



<u>The blog</u> Joaclint Istgud



This is an adaptation of my old *visual Starter for newcomers to Blender* written for those who began working with this exciting tool with the reason for the appearance of more than expected version 2.5 alpha 0.

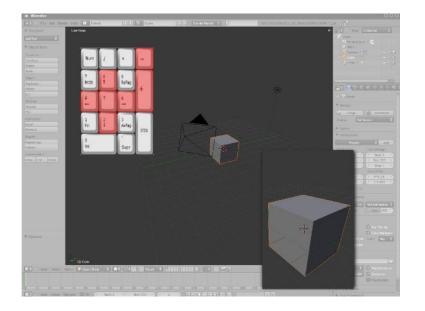
As already stated in the original guide mentioned ...

"To accuse me of impostor not tell in advance when it is finished with this
guide does not know how to make animations, or video games. I do not
even know model. Eventually you might be doing all these things and
more. For the time will have to learn to ride ; you are a baby-blender.
There are worse things, believe me. At least I'm not going to go around
the bush. not to mention already Yafray vo, or Python, or script, or IPO
curves

SAILING

We will start to see the 3D aspect of the program at hand. The only thing we have to worry about now is to have the mouse pointer in the central area of the interface, which we call the **3D window** (and have the keypad locked!) Play with the keys marked in red:

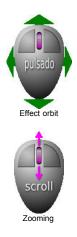
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



He got the zoom effect and the orbit.

With "Numpad 5" has alternated between orthographic view and conical view (perspective) Once satisfied that it was true that Blender is a 3D program related to one seems to start taking confidence ...

Now go ahead and move the mouse wheel or roll it down:



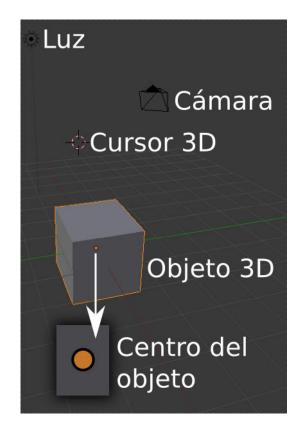
Something to consider from the outset is that if you exit the program *File / Quit* the program does not even deign to ask whether to save the changes. More dangerous still have the tick in the top right ...

Actually it can recover past records but have to resort to temporary files and folders with similar issues. To avoid such disturbances only thing that should get used is to save before exiting. Ive been using Blender since version 2.32 and still does not fit on the head that have not incorporated the last warning for reckless. But there is.

The initial elements

The 3D environment has become evident. There is a cube and a kind of grid soil, but otherwise what is it?. Here we go:

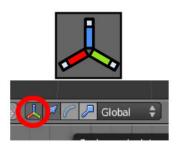
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Some of these items currently do not say much. Are you looking for a guide to the essentials and give him the feeling to learn quickly? Then come!

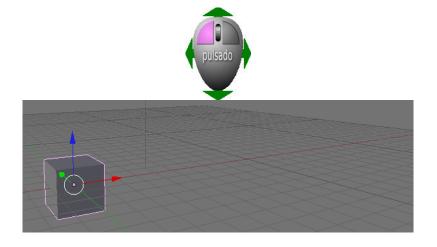
3D transformations

3D Transformer to appear by default in version 2.49 but 2.50 is necessary to enable it in the bottom of the 3D Window



Allows you to make basic edits to an object (move, rotate and scale). Before you move around the 3D environment, now only the object moves. Move your mouse one of the arrows.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Imagine this: Frame 1 = initial position, final position = frame 100 (and where a bucket put a rocket ship, I know, a *Starwars X-Wing* ...)



Do not tell me not feel like I keep learning this wonderful program ...

Elementary transformations on objects are **moving, rotating** and **scaling.** You know move along the axes so now it's time to rotate. Choose the *Transformer 3D* rotation:



Any arc of colors will help you rotate the cube at will around the axes. Once discovered this pendant on *3D Transformer* invite you to continue experimenting in this order:

- The option that remains to be tested is the icon that activates the *3D Transformer* own scaling.

- You can accumulate Transformers 3D viewing if you keep Shift pressed.
- All transformers have a white circle, if you move the cube from her, the transformation will not be on any axis but the monitor.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

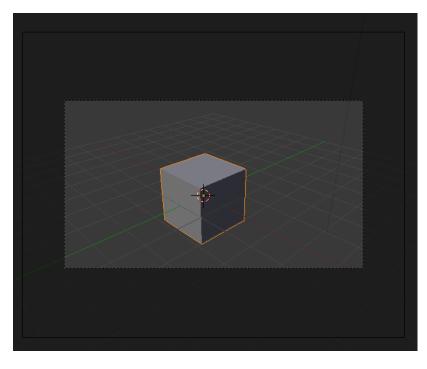
- The drop down where it says Global can forget the moment.
- Any change in course may be canceled by "Esc" or right mouse button.

With such transformation is unpredictable what is on screen so you start a new project using File / New (Blender delete the old document without saving changes and open a new one).

