



Create a 3D Cereal Box

Tutorial by Philemon Yalamu (C) 2018

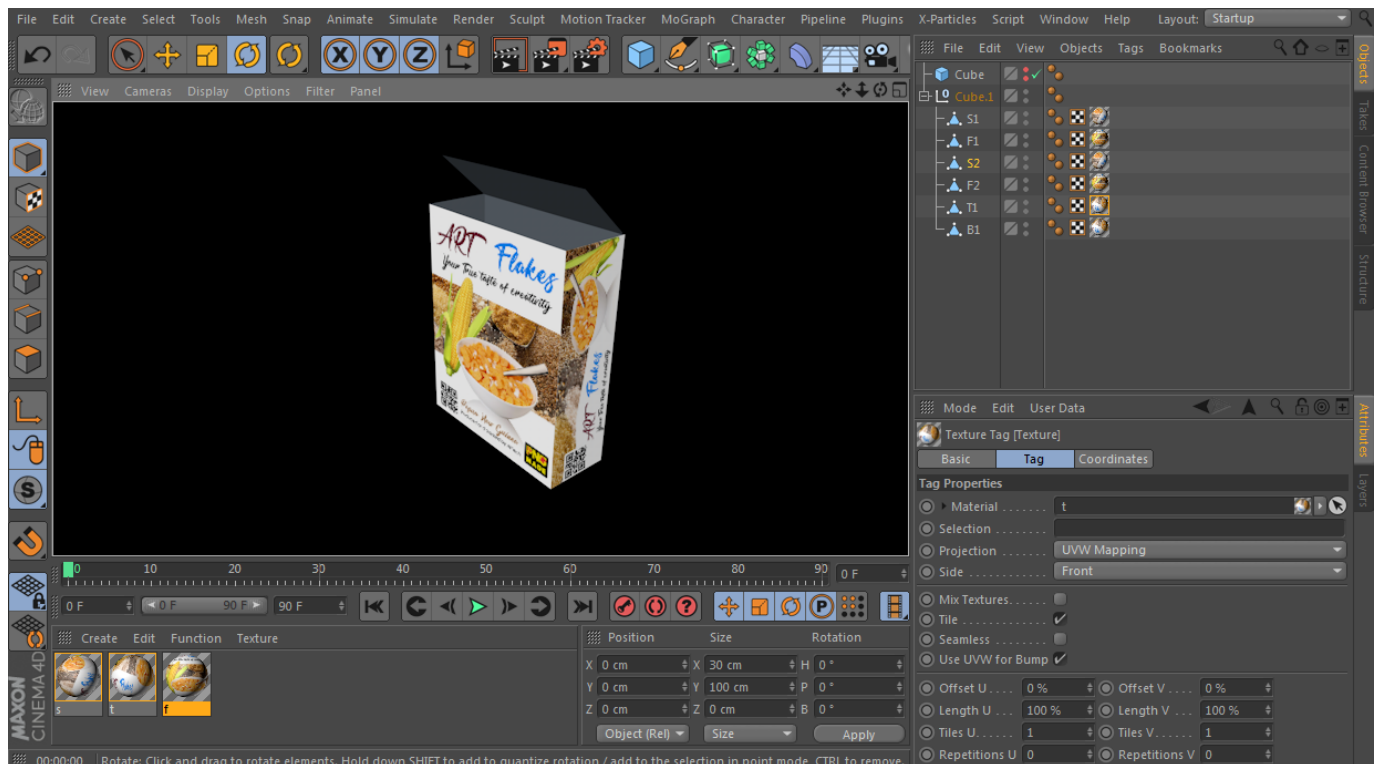
For this tutorial, I will show how you can turn a 3D cube into a 3 dimensional cereal box. I'm going to demonstrate using Cinema 4D Studio R17. In the demonstration, I will be using the metric systems in my measurement, specifically centimeters. If you have inches or other units, just use them. The important thing is the values we entered have to be similar in order for our texturing to go well. I'm sure versions 14 and above should have similar features used here.

The tutorial will cover few modeling concepts such as modelling, texturing and rendering. There will not be detailed configurations to the settings however, we are going to use some basic approaches to get the desired result. I've provided few images (*front.jpg*, *side.jpg* & *top.jpg*) for you to use in this tutorial which are all zipped with this PDF note.

