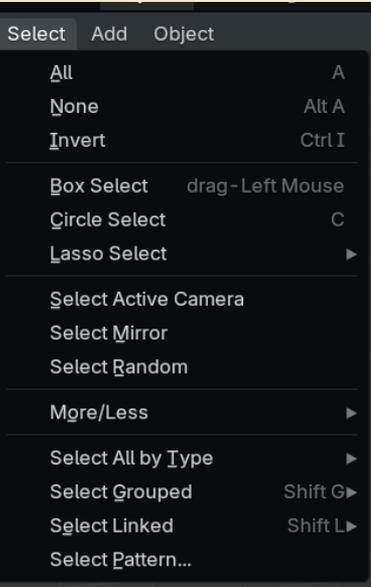


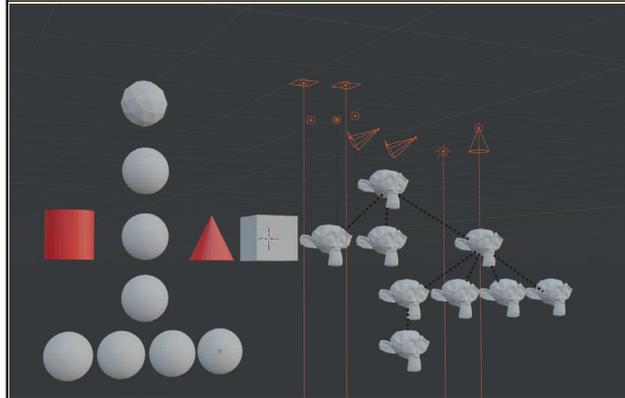
# The Select and Add Menus

We have already used most of the selection methods available when working in Object mode. At it's simplest all we need to do is left-click on an object to select it and use **Shift**+click to add to the existing selection. We've also looked at the Box, Circle and Lasso selection tools available in the Toolbar.

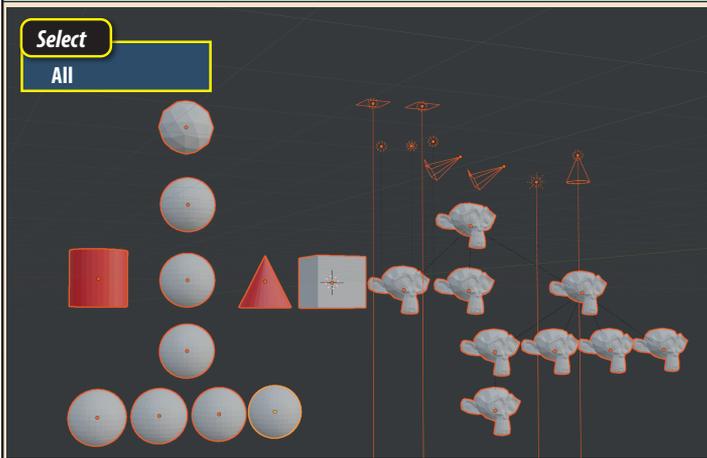
And although the Select menu repeats most of these, there are other options that are available only from the menu.



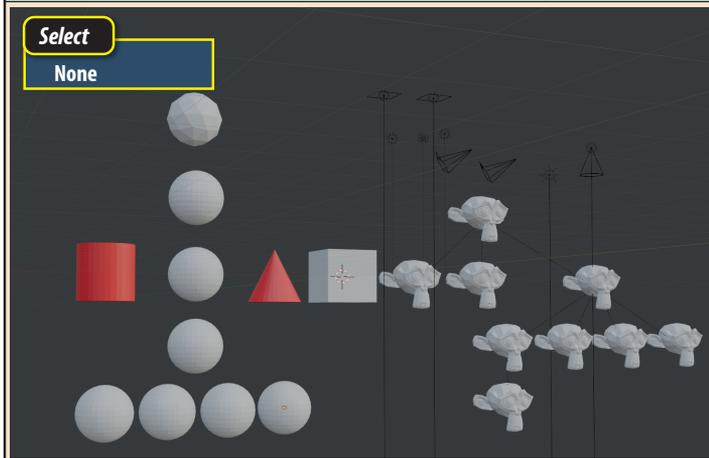
To demonstrate most of the Select methods that follow, we will be using the setup shown below. Notice that all the monkey heads are in parent/child relationships as shown by the broken lines. The Cone and Cylinder are assigned a Viewport colour. The lights and cameras are selected here to make them more visible.



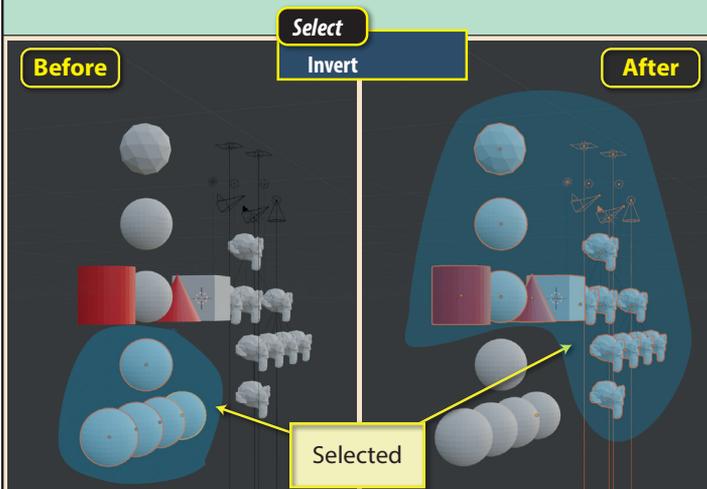
**All** (shortcut **A**) is the first entry in the Select menu. This selects every object in the scene that is not hidden or marked as unselectable in the Outliner Editor.



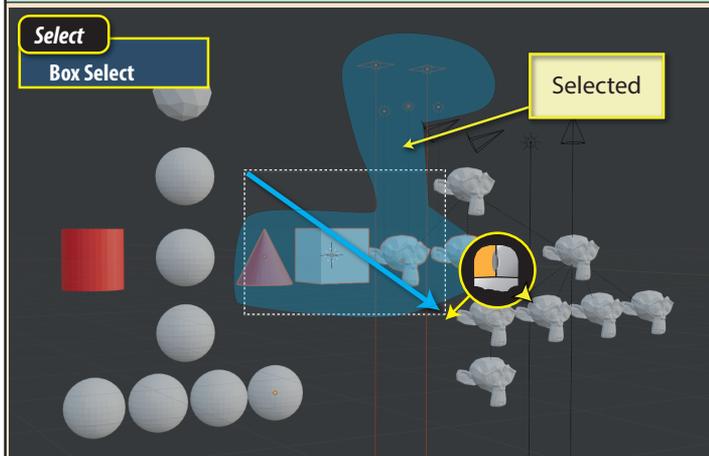
**None** (**Alt+A**) deselects the currently selected objects leaving nothing selected.



**Invert** (**Ctrl+I**), inverts the current selection. Items that are selected become unselected and unselected items become selected.



