Multimedia Module

BRYCE 5
USER MANUAL

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Modules available online at http://mll.arizona.edu/workshops.shtml

Bryce5_User.pmd
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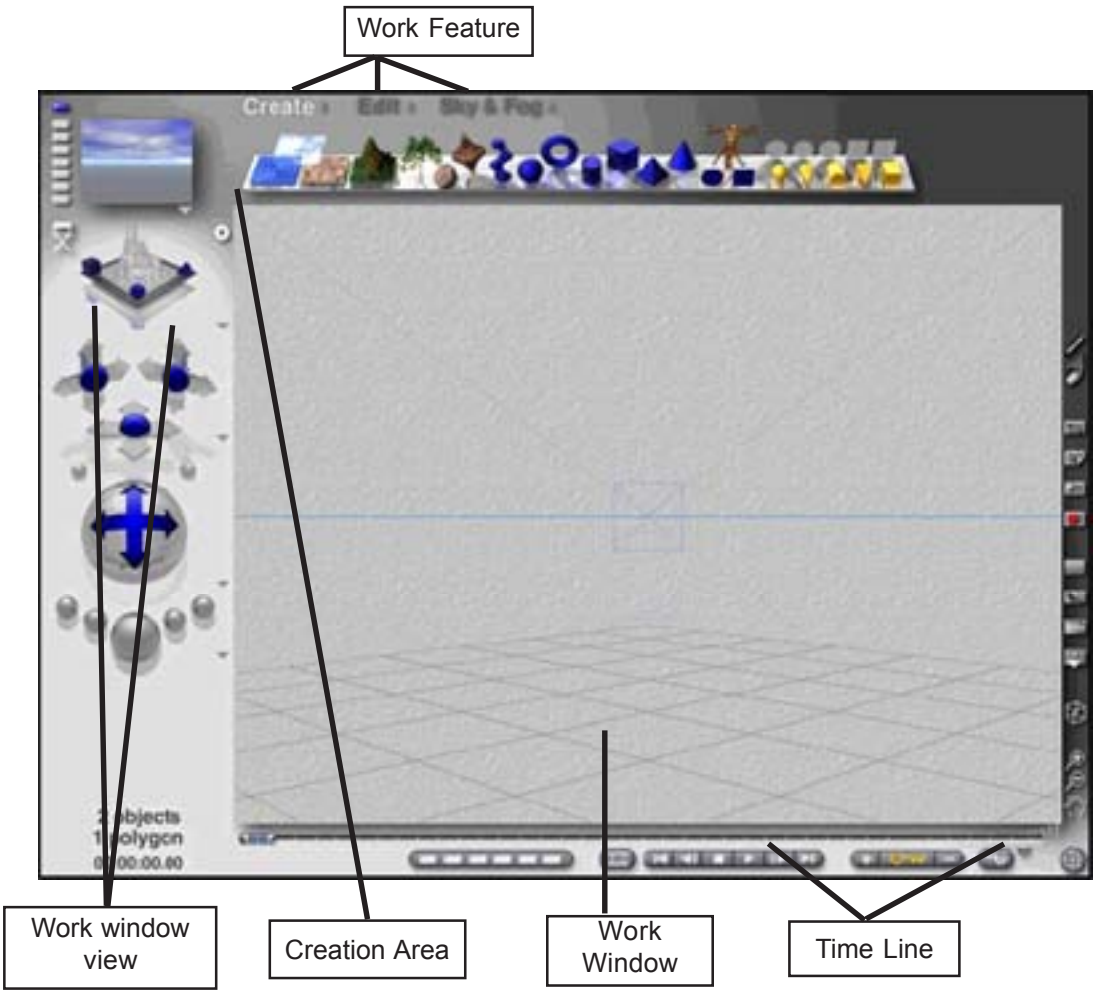
SETTING UP YOUR WORKSPACE:



- The work window view is a very often-used item. This is how you quickly change the work window view. Notice the triangle…this is a text based change area.
- Next is the creation area. This is where you place the items that you will edit and animate.
- The work feature area is where you change from creation items to editing items and also the sky lab. This will be explained more later.