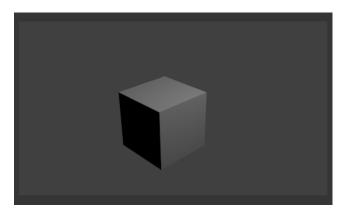
You are, therefore, with the default scene that might explain something about the camera.

CAMERA

In this 3D world must have at least one camera to tell Blender from where to "shoot" the scene and thereby obtain the bitmap (jpg, png ...) for. You see the scene from the monitor but from where he sees Blender? Consider the scene from the camera with "Numpad 0":



The rectangle of solid line is the camera and dashed line are relative to the frame. Let's take a picture of the scene. The shortest way is "F12". .. and tachaaaaaannnnnn!!



That is what is called a **Render.** Forget the idea of trying to rotate the scene render. It is a still image, a frame, as if he had obtained with a digital camera.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

Note that the lighting is on the focus of light in the scene. There is a single point of light as the unlit side is totally black.

Up to version 2.49 the default renderer is executed in a new window but could be configured to do so as it does now with the 2.50 integrated in a window, specifically in the UV image editor (Still, do not panic no I'm putting on technical issues). To return to the workplace press "Esc" (NOT the symbol to close window)

Delete the render window, we agree that it is nothing worthy of preservation.

Button Panel

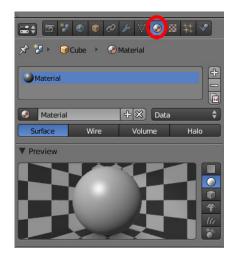
Let's go see a little matter of the right-button. That goes full of buttons. Come fast to see some results. There are, in principle, once icons. The next is enabled by default on the themes render:



Now that you know what a render is possible that some fields and buttons here are easy to interpret.

In all other we're staying in the eighth.

As you have not touched anything it is assumed that the cube continues to have an orange outline. That means it is the element that is selected. If so (and should not be any other way or if not you are not doing me any) the control panels that appear when you click the icon of the materials will these (among others):

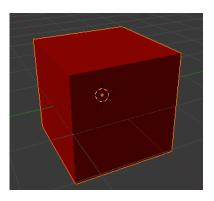


Of all the pictures we are interested in the preview (**Preview**) and containing the tab called *Diffuse*. Click on the colored rectangle that will display the editor to choose color and intensity (Intensity), the latter turning the mouse wheel.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



A possible outcome.

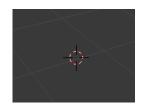


You can treat yourself to a Render ("F12") ... but I think you had better start to forget this cube that is well seen. As is selected (orange outline) press "Delete" and confirm the order



Adding objects

The predefined objects in a 3D program called **primitive** and in many cases can save labor. Others are a gift from the developers who used to be able to experiment with tools without having to invest time into modeling. Put in perspective in plant ("**Numpad 7**") and click with the mouse (left button) in the center of the 3D window. This will make the **Cursor3D** be placed there.

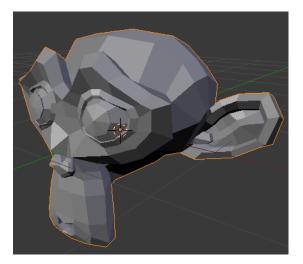


This is important because when we tell Blender to draw an object on the stage where it will find the Cursor3D. It's time to go to the menu Add / Mesh / Monkey

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

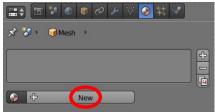


Feel free to rotate and orbit around the scene. Enjoy.



The object represents the mascot of the program and called **Suzanne**. This is **not** the time to go and call his brother or his closest friend into believing they had already learned to do this (do not feel bad, we made it all) Just a little.

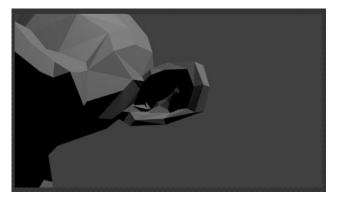
There is prosecuted and give some color to the matter but do not panic if returning to the materials is with this \ldots



 \dots just have to press $\ensuremath{\text{New}}$ to find the whole range of buttons that had with the cube before.

A Render? Do not cut, it's free. Do not be alarmed if you develop something like this:

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Bad lighting and framing are disastrous consequence of having the objects (Suzanne, light and camera) misallocated consequence of removing the object scene without thinking much what we did. We should move with the *transformer* Suzanne *3D* (using the terms "Numpad 0", for example) to get it to appear in the frame and that it is fairly well lit. Something like this (Still, the framing is done in a more comfortable, then include):



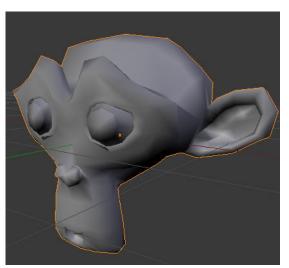
ENHANCING THE APPEARANCE OF MESH (MESH)

On the left side of the interface is another good selection of buttons. This box is visible or invisible with **View / Toolbar**, or better still with the key "**T**" (make sure you have your mouse over the 3D window in this case)

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



The button that you must do is click on the named ${\bf Smooth}$. The appearance has greatly improved our object:



Gone are the faces (called *facets*) and has been polished appearance. Interesting, but nothing compared to what I'll show below. To return to the faceted version should press the next button named **Flat** (do not do in this case)