Now, one might ask, "where and when should I employ this on a real project?" Well, the concept can be used on package visualizations, book covers, packets or boxes of any sort. The limit is your creativity and the basics are here provided.

Note: You must have Cinema 4D installed on your computer in order to follow this tutorial.

Below is what our complete model would look like, with some of its compositions in Cinema 4D.



1: Start Cinema 4D:

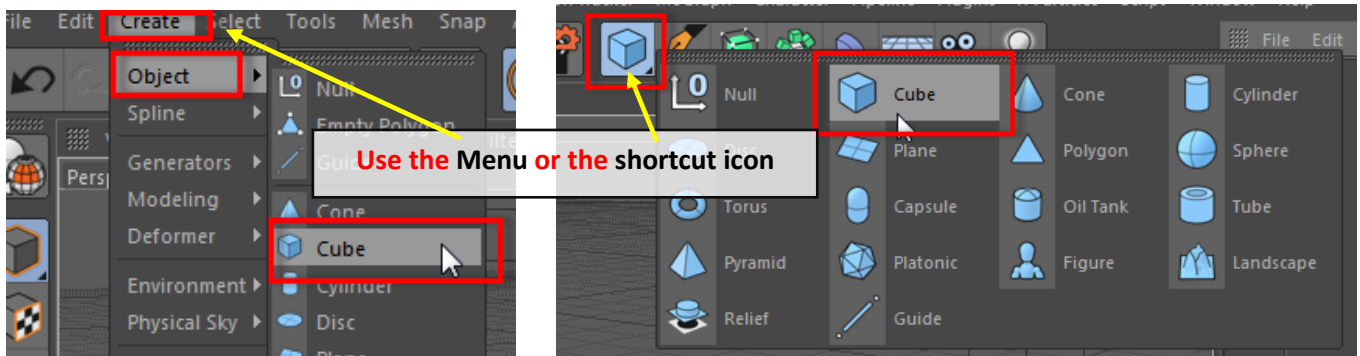


Locate Cinema 4D icon and launch it (i.e: *Start Cinema 4D*). You may access the icon from the start menu, under all programs or usually, there is a shortcut on the desktop when you install it. Left-click to start it.

The program may take few minutes before it starts depending on your system. When the program starts, the next step is to create a cube.

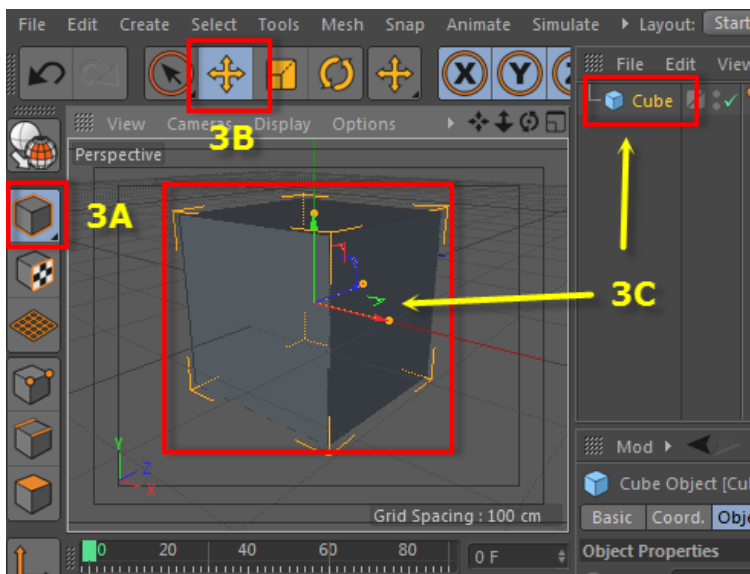
2: Create the Cube:

Go to **Create** Menu, click and select **Object**, then Choose **Cube** (2A). Alternatively, you can also access the cube from the shortcut icons below the main menus (2B).



You should now have a cube created. This cube would have all sides (*width, height & depth*) defaulted to specific values. For the next step, we are going to give specifications to our cube.

3: Specify Dimensions of the cube:



We are going to specify the dimensions of all the sides. First, make sure you are using the right tools and the object is selected.