EXERCISE 1: SETTING UP YOUR WORKSPACE

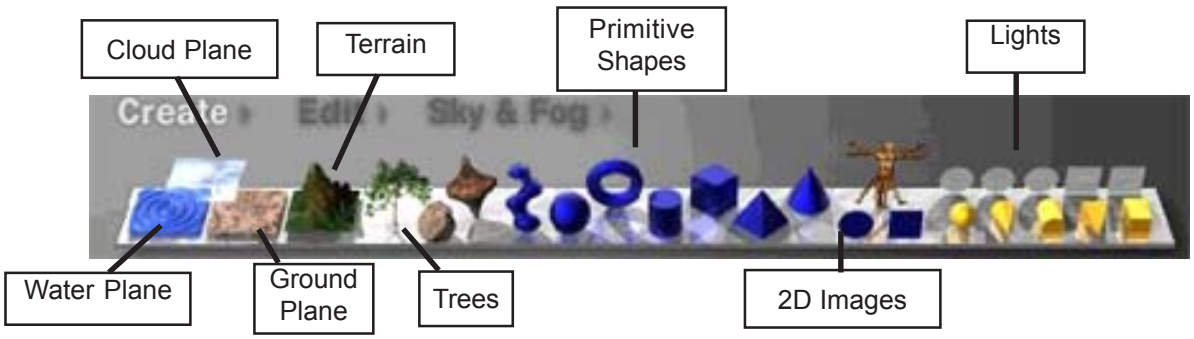
Steps:

1. **Open** Bryce, if it is not open already.
2. Set up your work space to **800 x 600**
3. Place the camera at **top center** looking down
4. Now click on your grid and delete it.

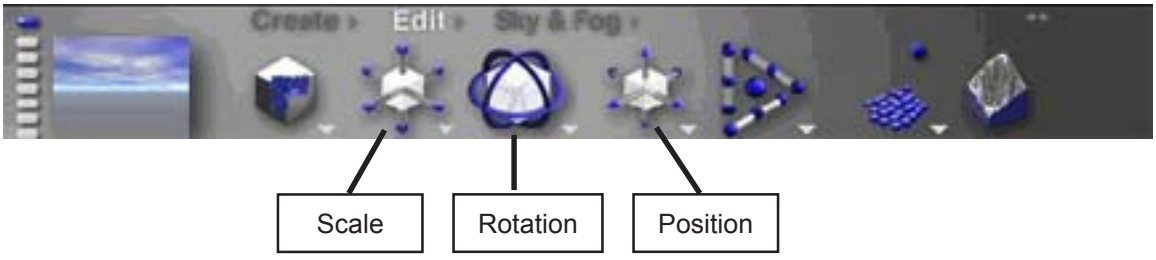
After doing that, get ready to create 3D!

CREATING OBJECTS OR ITEMS:

Clicking on the **creation tab** opens an area filled with what can be placed into Bryce.



You can also edit any object using these tools:



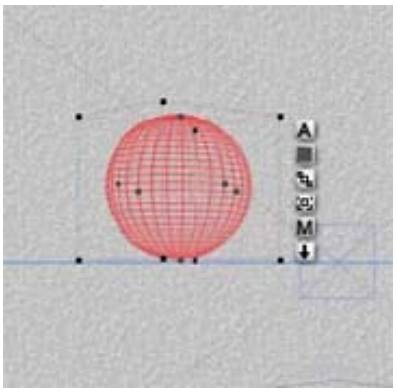
EXERCISE 2: CREATING OBJECTS OR ITEMS

Steps:

1. Using your set up document…create a **sphere**.
2. Add a **square**.
3. Select your sphere and using **scale** tool, make it bigger.
4. Now select the square and using the **rotate** tool, make it spin.
5. Select the sphere and using the **position** tool, move it around. Notice the different parts of the tool moves it in different directions…as always, practice will be needed.
6. Select the sphere and **delete** it…do the same with the square

EDITING MATERIALS OR APPEARANCE:

Besides editing the size, and orientation (rotation), you can also edit the texture (surface appearance). This is done by clicking on the **M** near each object and getting into the **Materials Lab Window.**



Clicking on the M of any object will open the window below…This is the material lab…where you will edit the properties of the material you select. First thing is to select a material for your object…you can either accept the one that appears (the last one used) or select a new material for yourself. To select a material, click on the triangle noted. This opens the materials.

The center area is attributes of the material…and on the right is the Material Texture windows. Stay away from the right area! Wait til you understand this from later learning or just play with it…getting what you want is next to impossible when first starting. Move the sliders in the middle area and look at the effect to the preview. When you like what you have done, click the check mark.