We returned to the right side of the interface panels and buttons with which we worked a little. It is time to activate the sixth button and click **Add Modifier**. Once deployed the options menu choose **Subdivision Surface**:

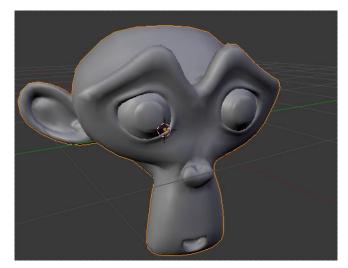
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

		Image: Constraint of the second secon
Generate	Deform	Simulate
🖳 Array	🕆 Armature	🐮 Cloth
🚄 Bevel	🌍 Cast	V Collision
🖬 Boolean	💙 Curve	📲 Explode
Build	🐷 Displace	🍐 Fluid Simulation
🖉 Decimate	ᇰ Hook	1 Particle Instance
🧉 Edge Split	🗄 Lattice	1 Particle System
😇 Mask	📃 Mesh Deform	🦢 Smoke
💒 Mirror	📲 Shrinkwrap	🄊 Soft Body
Dultiresolution	🍃 Simple Deform	
Subdivision Surface	🖌 🖌 Smooth	

In the panel buttons are a number of editable fields and buttons.

~	Subsurf	3 • \$ ¥ 🖓 🛆 🗸 X
	Apply	Сору
	Catmull-Clark	Simple
Subdi	visions:	Options:
4	View: 1	🕑 🔲 Optimal Display
(4	Render: 2	🕟 🕑 Subdivide UVs

Look at your model and see the improvement. Every facet has been multiplied by four (although we can not see clearly, but what is clear is that the smoothing effect of increased quality)



View Field: 1 relates to the level of subdivision we see on screen, in this case 1 Table Render: 2 refers to the level of subdivision to be implemented in the rendering.

The reason is clear: a major division faces more and more resources consumed from your computer the scene in which we are working. We will work at low levels and render it at higher levels. While it is true that everybody does not exceed recommended **Render 3** in any case.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

Think of a View: 2 assumes that the initial face will be subdivided into 16.

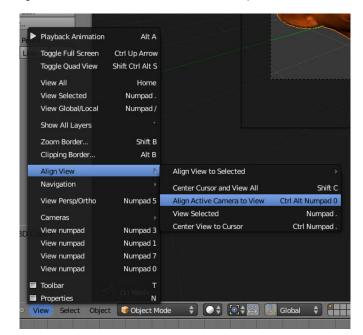
Treat yourself to a Render.



This it is time to go find the brother or friend. I assure you will stay with her mouth open.

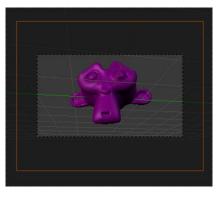
Control over framing

Before continuing I want to stop and show an important resource. To control the frame it is best to set the scene as we like and then force the camera to be placed at the point at which we find ourselves as observers from the monitor. For that there is a command line **View / Align View / Align Active Camera to View** or **Control + Alt + Numpad 0** "



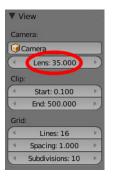
One possible outcome:

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



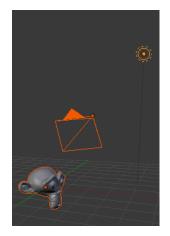
Note that the contour is now orange for the camera. This will have several consequences:

- The command to remove ("Del") which will remove the camera because it is the selected object (do not do, but if it has recourse to "Control Z" as in lots of software to back, not is appropriate that we run out of camera)
- One of the parameters of the camera that may interest you more now manipulate the focal length. This parameter we find it in a new assortment of buttons and options that appear in **View / Properties** or "N" (the mouse must be over the 3D window in the latter case). The parameter in question is called Lens.



SELECT

How to select the light bulb, for example? In Blender is selected with the right mouse button and like almost any other software in the Tech "Shift" serves to accumulate picks.



The above picture shows the three selected objects: the camera, Suzanne and focus. I guess you have noticed that the orange contour is different in some cases. The orange light that we

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

are used is reserved for a single item (in this case the focus) for being the last to be selected.

What I just say it is **VERY** important as it will result in many occasions it will be the dominant object. Now we're not going to give great importance but go memorizing. For now if you access the **Object** panel buttons are active will find the icon of the bulb, with what remains clear predominance.

🖈 🐌 🔍 Lamp	
Jamp	
▼ Transform	
Location: Rotation: Scale:	
X: 4.076 X: 0.650 X: 1.000	*
Y: 1.005 Y: 0.055 Y: 1.000	100
Z: 5.904 Z: 1.866 Z: 1.000	*
Rotation Mode: XYZ Euler	¢
► Transform Locks	
▼ Relations	
Layers: Parent:	

But this is not the panel of buttons that interests us at this time. We can see how having selected the bright spot has appeared a new icon to edit its parameters:

	8 C V			
x 3 · (🕖 Lamp 🕖	Spot		
🔀 Spot		8	3	
▼ Preview				
			-	
▼ Lamp				
Point	Sun	Spot	Hemi	Area
			legative	
(Ener	gy: 1.00) O1	'his Layer Onl	y

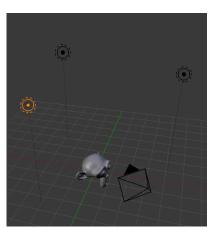
You can vary the value of **Energy**, choose a color the same way he did before with the material of the object, or testing the implications of working with different types of light: **Point**, **Sun Spot**, **Hemi** or **Sun**.

