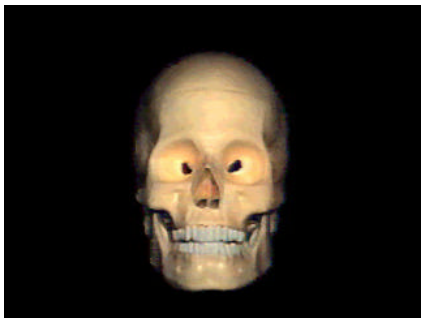
# Quick Start Guide To Making a QuickTimeVR Object Movie

TheQuickTime VR (virtual reality) technology from Apple Computer allows you to interact with and manipulate three dimensional objects as if you were holding them. With this technology, you and your students can rotate and examine anything from everyday objects to priceless artifacts.

## THE PROCESS

### GENERATING STILL IMAGES OF YOUR OBJECT

Before you create your QTVR Movie you need to capture a series of images/frames of your object. The frames can be captured with a camera or they can be rendered. The resulting images must be digital in a PICS, MooV, Scrapbook or PICT format, and they should be saved in the form of "name.#". (ex. object.01, object.02, etc.). Taking 36 images for each axis of the movie is optimal, but you can take as few as 8 frames and still get a great movie.

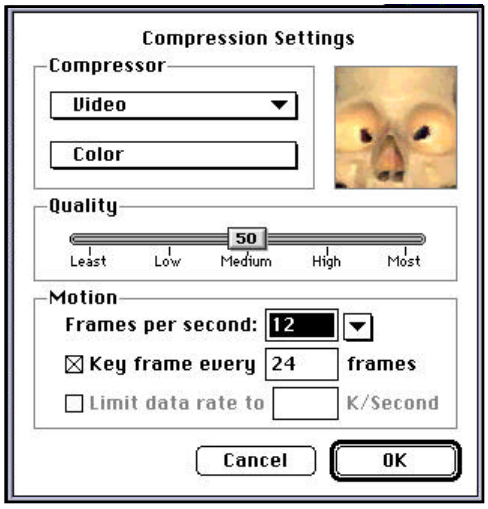


skull.001

### CONVERTING YOUR STILL IMAGES INTO A LINEAR QUICKTIME MOVIE

Once your still frames are taken, you will need to combine them into a linear QuickTime movie using a utility called ConvertToMovie. ConvertToMovie is included in the QTVR folder in the HS Utilities folder on the HyperStudio Resource/Preview CD.

1. Open the ConvertToMovie application.
2. ConvertToMovie will prompt you to choose the first image in your series. Navigate to the folder containing your images, choose the first image, and click on OK.
3. ConvertToMovie will now prompt you to choose the last image in your series. Select the last image and click on OK.



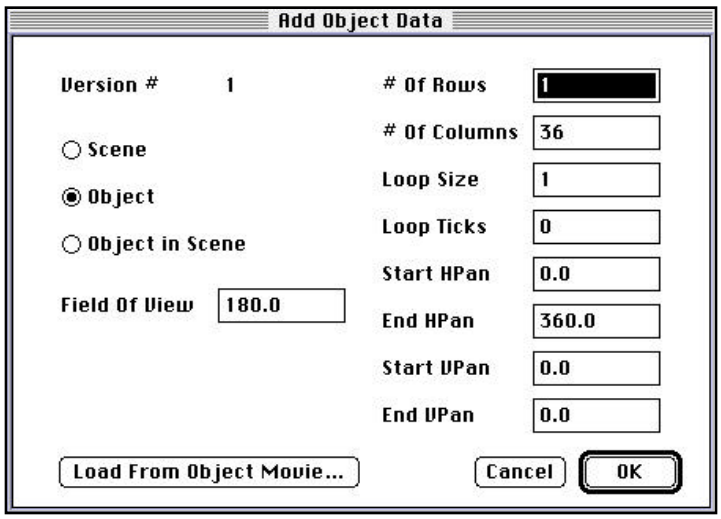

4. A Compression Setting dialog will appear. The default settings will work fine, but feel free to play around with quality and compression if you desire. When you are satisfied with the options, click on OK.


5. A Conversion Options dialog will appear. If you would like to share this movie with someone using the Windows platform, check "Flatten movie" and "Single fork". Click on OK.

6. A dialog box will appear allowing you to name your movie and assign a saving location. Remember, if you want to share the movie with Windows users, make sure to include the .mov file extension to the end of the movie name.
7. ConvertToMovie will now combine your images into a linear QuickTime movie.

**CONVERTING YOUR LINEAR QUICKTIME MOVIE TO A QUICKTIME VR OBJECT**

Using the application Make QTVR Object you will create a QuickTimeVR Object Movie from a linear QuickTime movie by entering the information needed to manipulate the object. Make QTVR Object is included in the QTVR folder in the HS Utilities folder on the HyperStudio Resource/Preview CD.




1. Open Make QTVR Object and open your movie.
2. From the Edit menu, choose Add Object Data.
3. Check the Object radio button.
4. In Field of View, use the default settings of 180 degrees. This setting affects the rate at which the movie rotates.
5. Under # of rows, enter the number of vertical pan positions you photographed or created. Enter 1 for a single row/axis of photographs.
6. Under # of columns, enter the number of pictures you photographed or created for each row. Enter 36 for a complete set of photographs taken all around the object at 10 degree increments, or if you only took 8 pictures, enter 8.
7. In Start HPan and End HPan, enter the starting and ending horizontal pan positions. Choose the defaults of 0.0 degrees and 360.0 degrees which indicate that the input frames make up a complete circle around the object. When you enter 0.0 under Start HPan, your QTVR movie will open showing the first frame of your linear QuickTime movie.
8. In Start VPan and End VPan, enter the starting and ending vertical pan positions. Choose 0.0 and 0.0 degrees if the input frames were taken in a single horizontal row around the object. For more than one row or axis: If you started photographing with the camera directly above the object, you would set Start VPan at 90.0. If you finished with the camera directly below the object, you would set End VPan at -90.0. (Using more than one axis is a more advanced technique - you may have to experiment).
11. Choose OK. The movie is saved as a QuickTime VR object.

**VIEWING OPTIONS**

You can change the frame which first displays when your movie appears. Rotate the object to the view you want to use as the poster view (first appearing frame). Select Set Poster View from the Edit menu, and the view you selected is now saved as the poster view.

**CROSS-PLATFORM COMPATIBILITY**

You can also make the object playable on Windows computers.
1. From the File menu, choose Save as Cross Platform.
2. Enter a name for the Cross-Platform version and choose Save.

Note: The object must have the suffix .mov (e.g. vrobject.mov). For compatibility with Windows 3.1, use the 8.3 file naming convention.

**USING QTVR MOVIES IN HYPERSTUDIO**

Once you have made your QTVR Object movie, you can add it to HyperStudio as you would any other QuickTime movie. Go to the Objects menu and choose Add a Button. Choose the invisible square button type and place the button on your card. At the Actions menu, choose Play a Movie or Video and then choose the Disk File (QuickTime) movie option. Navigate to your QTVR movie and click on Open. Place your movie on the card. At the QuickTime Movies dialog box, check Show First Frame. Click OK and Done. You can now interact with the object in your movie from within HyperStudio.

**PANORAMA QTVR MOVIES**

The same way you added a QTVR Object movie in HyperStudio, you can also at a QTVR panorama movie. This type of movie places the user in a landscape they can look around in. They can even zoom in and out using the Option and Control keys.