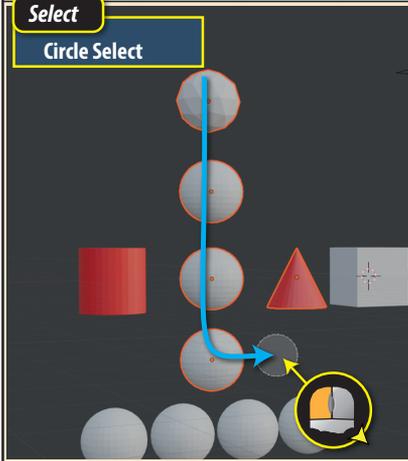
**Box Select** (**B**) allows us to drag out a box shape. Any items even partially within that area are selected. Notice that some lights are selected because their vertical line is within the box. Any previously selected items outside the area are deselected.



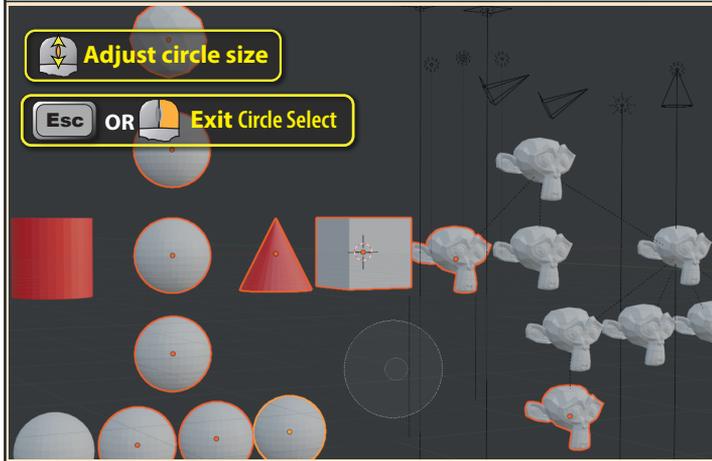
To retain any previously selected items, hold down the **Shift** key while defining the box area.

To have the items in the box area deselected from the current selection, hold down the **Ctrl** key while defining the box area.

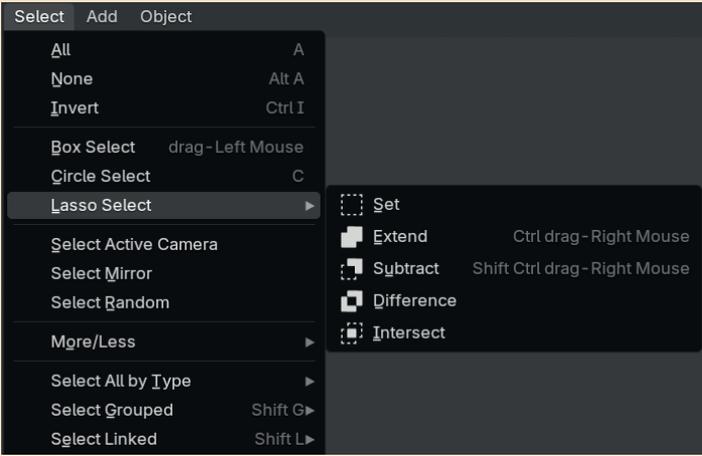
**Circle Select (C)** creates a circular selection area. If the circle is dragged over the origin of an item, that item is added to the selection.



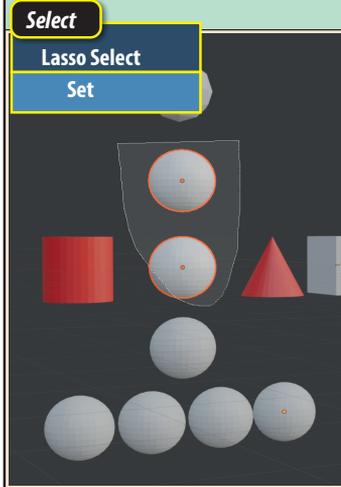
The circle's diameter can be adjusted by rolling the mouse wheel. To exit **Circle Select** either press the right mouse button or the **Esc** key.



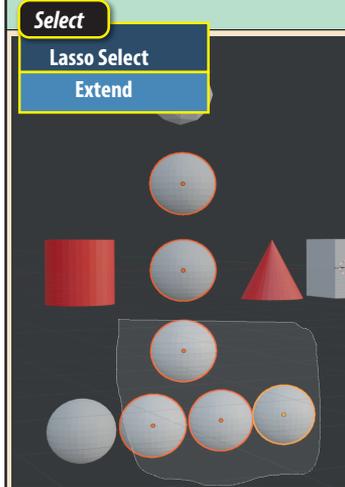
**Lasso Select** variations are shown in a submenu.



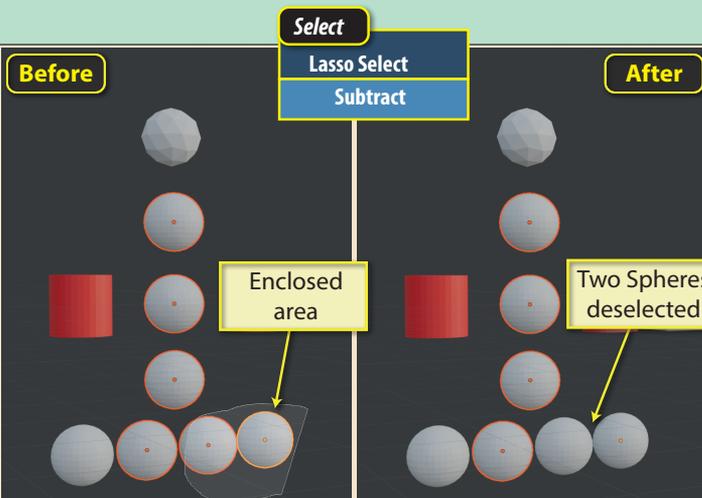
Choose **Set** to enclose a new selection, deselecting any previously selected items.



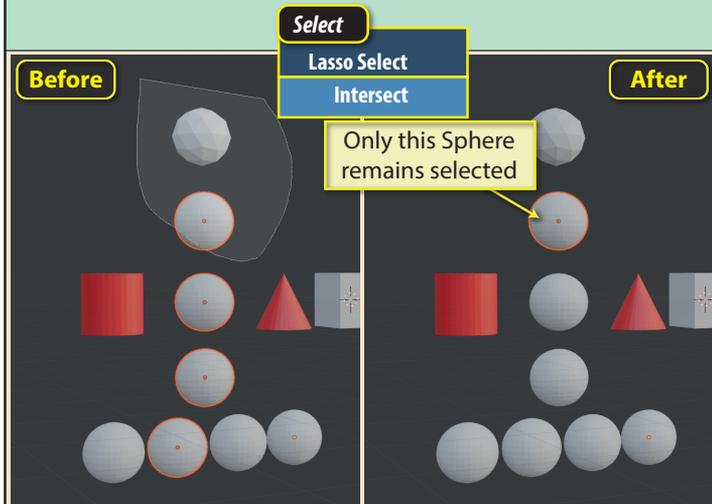
Choose **Extend** to add the next enclosed items to the current selection.