DUPLICATE OBJECT

One object (or several) that is selected can be doubled with Object / Duplicate or "Shift D"

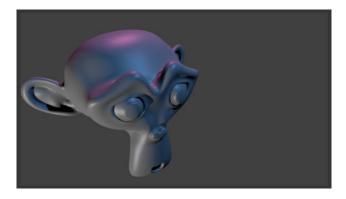
	Duplicate	Shift D
	Delete Kr	
	Insert Keyirame	py.ops.object. I
	Snap	
	Apply	
	Clear	
	Mirror	
	Transform	
Ob	ject 🛛 🥥 Object Me	ode 🗘 🕅

We are now going to use this resource to illuminate the scene with three points of light.



You'll see that doubling a focus the rest inherits its characteristics (energy, color ...)

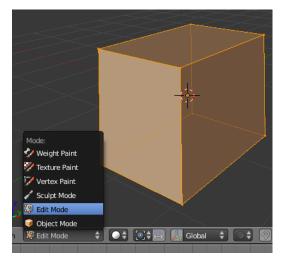
Now select one by one and edit its position, energy and color (you may prefer all white). One tip is that the sum of the three sources is about 1.



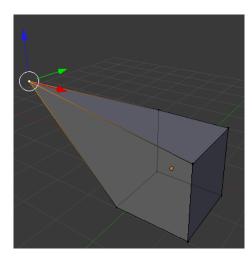
EDIT MODE

We have already gotten quite a benefit to Suzanne so start a new project and we spend our initial cube to a new way of editing: **Edit Mode.** For this, the shortest path is the "Tab" while we can use the box icons at the bottom of the 3D Window

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



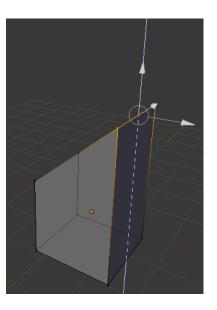
Since this type of editing can make edits on vertex, edges and faces of the object. The selection mode is the same as from **Object Mode** (which is the way we've been working so far), ie with the right mouse button (in this case "white" means *checked*). Select a vertex and move it.



I take this opportunity to broaden knowledge on this issue:

- If you drag your mouse over the *3D Transformer* clicking the white circle instead of an arrow achieved by moving the vertex parallel to the view (parallel to the plane of the monitor, so we understand)
- The key "G" begins publishing move as much and in Object Mode Edit Mode (and will do as the plane parallel to the plane of the monitor). This means that you have selected will move with the mouse after pressing this key. To do this it is best to have the mouse placed near the element to displace before giving the order G Blender. Once given the order G if we restrict movement to one axis XYZ what we do is to press the second key. For example after first press G, then Z is an axis for the movement as a representative sample of the address to which the movement has been integrated (in the example I have selected two vertices):

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



If you understood this procedure for editing the movement try to rotate with the ${\bf R}$ key and scale with the ${\bf S}$ key.

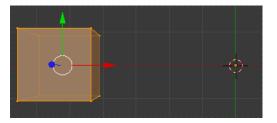
If you have edited several points it is possible that by running these two orders or to enforce the *3D Transformer* gives you the feeling of not having the whole situation under control. Do not worry, we'll explain.

PIVOT FOR rotation and scale

The issues of scaling and rotation are directly affected by their assigned center. Usually this will be the **center** pivot of the object and we have been continuously represented by an orange dot.



When an object appears on the scene it does with its **center** located at the geometric center. If we move the object will also move this **center**. But if we go to **Edit Mode**, select all the points and move to note that the Center can **not** move with them.

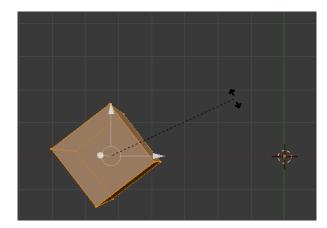


Get used to no "left out there," the center of the object. Not that I could relocate but it is used to working in order.

If we were in the previous case we could find by applying an order of rotation or scaling from **Object Mode** with unwanted rotation ...