EXERCISE 3: EDITING MATERIALS OR APPEARANCE

Steps:

1. Create a sphere in your work area.
2. Click on the M and edit the materials.
3. Choose any material to apply and click the check mark in both the materials and materials editor.

   Notice that you cannot see what changes happened. That is because to see effects besides scale, position and rotation, you need to render….rendering is letting the computer generate an image based on the info you provided. In Bryce, this is done with the render button on lower left.

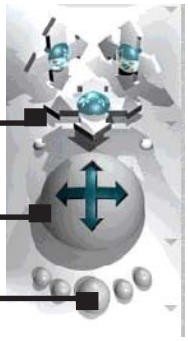
EDITING MATERIALS OR APPEARANCE PART II:

When you create something and are ready to see it rendered, use the following tools. First change your view to the director view, denoted by the director chair in work window view area, then position the image using the position tools…these do not move your objects, rather these change you view of the entire picture.

Pan right and left

Rotate and **skew** picture

Finally, push the **render button** and wait for the computer to generate the image.



YOU MUST RENDER an image to export it as an image, if you export a wire frame, you will get a wire frame.

EXERCISE 4: EDITING MATERIALS OR APPEARANCE PART II

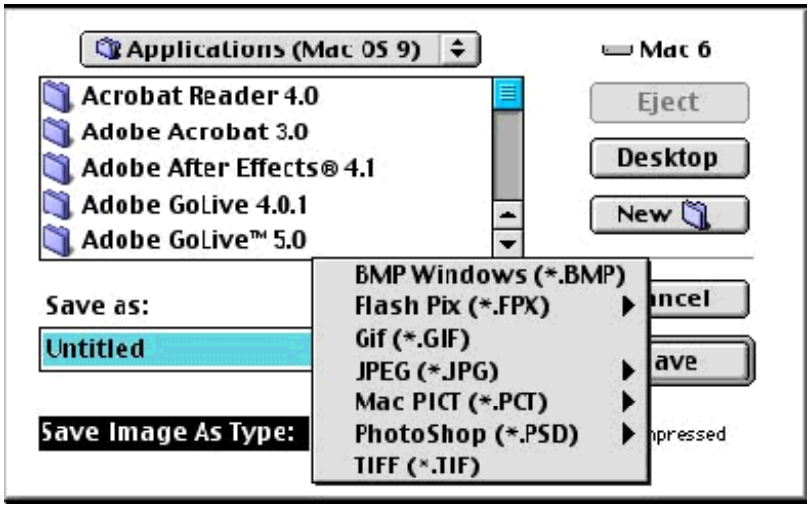
Steps:

1. Add a cube to your image.
2. Select a material and position it near the sphere.
3. Push the render button…Neat!

EDITING MATERIALS OR APPEARANCE PART III:

Now that you have a rendered image, you can do two things…one is click on any tool and continue the creating process or you can save that image as.

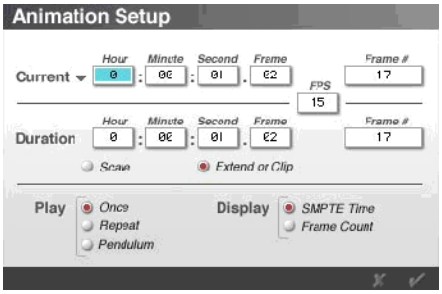
A saved image is what you see on the screen…it must be rendered if you want it complete.
File>Save Image As…



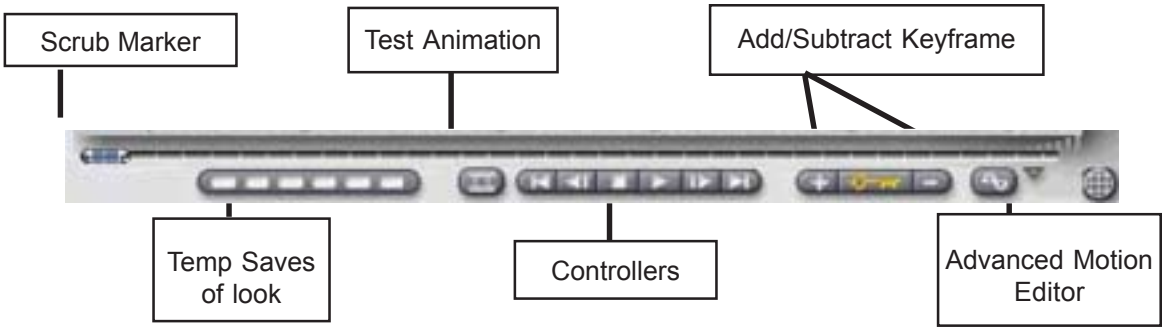
Now, what you have just done with a simple object can also be done with the sky, a ground plane, a cloud plane, a water plane and a mountain object. Rather than going into all of their different features, I suggest you play with them on your own time as you can create any look you want…Really, any look you can imagine.

