ΓΡΑΦΙΚΑ & ΕΙΚΟΝΙΚΗ ΠΡΑΓΜΑΤΙΚΟΤΗΤΑ

Διάλεξη #11

3ds MAX – Camera

Camera

We need a "<u>Camera</u>" in order to output a scene:

- □ in to an image or
- rendering for making a movie

We need a proper Camera for <u>a still image</u> or <u>a sequence of images</u>

- The Perspective View was deigned to view the scene at any angle, so we don't want to render that View
 - **"Camera"** is what the Audience see (Audience View)
 - **"Perspective View"** is what the Director see (**Director View**, which includes the Camera)

Camera

Create a "Camera" (object) (load "target_camera.max")

Go to Command Panel – Create - Cameras – Choose Object Type "Target"

There are two major type of Cameras: "Target" and "Free" Cameras

A "Target" camera <u>has an end</u> or <u>look up point</u> (lock down shot)

(very useful for shots were the camera never moves)

A "Free" camera doesn't has an end point or a target so it's much better for a moving camera shot – Pan / Tilt / Track ... the camera

(any kind of moving camera shot)

- Choose <u>Top View</u> (or Perspective) to create the camera
 - <u>Click and Hold</u> to create the **Camera** and then
 - Drag and Release the mouse to create the End Point (the target)

(Right click to exit)

We can move either the Camera or the End Point

Camera

Load the Camera View (to Left View) so we can see through the camera lens

- Click on [Left] and then choose Cameras Camera001 (shortcut "c")
- There are two types for taking a shot with the Camera: "<u>Fist Person</u>" and "<u>Third Person</u>"
 - To do at "Third Person" just <u>select the camera</u> (Top View) and move it against the target (object) (we position the camera)
 - To do at "Fist Person" <u>select the Camera001 Viewport</u> and move the Camera & the EndPoint (Tracking Top-Down or Left-Right)
 - Use the Bottom-Right buttons to <u>Dolly</u> (camera & target), <u>Ordit</u> (rotate camera or panarama)

(we manipulate the view directly)

Press F3 to see the Camera View in Shaded mode

Camera – Safe frame – Aspect Ratio

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- There is a miss much between the Camera View Frame and the Aspect Ratio of movie
 - Enable the "Show Safe frames" (Click on [Camera001] <u>Show Safe frames</u>) to be able to preview the actual view after rendering

(shortcut "Shift + f")

 Go to Viewport Configuration (Press [+] – Configure Viewports...) - Safe Frames panel enable Action Safe (sowing even in 16:9) or/and Title Safe

<u>Aspect Ratio is also associated with Render settings (Common – Output Size)</u>

- Width / Height Pixel Aspect
- Image Aspect

3ds MAX Camera – Field-of-View

Field-of-View or **Angle-of-View** or **Zoom**

The camera stays still and we just zoom-in or zoom-out

(Go to [Camera001] and Select Camera) -

(Observe the Camera Lens Angle)

(Go to Modify Panel)

- Field-of-view is linked to the Lens parameters of Camera (Foto-Lenght).
- Photo-Length is also associated with Render settings (Common Output Size)
 - Aperture Width(mm): 36 (or choose "<u>Output Size</u>")

3ds MAX Camera – Free_Camera

- Use "Free" Camera for Animations
 - Right click on any "Snap" tool Grip and Snap Setting Home Grid Perspective View Grid Extent: 5000
 - Horizon level problem (Select the camera Modify Panel check "Show Horizon")
 - If we move the camera <u>right or left</u> the horizon line stay level
 - If we move the camera <u>up or down</u> the horizon line disappears and the camera starts to do wired things
 - Create a <u>Free Camera</u> at <u>Front View</u> choose <u>Word</u> Coordination system and try to rotate
 - choose <u>Local</u> Coordination system
 - choose <u>Gimbal</u> Coordination system
 - the horizon line <u>don't</u> stay level and the camera spin out
 - Create a Free Camera at Perspective View (the camera face down)
 - choose <u>Gimbal</u> Coordination system
 - Command Panel Motion Parameters Rotation = ZXZ (actual is YXZ)
 - the horizon line stay level and also the camera don't spin out

Ερωτήσεις