Edit Mode This would not be a problem because since this editing mode is used as the source of all the geometric center of the selected items (not always but this time yes, because it is the default)

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



To control the position of the **Center** have to activate a tool called the **Center in September**. For this we turn to the **Toolbar** control panels in paragraph **Tool Shelf** (remember that become visible with the key "T") and choose **Add Tool** (you can help the search engine to access the tool)

Add	Tool		ŧ	
Sav	e User !	5ettings		
Set	Screen			
Fran	ne Offs	et		
Set	Previev	v Range		
Add	to Key	ing Set		
Ren	nove fro	om Keyir	ng Set	
Add	Empty	Keying	Set	
Set	Center			
Set	Object	Mode		
Set	Restric	t View		
0	set			

The new button (although I recommend "Shift + Ctrl + Alt + C") allowing you to choose between three options (editing only end when I make the following selection of the object, but applies to the object that was selected before choosing the option) :

- ObData to Center: Moves the object and repositioned without moving the center.
- New Center: Moves the center and repositioned without moving the object (this operation should make it in Object Mode or otherwise Blender will send an error message telling you)
- Center Cursor: Move the center and places the cursor is on 3D (this operation should make it in **Object Mode** or otherwise Blender will send an error message telling you)

There are other options for choosing the pivot in this drop-down box:



I think at this point where we already begins to walk alone with Blender can do some tests to try to fully understand the importance of these elements well localized.

EXTRUSION: The most powerful weapon a tool 3D

I left him impressed. I know.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

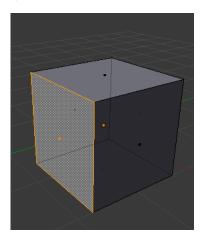
Seriously, what I just said is absolutely true. I would even say that without the 3D extrusion technology would be in a precarious state. Do not believe me? Let's see.

Start with Blender cube we select a face in Edit Mode. It has to do several possibilities:

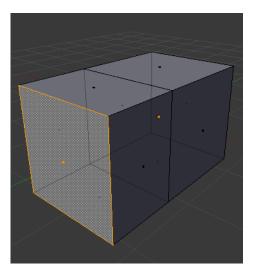


- Selection points
- Browse by sideBrowse by side

For our case I recommend you choose the latter:



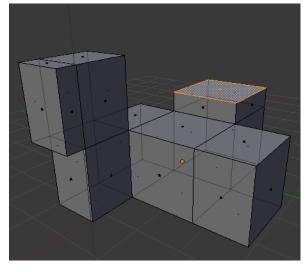
To perform the extrusion (I know I still have not told you what an extrusion but I want to surprise again) has the command line *Mesh / Extrude* but I recommend that you give the order to Blender with key "E". After move the mouse and finish the operation with a click



If this has not stopped with his mouth open and uninstall Blender off, I throw in the towel with you.

Play with the faces and the choice of extrusion. Do something in this line. Enjoy.

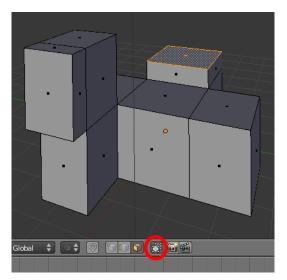
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



By now you must start to feel that somehow begins to understand the program and even to dominate a bit.

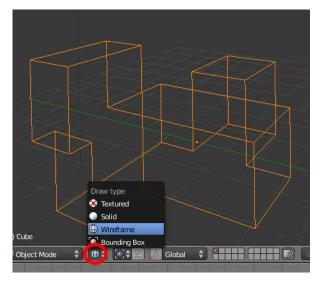
At this point I stop to say a few things.

• That sense of transparency may be activated with the icon next to faces selection.



• You can see the object in several ways, one of them is called **Wireframe** or wire mesh. You can choose them in this box:

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



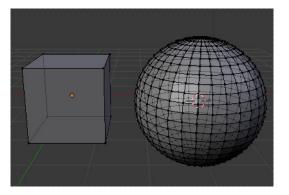
In the above example is the object from the Object Wireframe Mode.

The most used are the views of **Wireframe** and **Solid**. The best way to toggle between them is the key "Z".

WHEN ADDING A MESH AND THERE IS ANOTHER IN THE SCENE

For easy! "" I'll tell you the Add menu and add a new Mesh.

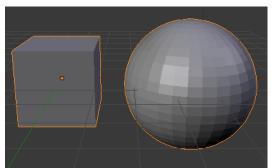
Indeed she is right but in this case I want you to assimilate NOW if adds the new mesh in **Object Mode** it will be a separate object of everyone else, but if you add it in **Edit Mode** the new mesh is added to that at the time is selected. For example in the following case has added a bucket when he was in *UVesfera* **Edit Mode**:



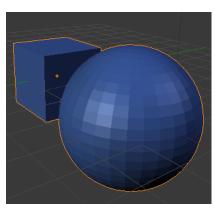
That means several things:

- These two entities have only one center
- You can not dispose of them separately in **Object Mode** for when you want to select the area to be selected once the cube (and vice versa):

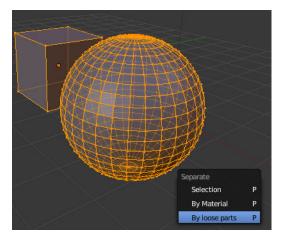
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



All the shared properties of one another. Well, actually share nothing, and I repeat: they
are the same mesh.



In the case of wanting to have them separate so we separated. The most affordable method available to us right now is go to **Edit Mode** and select at least one vertex of the mesh. Once selected click the Command Line *Mesh / Vertices / Separate* or press "P". Blender will ask the criterion to perform the separation.



In this case we choose **All loose parts** that would be something like *Separate all independent parties*.

The inverse, or join meshes, is made from **Object Mode**. Once selected meshes that want to unite is the command line **Object / Join Objects** or merely "J".