ANIMATION:

Under **Menu > File > Animation setup**…
The window to the right pops up…here is where you enter the desired length of your animation (duration) as well as the desired frame rate (fps). 30 frames a second is film quality, while 8 frames a second is good for tests. 15 fps is good for web and general animation. Remember!!! Rendering takes lots of time, more frame/sec equals more time.



Creating the length of your animation creates the following:
A time lime of the desired length and your first Key frame. There is no limit to how many key frames you can have, but the fewer the better as they add time to the render and add to the saved file size.



EXERCISE 5: ANIMATION

Steps:

1. Taking the document you have already set up, **File > Animation Setup** and put in **5 seconds at 8 fps**.
2. Make sure scrub marker is at beginning of time line. Move **scrub marker to 3 seconds** and move your objects around a little.
3. Move **scrub marker to 5 seconds** and move your objects some more.
4. Now Click on **Camera View** by moving work window view.
5. Now click on **test animation** and wait.

You just animated something you created!!!

EXERCISE 6: REVIEW

Steps:

1. I want you to open a **new blank file**…Set it up as you were shown.
2. Create 3 objects…A **sphere** positioned off the ground, a **ground plane** and a **terrain/mountain**.
3. Give each a **material**.
4. Now **set up the animation** for 3 seconds at 12 frames per second.
5. Position the camera so it sees the sphere and the mountains behind it
6. Move **scrub marker to 1 second** and move the sphere to the ground.
7. Using the **edit scale** tool, squish the sphere a little.
8. Now, move the **scrub marker to 2 seconds**.
9. **Move** the sphere up off the ground and make if round again.
10. Move the **scrub marker to 3 seconds** and place the sphere just on the ground.
11. Click on **Test animation** and watch!

RENDERING:

To output your final animation into QuickTime, you must File> Render Animation.
Things to remember:

- The window you are viewing is what will be rendered…to render the camera view…you must select the camera view from work view controller.
- There are different compressors to render with…each has a benefit and limitation; you need to learn them to make sure you are using the correct one based on your desired output.
- A high frame per second creates smooth animations and huge file size…balance this depending on output destination.
- Using no compression is best for importing into a video editor.
- Use cleaner 5 to shrink file size after editing.
- The size of the window is the size of the QuickTime movie…to change to a smaller size…use the document setup area and set it to 320 x 240…this is best for most animations because of file size and web destinations.
- On a PC it defaults to AVI…change to Quicktime

CRITERION TEST
20 min

This is the criterion test for the Bryce 5 module. It is going to test your comprehension of the workshop you just participated in or allow you to test out of the Bryce 5 module.

- Begin by opening the program, if it is open, create a new document
- Set the document up as a 800 x 600
- Position the camera as taught and delete the ground plane
- Add a Mountain, apply a material
- Add another mountain, apply a material
- Add a sphere, place between mountain and camera, apply a material
- Add a square, place between mountain and camera, apply a material
- Place all objects so mountains are in background and sphere and square are in foreground.
- Create a ground plane and apply a material
- Set up animation to 5 seconds at 8 fps (frames per second)
- Set scrub marker at 0 and position camera so all objects are visible (remember to switch views to check your placement).
- Move scrub marker to 1 second and make some moves with the sphere and square
- Move scrub marker to 2 seconds, add a rotation to the sphere and square.
- Move scrub marker to 4 seconds and make some move with the square.
- Move scrub marker to 5 seconds and move the sphere and rotate the square
- Render the image
- Save image as a tiff on to the desktop.
- Change the window to 320 x 240 and render the animation, use animation compressor and save to desktop