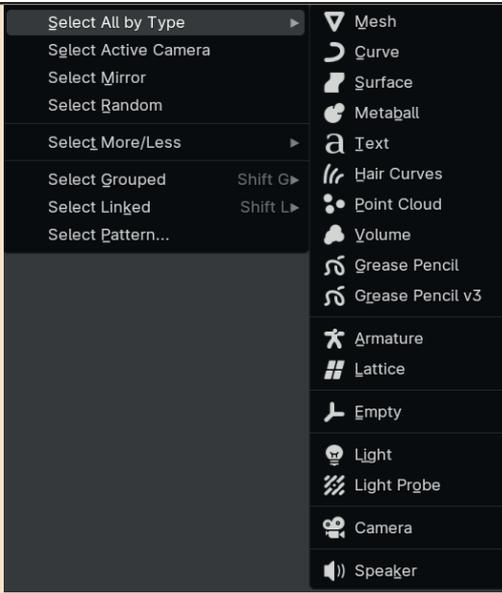
Choose **Subtract** to remove the enclosed items from the current selection.



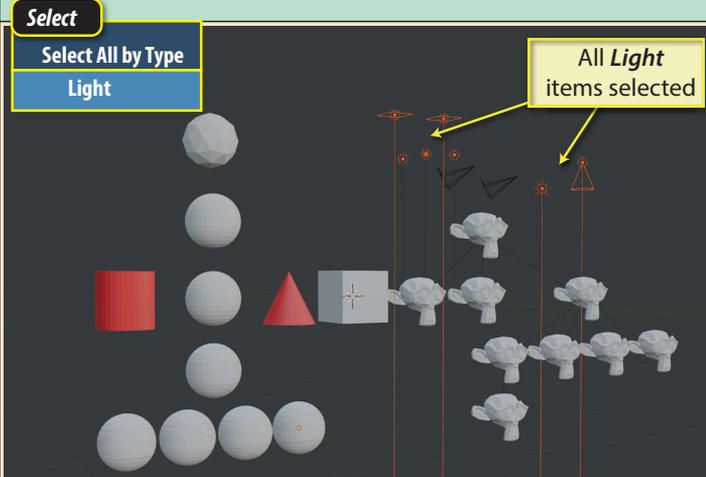
Choose **Intersect** to select only items that are already selected and are also in the new enclosed area.



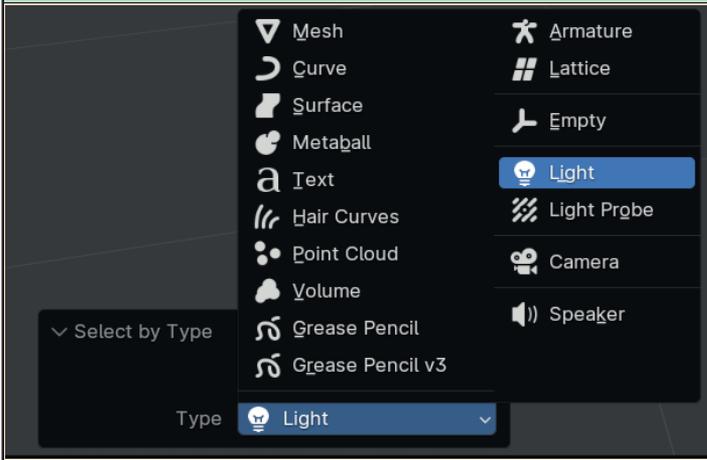
**Select All by Type** is designed to select all objects of a given type. The various type options are listed in a submenu.



We've encountered only a few of the types listed. Those are *Mesh*, *Empty*, *Light* and *Camera*. For example, we can see the result of selecting *Light*. Note that any previous selection is deselected.



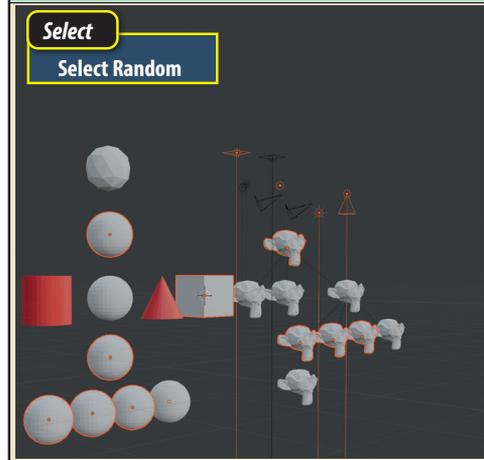
The **Last Op panel** has two fields. The **Extend** checkbox, when selected, adds the latest selection to the previous selection. The second field, **Type**, allows us to change to any of the other Item types.



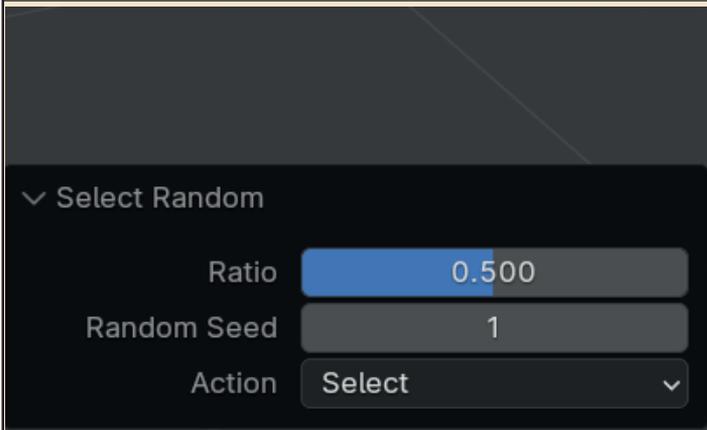
**Select Active Camera** selects the camera currently being used as the render camera. This is an option that is only useful when we have added several cameras to our scene.

**Select Mirror** involves a topic to be covered in a later chapter.

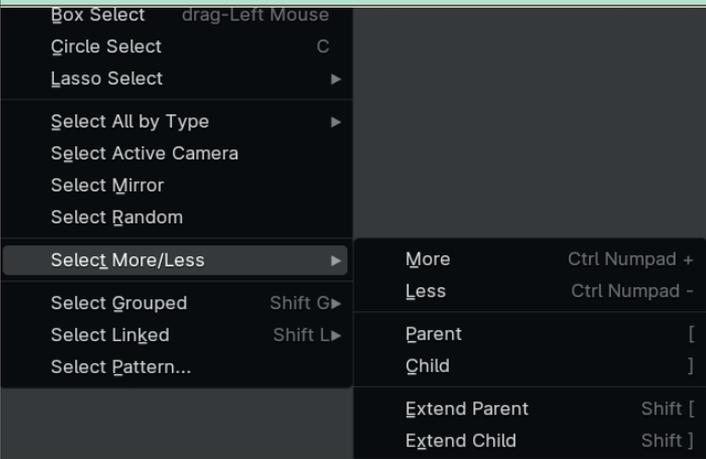
**Select Random** selects a random set of objects in the scene.