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

SELECT ALL

Both in **Object Mode** and **Edit Mode** is the command line **Select / Select-Deselect All** though I recommend you get used to switch Select and Unselect All with the key "A".

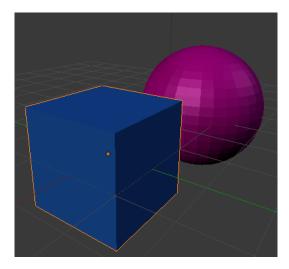
SOMETHING MORE ON MATERIALS

Back to the matter of materials to propose some research into some of the features that you can give them.

Suppose that the scene still have arisen as a result of our research on joining and separating mesh. We have two separate but initially were part of the same mesh. If you want to change it UVesfera material also changes the cube.

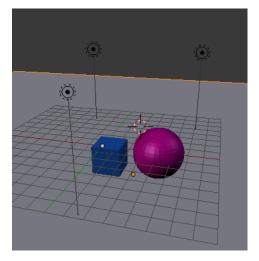
Go to the materials and verify that you receive a **2** beside the name of the material. is the number of objects that are linked to it. If you selected the field and hit that number will be releasing the material to no longer remain bound and can edit their features without affecting the other objects.



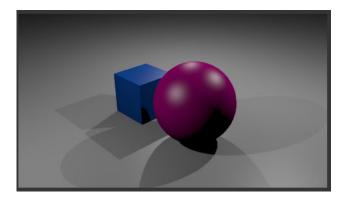


Now from **Object Mode** add a plane to the scene and create a composition similar to this (it has three points of light):

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



With that we get a first render like this (more or less)



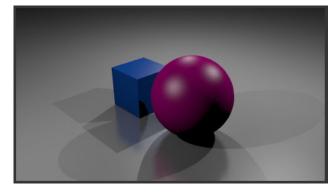
Select the plane and go to edit your material. We care because we want to picture called **Mirror** to acquire the property of reflecting as a mirror

Reflectivity:0.527	(Fresnel: 1.000
	Blend:0.705
Max Dist: 0.000	Gloss:
Depth: 2	Amount:0.897
Depend	Threshold:0.005
	Inreshold:0.005
e To: Material 🗘	Samples: 18

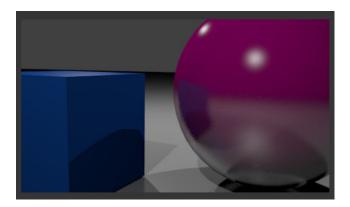
The first is to activate the property or otherwise, the parameters do not apply:

- Reflectivity: the mirrors.
- Fresnel: a parameter related to the behavior of the material that does not reflect equally.
- Fade to Material: non-fading for dye color of the sky (in a while will know this color edit)
- Gloss: that the reflection is not too clean and seem unreal (unless it is a mirror)

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Enjoy this new feature and add new values to the area ... (remember that reflection is a property which means that the color of the sky greatly affect the outcome)



Now we will select and activate the cube in materials Transparency option.

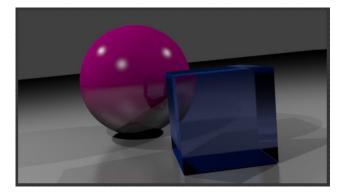
Transparency			
Z Transparency		Raytrace	
Alpha:0.145	\supset	Fresnel: 4.800))
Specular:1.000		Blend:1.250	
(IOR: 1.700	Þ	Gloss:	
Filter:0.418	\supset	Amount:0.976	5
Falloff: 0.100	►	Threshold:0.00	5
Limit: 0.000	►	Samples: 18	Þ
Depth: 2			

Where we will consider:

- Raytrace: Transparency versus Z is an engine of much higher quality because it will take into account many more parameters that attempt to mimic the real optical effects. Vise Z and Raytrace Comping transparency for final quality effects.
 Alpha: The amount of transparency.
 IOR: distortion of objects seen from behind.

- Gloss: similar to the treaty in Mirror.

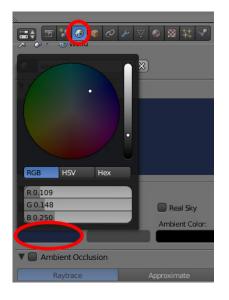
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Here I have to leave him alone. Further this goes far beyond the goals of this guide initiation.

THE COLOR OF THE SKY

The fund appears in the scenes is gray but can be edited to taste. The issue is simple color change. What can be done from the buttons **World**:



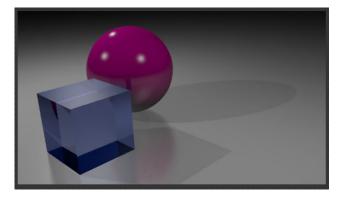
A LITTLE MORE ON LIGHTING

You may have noticed that in the previous examples there was an excess of shadows cast. You may be right there lighting from different points but not all cast shadows. A 3D program used to calculate all these details a technology called **ray tracer (Raytracer)** For a light shine but do not produce shadows should **not** activate the **Shadow** in the panel lights edicoón already met before. You know you should have selected the spotlight and go to the panels of material.