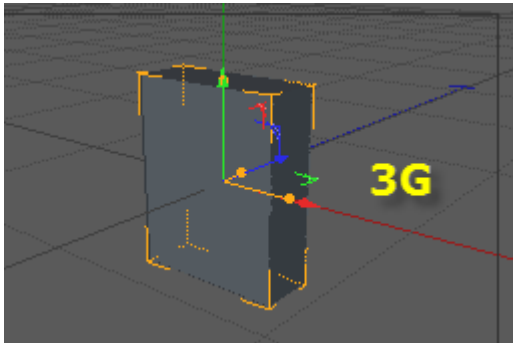
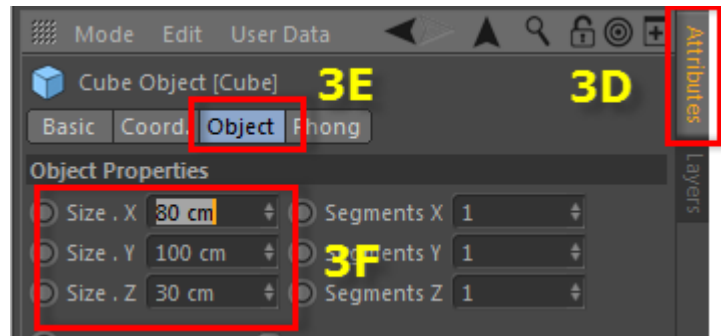
With the **model mode** (3A) and the **move tool** (3B) selected, **Select the cube** (3C) by clicking on it. You can either click the object on stage or select it from the objects' panel.

Next, go to the **Attributes** Panel (3D), under the **Object** tab (3E), adjust the settings as follows (3F);

Size.X = 80

Size.Y = 100

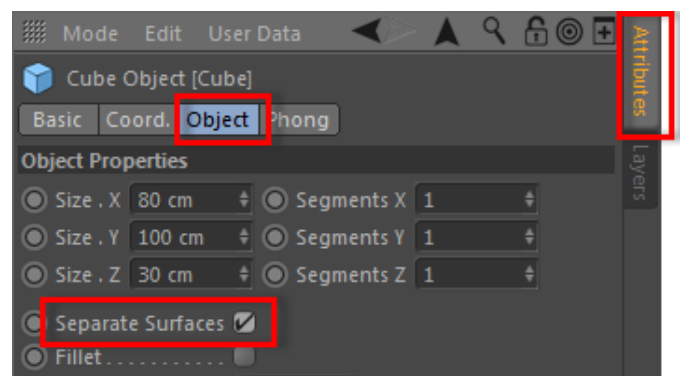
Size.Z = 30



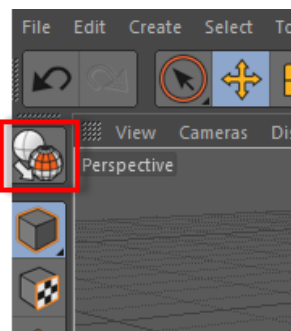
Your new shape would look much like the one shown opposite (3G). This now gives the shape of our targeted object, the cereal box.

4: Separate the faces of the cube object:

The next step is to isolate the faces of the cube enabling us to apply individual textures to each of the faces later on. To do this, go to the Attributes panel, under object tab, navigate to the option where it says "**Separate Surfaces**". Check the box next to it.

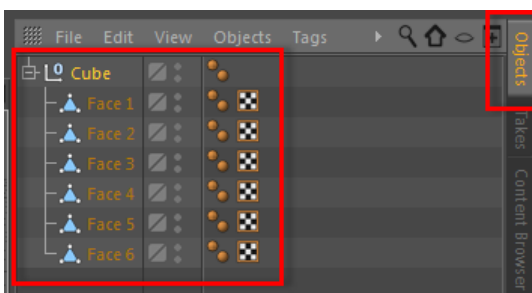


5: Make the cube object Editable:



With the cube object selected, Click the "**Make Editable**" icon on the left-pane tools-set. You can also use the shortcut by pressing letter **C** on the keyboard to make the cube editable.

Note: If you do not select the cube object, this icon will not be active.