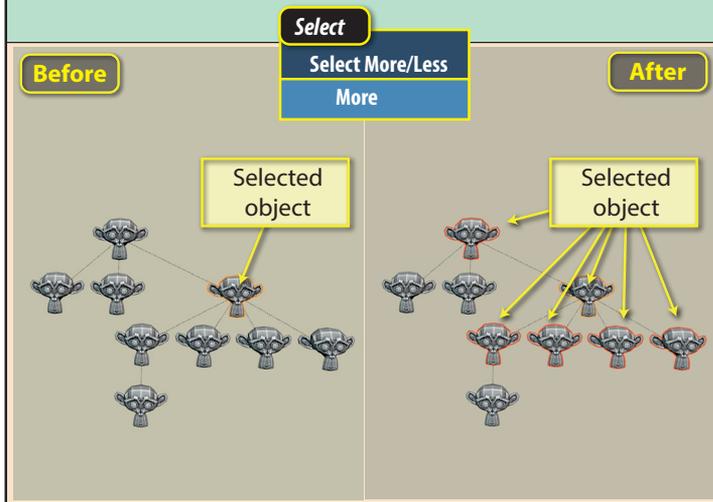
**Select Random's Last Op panel** has three fields. **Ratio** sets the percentage of the objects in the scene to be randomly selected (1.0 = 100%), **Random Seed** is the starting value for the random number generator. This directly affects which items are selected. **Action** allows for selection or deselection of the chosen items.



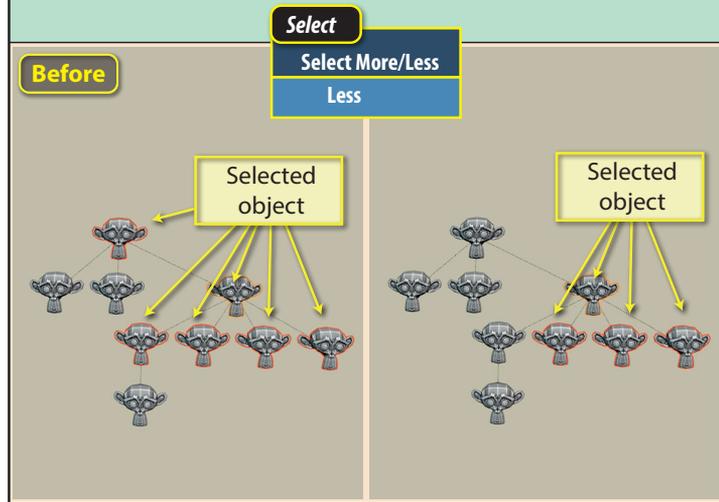
**Select More/Less** adds to or reduces the current selection. It is useful when we have a complex set of parent/child relationships. The submenu determines exactly what items are selected or deselected.



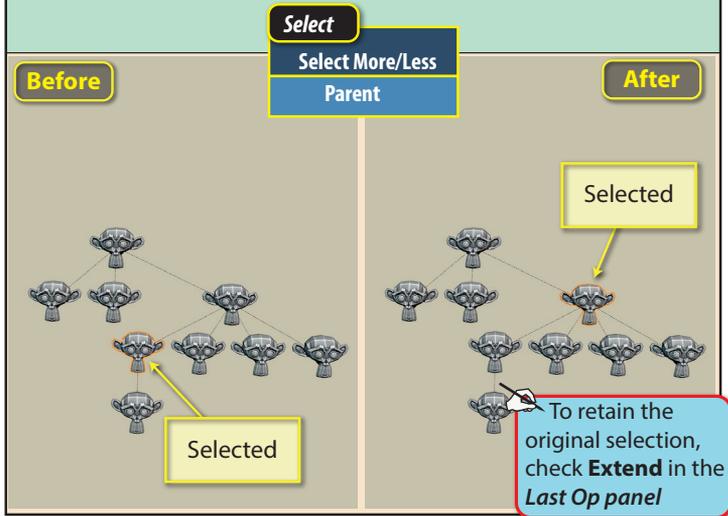
**More** adds the parent and children of the currently selected object to the selection.



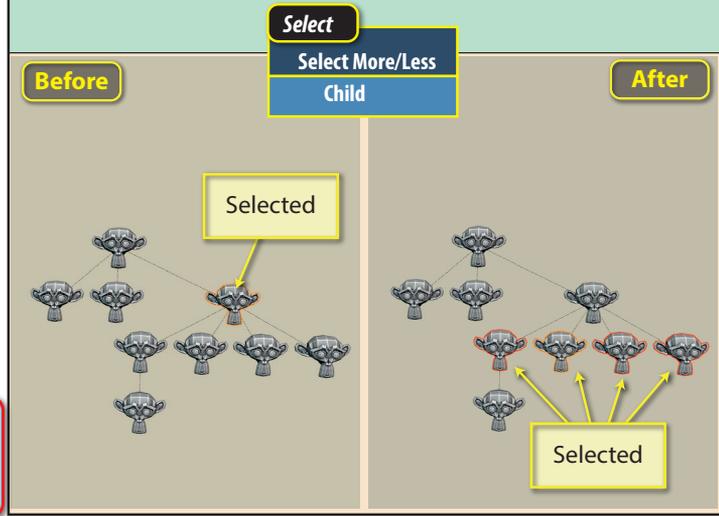
**Less** deselects the objects at the "Boundary" of the current selection. It can be difficult to predict exactly which items will be deselected.



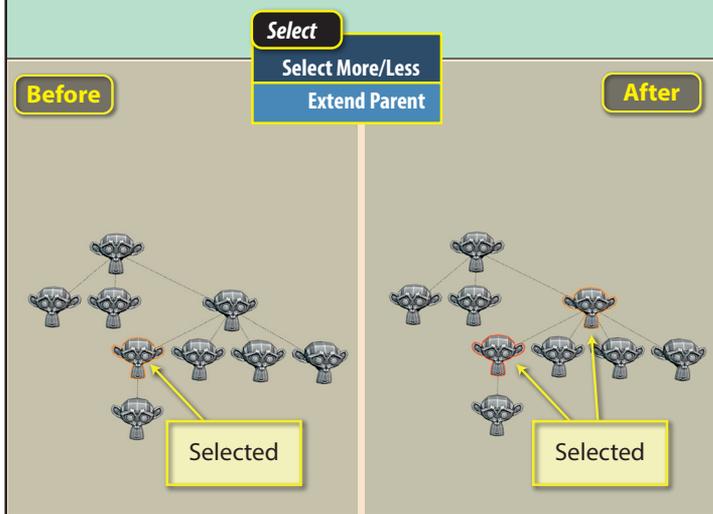
**Parent** selects the parent of the currently selected object but deselects the original selection.



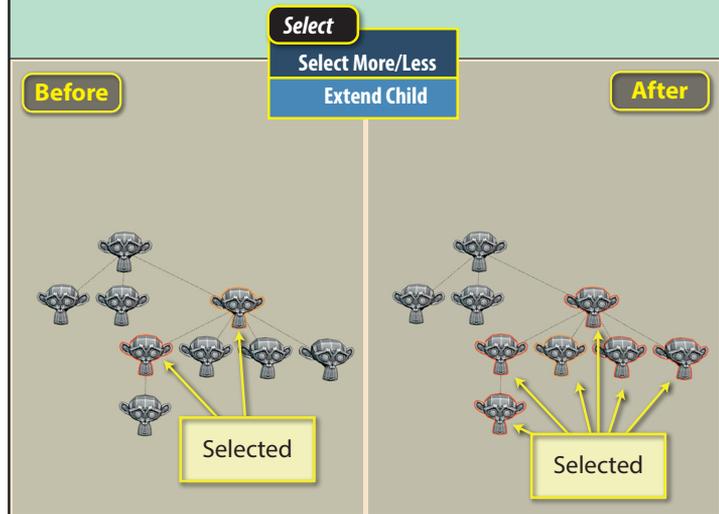
**Child** selects the children of the current selection and deselects the original selection.