▼ Shadow	W.
No Shadow	Ray Shadow
	This Layer Only
	Only Shadow
	Only Shadow

In the previous scene cast a shadow if only one of three sources the result would be this:

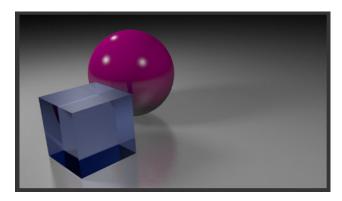
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Much better. But you will have noticed that in real life the shadows are losing sharpness on the contour as the object away. This shadow us to come to us is too artificial. 'Il Edit in the same table:

Adaptive QMC	Constant QMC
Soft Size: 2.882	
Samples: 12	
Threshold: 0.001	

- Soft Size refers to the size of the blur
 Samples is the number of shadows that Blender should calculate to spend from the beginning to the end of the blur.



There is a kind of illumination that is closely related to the aesthetics 3D Ambient Occlusion is known that does not require any outbreaks in the scene (although we may retain some to produce shadows)

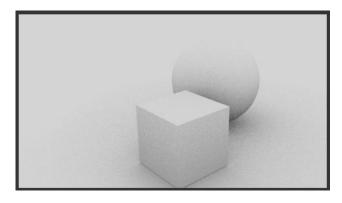
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



Before all this lighting will create the table is already known on the blade press materials appearing beside the name of the material to remove it and start from scratch (do this with each of the three objects). Not that the ambient occlusion does not support reflections and transparencies but render times are endless if these properties are activated.

Material.002						
•		0.00		-		
Material.002)2	- 💥 Data			
	Surface	Wire	Volur	0.54	Halo	

In the following example I've also deleted all the hotbeds.



To achieve the effect of ambient occlusion should go to the panel for the **World** tab and activate the **Ambient Occlusion**

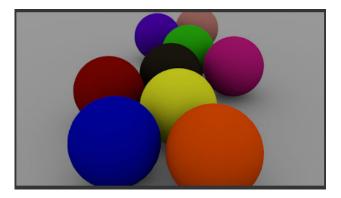
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

	- ▽ ⊗ ⊠ 抹 ♥
🖈 🔊 🔹 🐨 World	
S World	+ ×
► Preview	
► World	
Ambient Occlusion	
Raytrace	Approximate
Attenuation:	Sampling:
Distance: 5.300	Constant QMC 🗘
Falloff	Samples: 5
Strength: 0.000	
Influence:	
Add Sub	tract Both

Pay attention to:

- Raytrace: Approximate better (use this for sketches)
 Samples: ambient occlusion creates a noisy texture in the image. A larger number of smaller samples that feeling.
- Energy: The amount of light.

The ambient occlusion light comes from above and all around very nice aesthetic generating



Procedural textures

Or what is the same, generated by the program. In this issue because I will not expand much beyond my purpose with this guide but will give a few clues to start its journey.

Start by creating a scene with a UVesfera, let Smooth, go to the panels of material and apply one. This will reveal a new icon next to the material and is intended to edit textures.

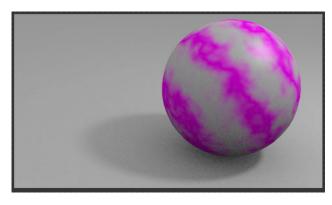
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	2
🖈 🐶 🞯 Mesh 🔸 📀 Material.001 🔸	
8	
8	
8	
8 + New	

Once you click the **New** button will have a box to start editing textures. In the **Type** drop down, where it now says **Clouds** choose one, for example **Marble** (marble) and get a wide range of possibilities to edit the texture ::



A direct result to make a render with ambient occlusion and a bit of editing in the spotlight is this:



The gray color corresponds to the area that had been issued to define the texture but it takes at least two colors. A lack of data Blender select a default color by default. We choose the second color on the bottom of these buttons texture editing:

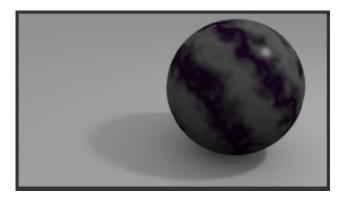
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



For example choosing a somewhat darker gray than the material:



It's time to play some more with the colors and make a render ... editing some parameters:



You can add more textures to the same object.

Add a bitmap

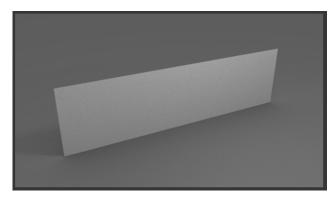
Now we add this bitmap to a plane

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



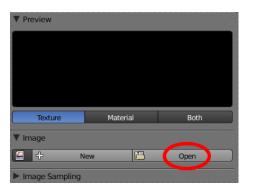
Diseño por Ordenador con Freeware

Create a composition similar to this:



This is a simple horizontal to the ground and one deformed as a wall to insert the bitmap into one side.

Do with him as with the other objects that added texture but now in the options menu choose not **Marble** or anything. Choose **Image or movie**. Among the multitude of options will have a file browser to fetch his image.



