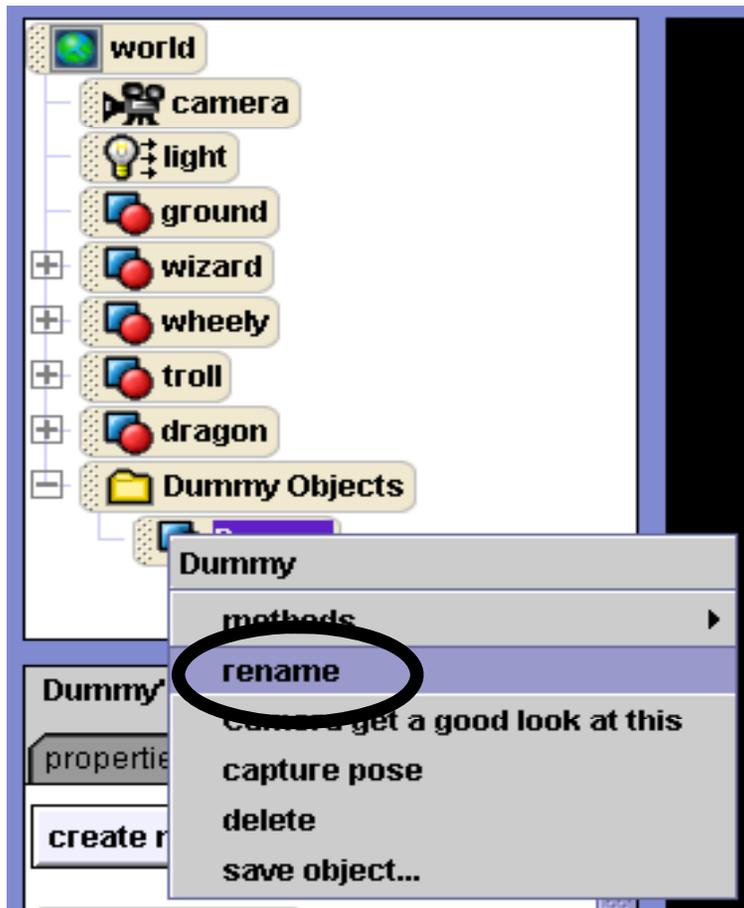
Using the Dummy Object

The second way to re-set the camera is to simply click on the **move camera to dummy** button on the right-hand side of the screen, and then select **dummy**. However, this is only available if you are on the **add objects** screen.



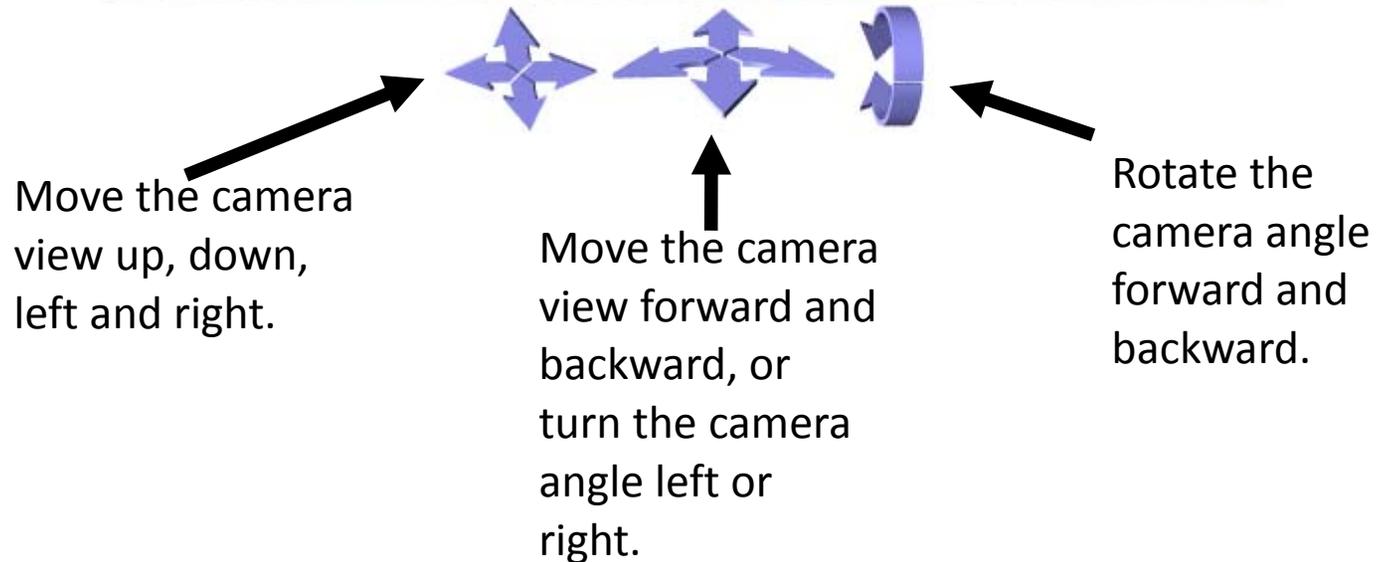
Renaming Your Dummy

Whenever you create a dummy object in Alice, it is automatically named **Dummy**. To remember which position each dummy holds, you should re-name them to something more meaningful. Right click on **Dummy** in your object tree and select **rename** to do this. We'll rename ours **original position**.



Using the Blue Arrows

The blue arrows referred to earlier in this tutorial can be very useful for creating new camera positions to drop dummies at, and also to get different views of objects when trying to position them in your world. Here is a quick explanation of each of those arrows.



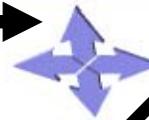
Using the Blue Arrows

Now we want to use these arrows to get an overhead view of our four characters, so we can place them in a diamond shape.

Try to get your camera view to look like this:



Use this up arrow to get your camera high in the sky.



Use this forward arrow to position your camera over the characters.



Use this forward arrow to tilt your camera down towards the characters.

Positioning the Characters

First, drop a dummy object at your camera. Name it something like **overhead view**. Then, using your object positioning buttons, arrange your characters in the shape of a diamond, like this:



Finishing Up

Now set your camera back to **original position** to check out what your characters look like from the front. Use the techniques you have learned in this tutorial to position objects and save camera positions in your future Alice worlds!