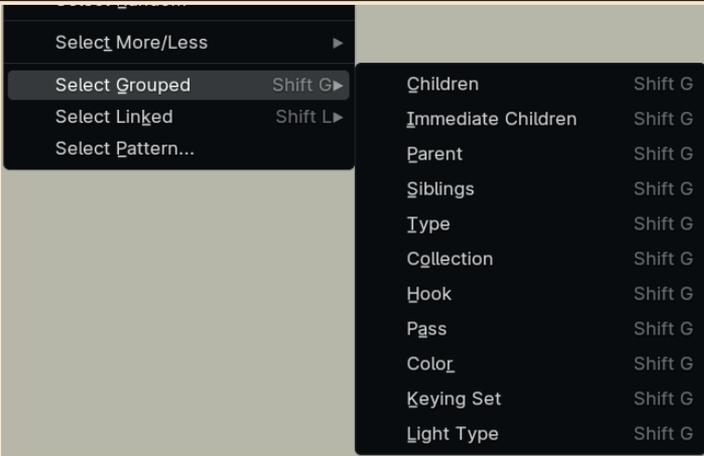
**Extend Parent** selects the parent of the current selection, but retains the current selection.



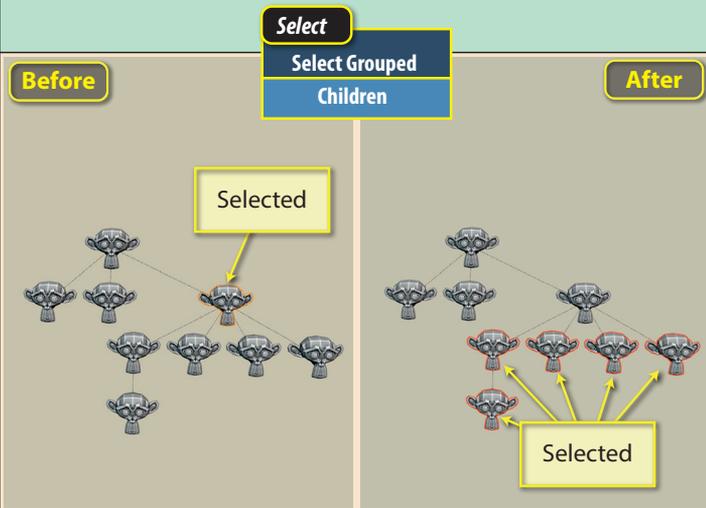
**Extend Child** selects the children of the current selection, but retains the current selection.



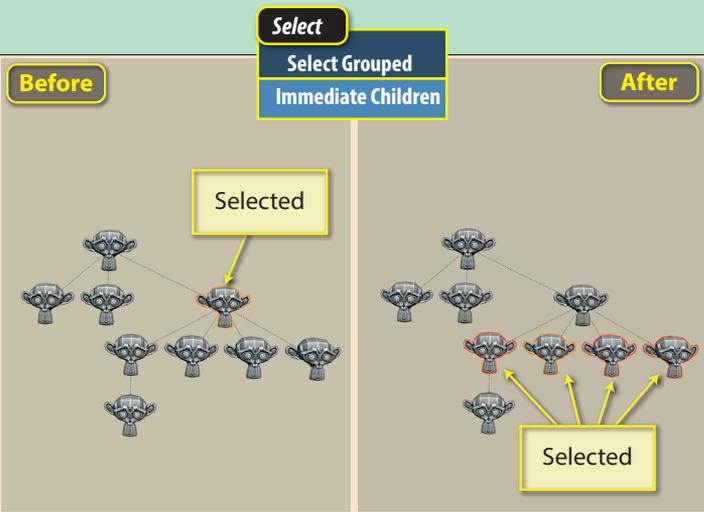
**Select Grouped** selects objects that are grouped in some way. Again, there is a submenu.



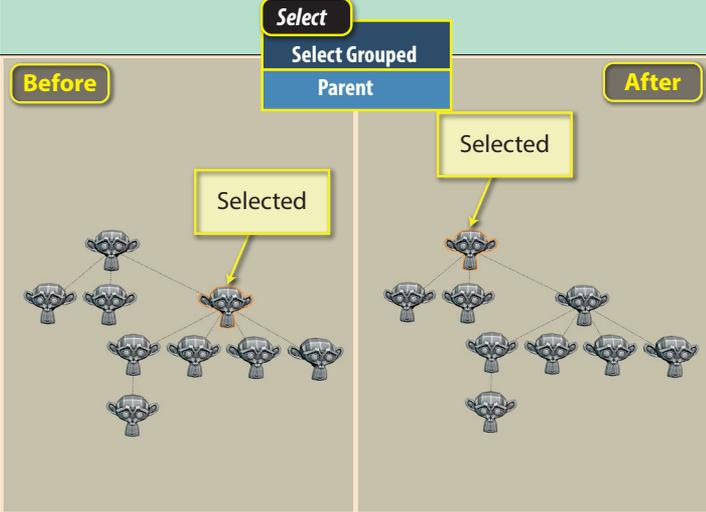
**Children** selects all direct or indirect offspring of the selected object. That is to say, children, grandchildren, etc.



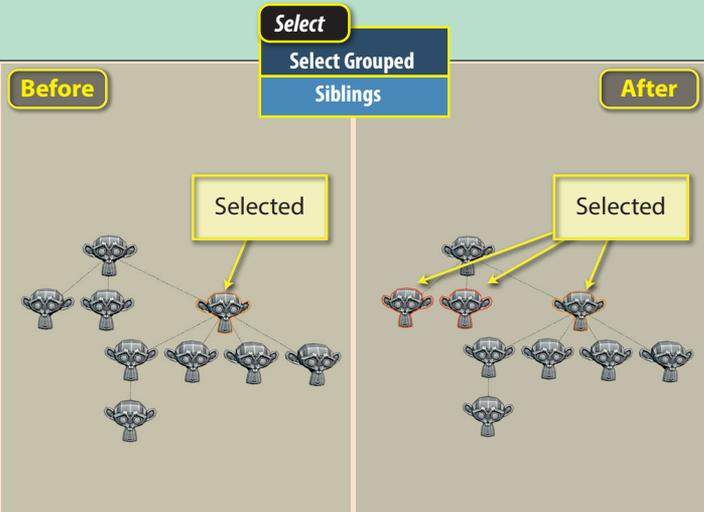
**Immediate Children** selects only the first generation of children.