A first result would be this:



If the image is inverted because it comes out is seeing the wrong side of the plane.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

Improving the proportions a little box and adding some effects like ambient occlusion other possible outcome would be this:



WHAT YOU SHOULD KNOW THE RENDER

At the moment there is not much to know. The experience will clarify many things, but pay attention to render the panels themselves. First things first by looking only at the most important:

=+ 🖻 🕅	S 😻 🖉 🌽 🟹	
🔊 🎖 Scene		
▼ Render		
ln 🔝	nage 🦉	Animation
Display:	Full Screen	\$

- Image: equivalent to order "F12".
- Display: Full Screen. Refers to the window in which to run the render. most common options are Full Screen New Window (new window)

-	Presets			÷	Add	
Resol	ution:		Frame	Range:		
4	X: 1920	F	4	Start:	1	4
4	Y: 1080	*		End: 25	0	*
	25%		4	Step: ()	*
Aspe	t Ratio:		Frame	Rate:		
4	X: 100.000	F	4	FPS: 24	4	A N
4	Y: 100.000	*	4	/: 1.00	0	*

- Resosution X, Y: dimensions in pixels of the render
 %: Percentage size in which is rendered. Download this value for sketches and up 100% for the final result conforms to the specifications in Resolutie X, Y.

		1	(-		
5	8	11	16	Mitchell-Netravali	÷

• Anti-Aliasing: smoothing the edges to avoid the classic sawing effect. A higher value, better quality.

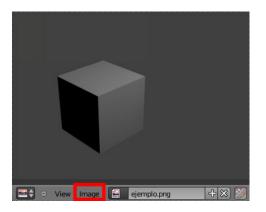
file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

- ▼ Shading
 ✓ Textures
 ✓ Ray Tracing
 ✓ Shadows
 ✓ Color Management
 ✓ Subsurface Scattering
 Alpha: Sky ◆
 ✓ Environment Map
- Alpha. In the case that we want an image with transparent background Blender must understand that the color of the sky should not appear. First you'll choose an output format to PNG or similar rendering that supports transparency (later we shall see) and choose in this parameter between **Sky** or **Premultiplied** or **Straight Alpha**. The choice of this parameter will determine the quality of edges and the anti-aliasing. **Premultiplied** is better than **Sky**.

/tmp/				C
🕌 PNG		\$	🗹 File Extensions	
BW	RGB	RGBA	🗹 Overwrite	

- The field for the output directory is not important because it is time for entertainment.
- PNG is the default output format but you can choose among many formats.
- BW, and RGBA RGBA: to make the render in black and white, RGB or RGB alpha channel. If we are to achieve the effect mentioned above in the sky comes out clear need to activate the latter option.

If you want to keep a render, once done, go to the **Image** of the bottom and choose **Save** or **Save as ...** as in any other software.



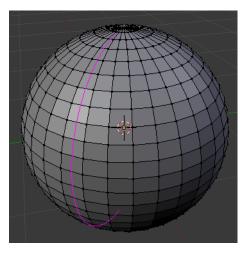
IMPORTANT THINGS

A couple of things I find very interesting before letting him walk alone.

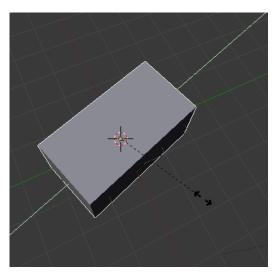
Proper organization of the chains of vertices is crucial to be successful in their work
process (eg apply a modifier Subdivision Surface and the result is acceptable). These
chains are called loops. You can add new channels to Edit Mode by adding a new tool,
as it did before with Set Cente r, called Loopcut and Slide or simply "Control A" (I
recommend you get used to this shortcut).

When Blender allows you to click to move the **loop** along the selected side so you can freely choose their location.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht



 Basically an object is governed by global axes XYZ but will always retain its own local axes. If you rotate an object broad lines and the premises cease to coincide. This could pose a problem in the case of wanting to scale, move ... the cube in one of the axes no longer coincide. The case for example for climbing resuleve with SYY (S key plus twice the Y)



It may also help for this 3D Transformer. Remember that at the beginning I mentioned a drop-down transformer near the 3D?



Then you can start experimenting with it.

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht

• There are hundreds of things you should tell me but even I have forgotten from time to time that it is entitled: Getting Started *for newcomers to Blender* (by the way, congratulations, you are no longer a newcomer ...)

EPILOGUE

I hope I've given some guidelines that will serve to start working with Blender in a solid. Not lying when I say that in this introductory manual has not been developed even 1% of the program. Blender supports animations, making it almost into another program at hand, just as it supports creating video games, audio and video postproduction ... Blender is a software to spend time, not a toy. If you learn to handle it will have thousands, millions of graphic possibilities at your fingertips.

As stated in this little world of Blender ... Happy blending!

For more tutorials visit <u>The blog</u> <u>Joaclint</u> <u>Istgud</u> Joaclint Istgud Diseño por Ordenador con Freeware

And even here the tutorial. If you think that is incomplete , have errors or want to bring about some improvement, post your suggestions here

Joaclint Istgud with Blend 2.5 Alpha 0

file://localhost/E:/Downloads/Nieuwe%20map/Getting%20Started.mht