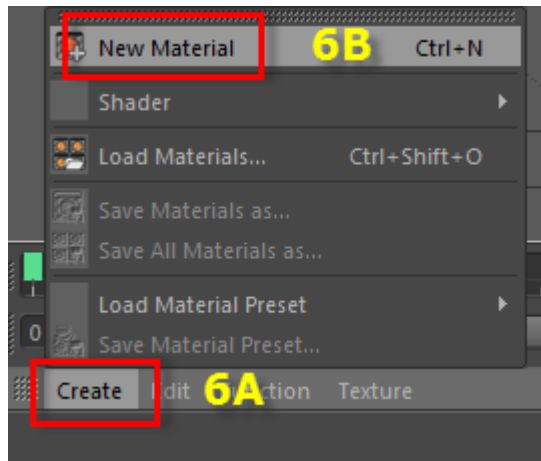
When you click the "Make Editable" icon or press letter C on the keyboard, you will notice that the object in the **Objects** panel will now be isolated into few faces. These are all the faces of the cube. Since we selected the "Separate Surfaces" checkbox in step 4 and we made the object editable in step 5, it now enables us to access all different faces individually.

Before we proceed further, you should first understand that there are 3 corners/ sides of the cube. In actual fact, there are 6 faces however, because each face is a duplicate of the other, it only leaves us with 3 faces hence your working files have 3 textures to go for those three faces.

Now that we understand this, let's set up materials for each of the faces and link them to the 3 images *top.jpg*, *front.jpg* and *side.jpg*.

6: Creating Materials:

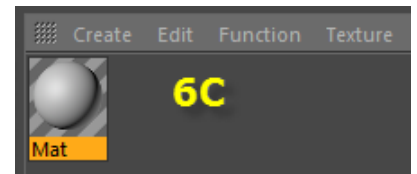
With 3D modeling, textures are contained in what is called a material. The attributes of each textured material can be manipulated by tweaking the various material settings.



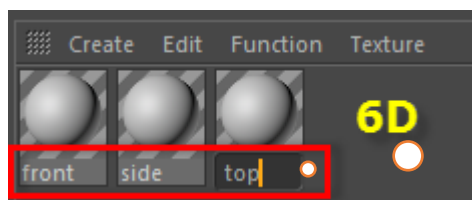
Let's now create materials for each of the faces.

Under the Material manager, click **Create** and select **New Material**, or you can also press CTRL + N while the material manager is active.

This will add a material object to the material manager (6C).

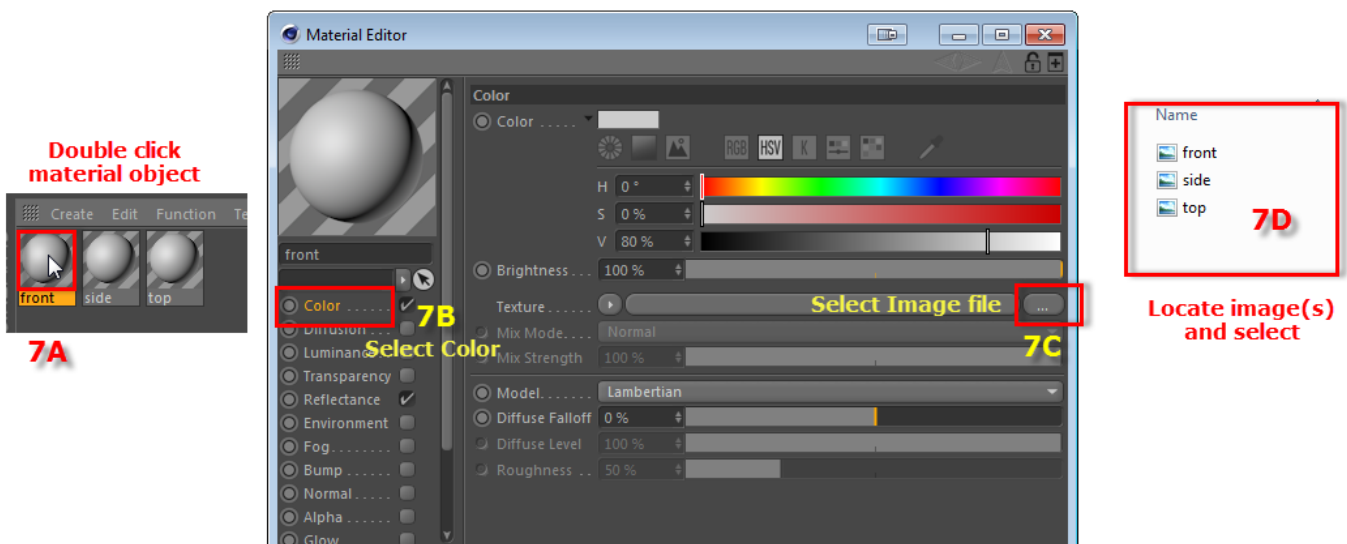


Repeat the step above to create 2 more material objects totaling 3 material objects and give them names front, side and top (6D) respectively.