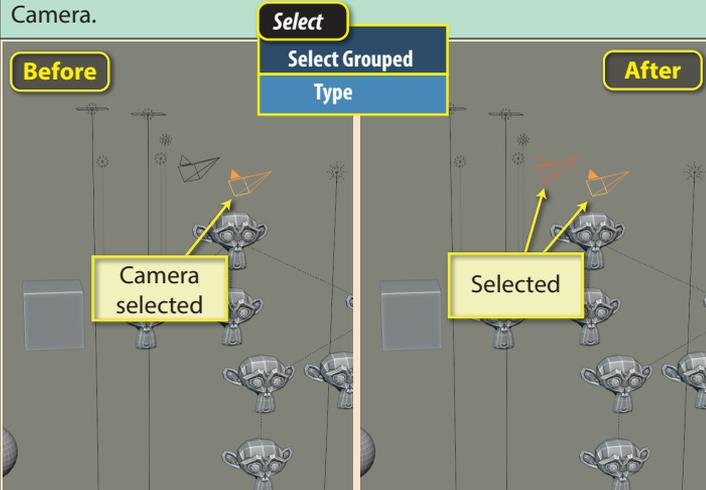
**Parent** selects the parent of the current selection.



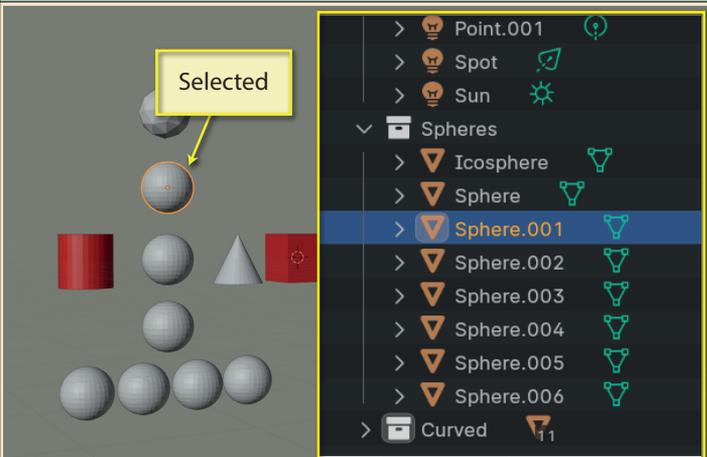
**Siblings** selects the siblings of the current selection. Note that the original selection remains selected.



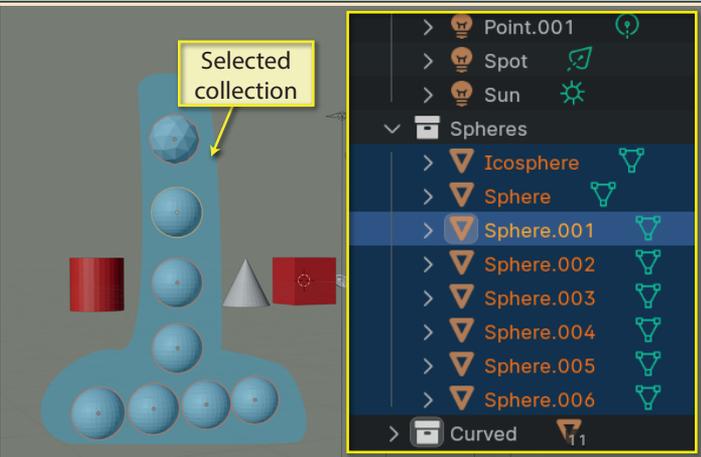
**Type** selects all items that are of the same type as the selected object. We saw a list of the various types in the submenu for Select All by Type. Typically, we have types such as Mesh, Light, and Camera.



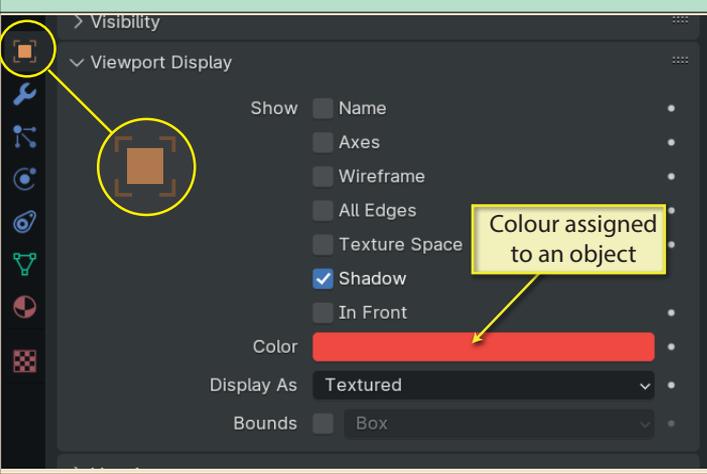
**Collection** selects all objects in the same group as the selected item. Collections are defined in the **Outliner Editor**. For example if we select the Sphere indicated below, which belongs to the **Spheres** collection...



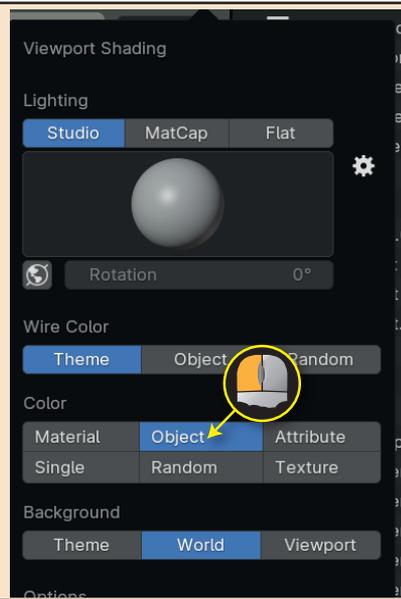
...choosing **Select>Select Group>Collection** will select all the other objects in the **Spheres** collection. The original selection is retained.



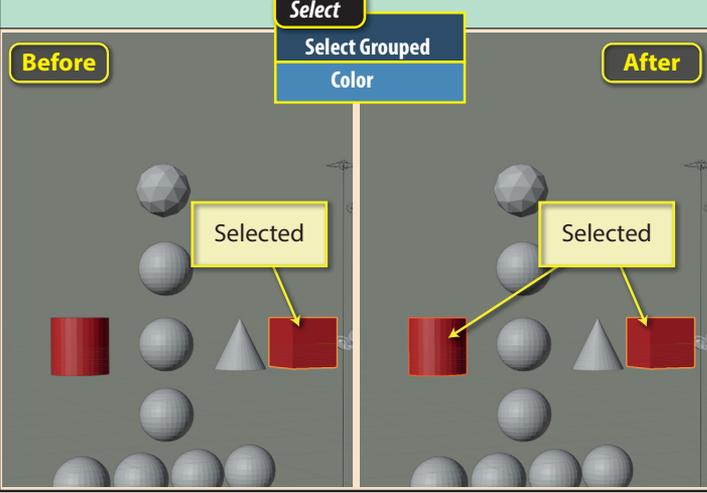
Skipping on to **Color**, this selects any other object that has been assigned the same **Viewport Color** value on the **Object** page of the **Properties Editor**.



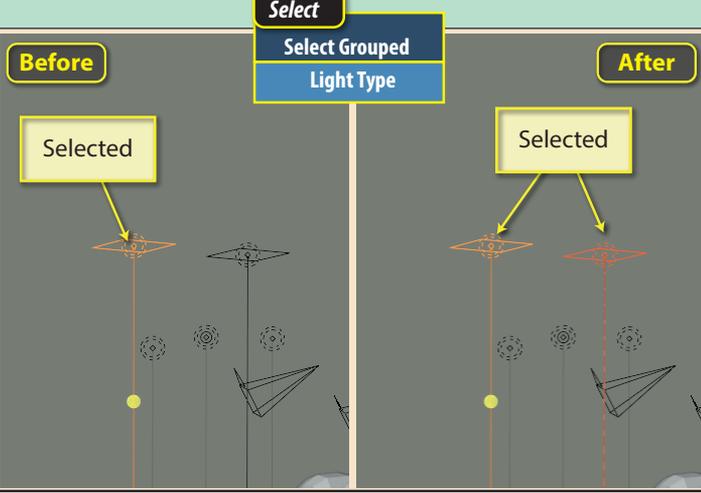
If we want the colour assigned to appear in the **3D Viewport**, we need to the **Viewport Shading** panel's **Color** value to be set to **Object**.



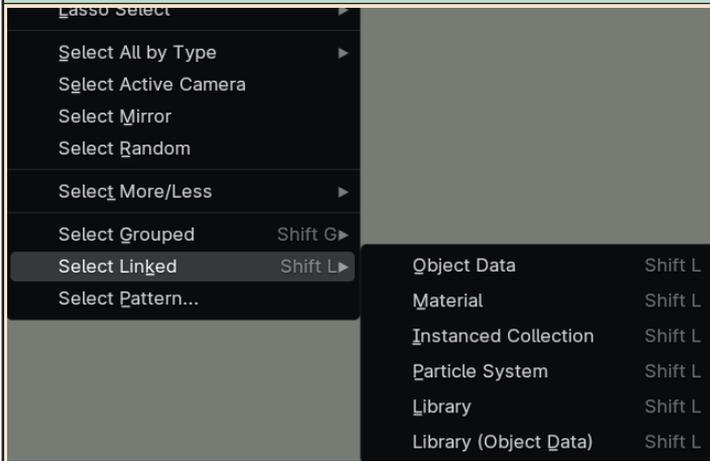
If we start by selecting the Cube before choosing **Select>Select Grouped>Color**, then the Cylinder will be added to the selection. Note the object must be **IDENTICAL** in colour.



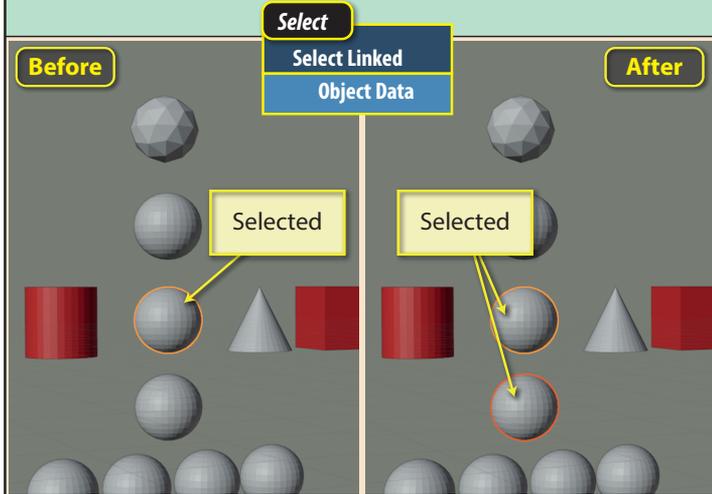
Jumping on to **Light Type**. This option selects all lights of the same type as the selected object. Here, an Area light is initially selected.



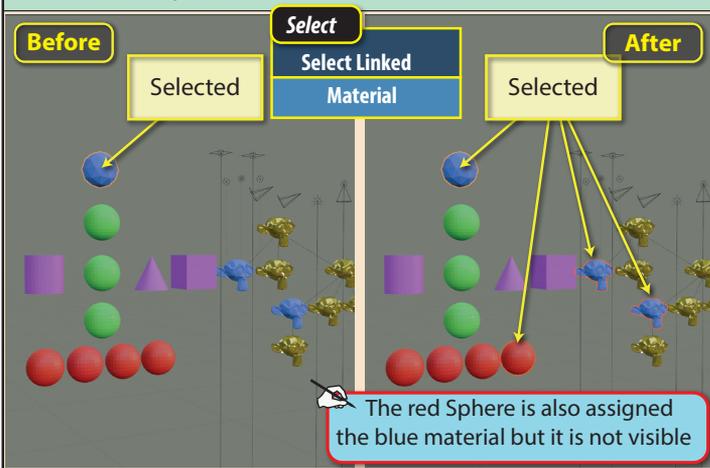
**Select Linked** selects objects that share some form of data. It has a submenu from which we can select the class of data sharing we are interested in.



**Object Data** will select other objects that use the same object data block as the selected object. Generally, these will be objects that were created using the **Alt+D** option.



**Material** selects objects that have been assigned the same material as the selected object. If an object has been assigned the same material, even though it's not visible on the object's surface, that object will be selected.

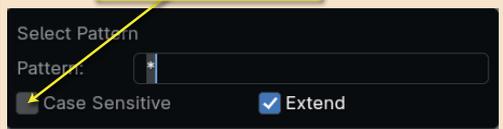


**Instance Collection** will be explained when we look at the Add menu.

The other options in this submenu will be discussed in later chapters.