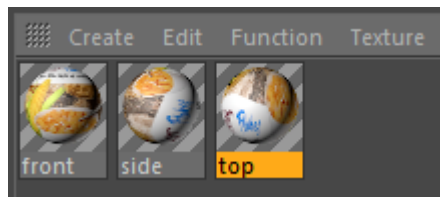


Note: To rename, double left-click the name below the material object and type new name.

7: Applying textures to Material objects:



To connect textures to each material object, double left-click the material object (7A) (i.e: front), from popup window, choose color (7B) by selecting on the text color and making sure the tick next to it is also checked. Then on the right, click the oval box (7C) to select your image. This will open the explorer window for you to select your image. Navigate to where the images are and select them accordingly. For instance, double click the front material to select the front.jpg image. Likewise, double-click the side material to select the side.jpg image and finally, double-click the top material image and select the top.jpg.

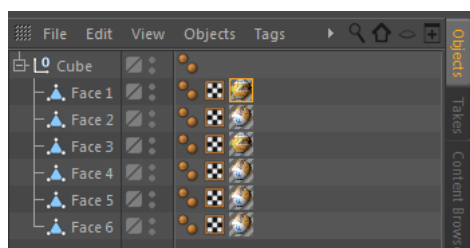
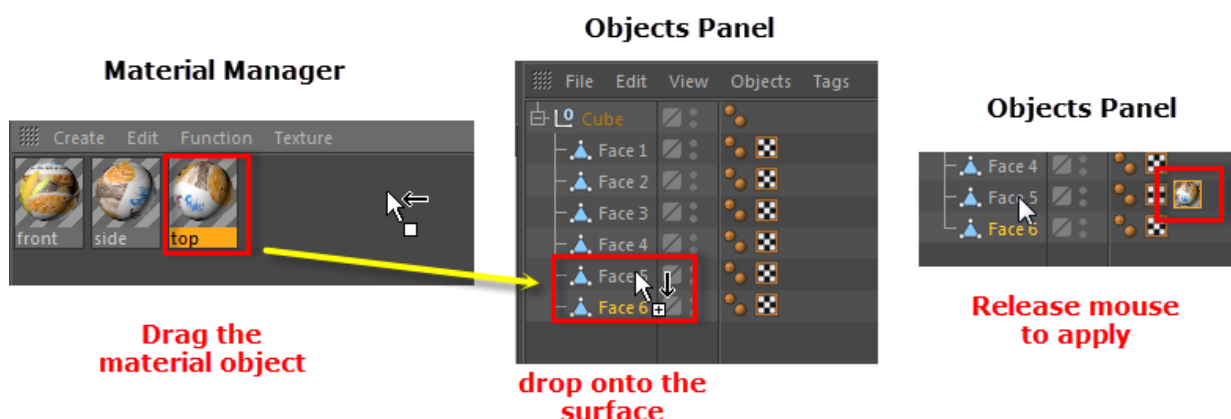


If you do it well, you should now have your textures in those material objects.

8: Applying textures to each surface:

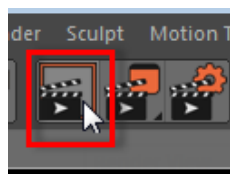
It is now time to apply the materials we've just created onto the surfaces of the object we modelled. If you follow me well, our settings would be similar. For the next few steps, do the following (see image that follows);

- On the material manager, drag the material with name **front** to the surfaces named Face 1 & Face 3 on the objects panel. Drag them one at a time onto the surfaces.
- On the material manager, drag the material with name **side** to the surfaces named Face 2 & Face 4 on the objects panel. Drag them one at a time onto each surface.
- On the material manager, drag the material with name **top** to the surfaces named Face 5 & Face 6 on the objects panel. Drag them one at a time onto the surfaces.



If you apply all the materials to the right faces on the objects panel, you should get the desired result.

9: Render the Scene:



Finally, Press CTRL + R or Apple+R to render the Scene and see your model take its shape.

One last thing, I'll be happy to see your finished work.



That brings us to the end of this tutorial. I hope you learned something. *Good Luck!!*