**Select Pattern...** is actually a text search option that selects objects based on their names.

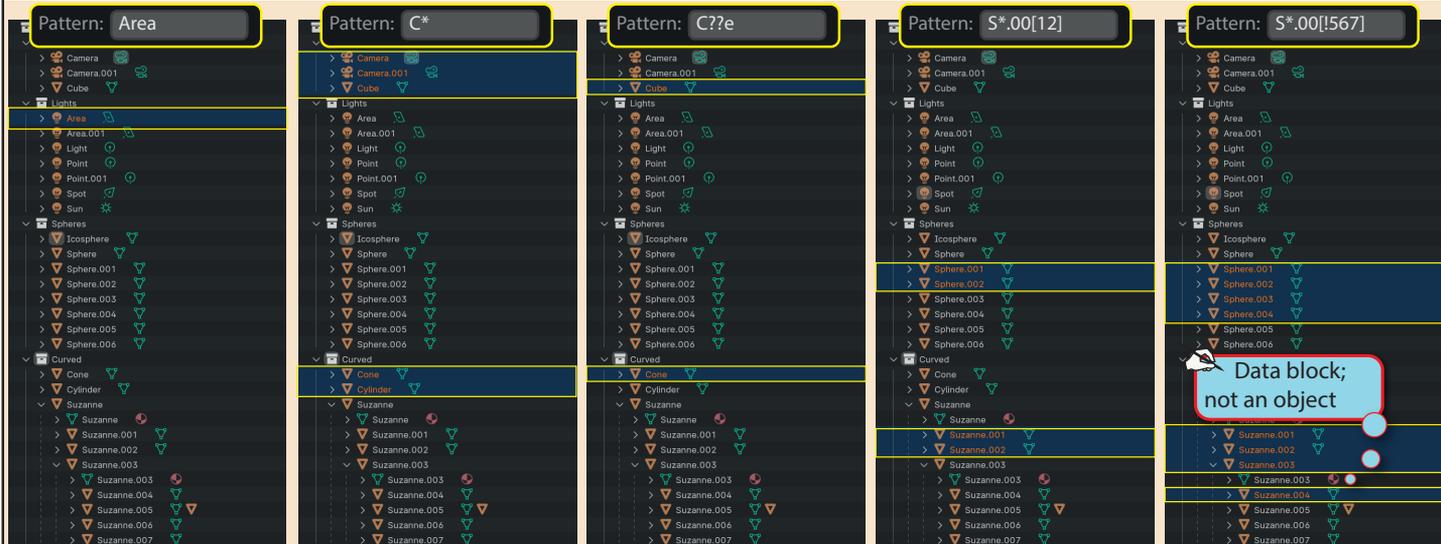
Check if search is to be case-sensitive



There are several special characters that can be used when specifying a search pattern:

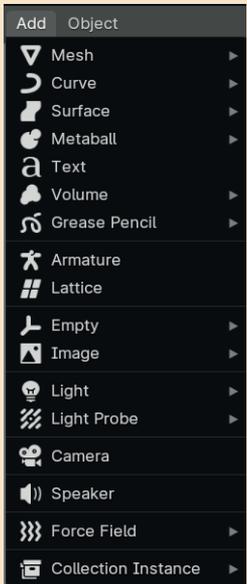
- \* = any sequence of characters
- ? = any single character
- [ ] = any of the characters enclosed
- ! ] = none of the characters enclosed

Various examples of searches and the objects those searches select are shown below.

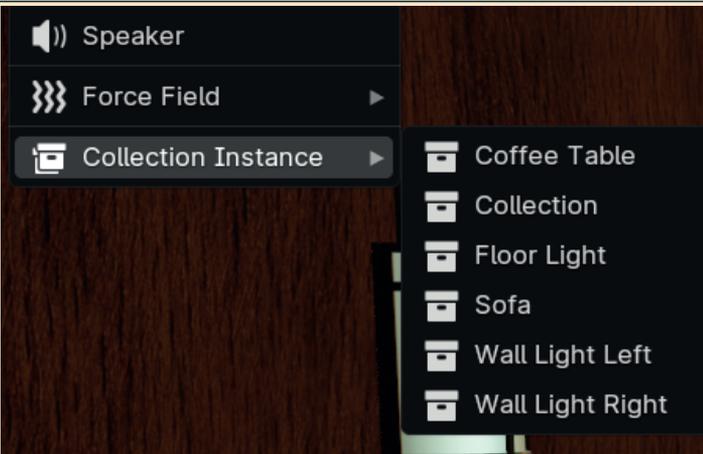


The next menu heading is **Add**. It's from this menu that we add any new objects to our scene.

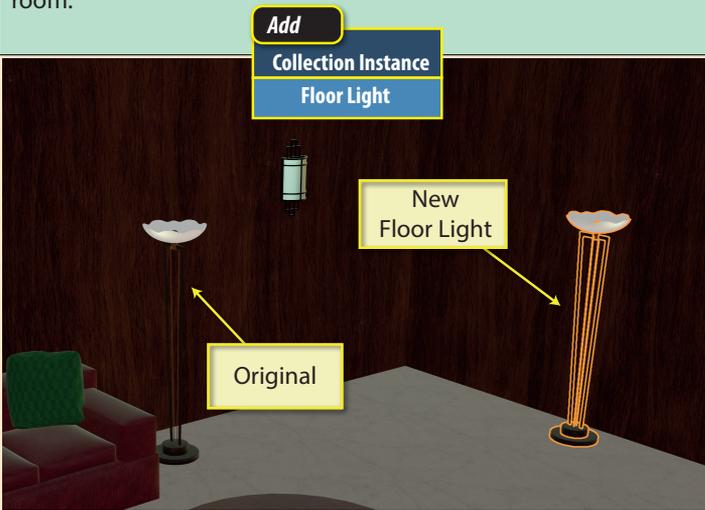
As we can see from the list, there are many different type of objects that we can add. Most of these we have yet to discuss.



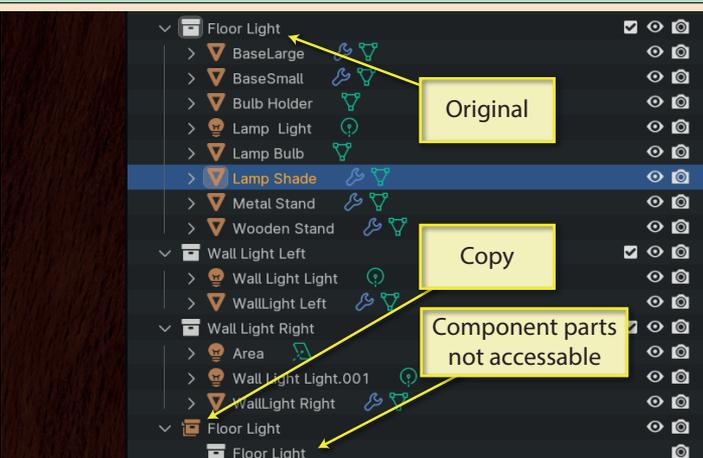
**Collection Instance** is the only new entry that we can explore at this point. This option allows us to make a copy of a complete collection. When selected, it produces a submenu displaying all the collections in the current project.



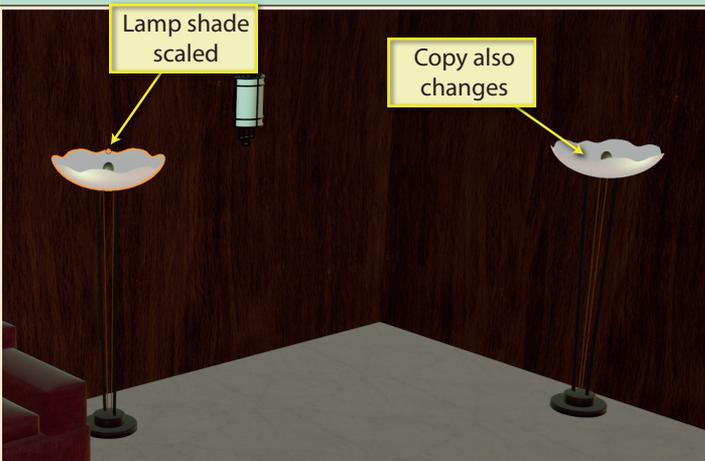
In the example below, we have copied the *Floor Light* collection and moved the newly created collection to a different part of the room.



Notice that, unlike the original, we cannot access the individual elements of the new copy of the *Floor Light*.



Any changes made to parts of the original also affect the copy.



After making two more copies of the *Floor Light*, we'll return to the Select menu's **Select Linked > Instanced Collection**. If we select one of the copies, this menu option will select the remaining copies. The original is not selected.

