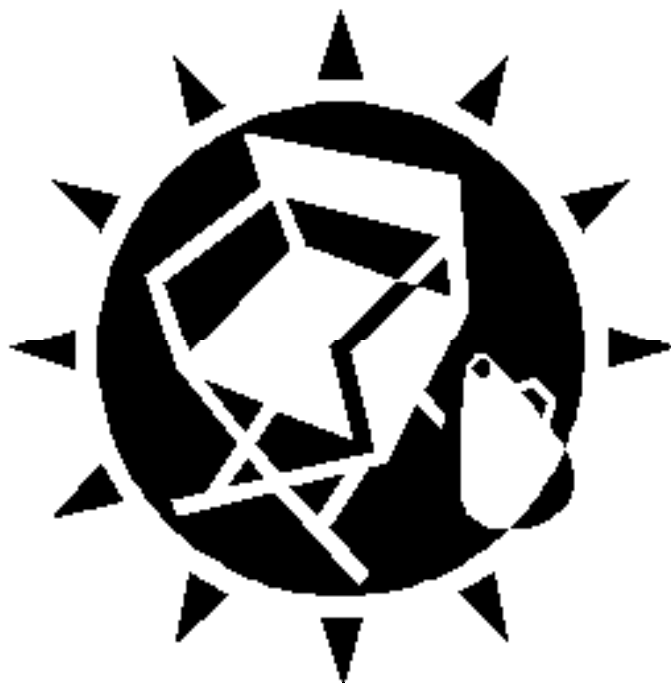


Director 3.1



Product Demonstration Script



MACROMEDIA

SETUP

System Requirements

System Hardware

- Color Macintosh
- 8-bit color display card
- color monitor
- hard disk with 5Mb disk space free (2 Mb if Director is already installed.)
- 5Mb RAM minimum, 8 Mb preferred
- MacRecorder (optional)

System Software

- System 7.0 or later preferred
- System 6.0.7 or 6.0.8 (add TrueType extension)
- QuickTime extension
- MacRecorder Driver (optional)

Applications & Extensions

- Director 3.1 or later
- SoundEdit Pro 1.0 (optional)

Files You Need

Graphics

- Device.PICT
- Stars.PICT

QuickTime Movie

- Earth.QT

What Is Covered

- 1.. Introduction to Director
- 2.. Director's User Interface
- 3.. Importing
- 4.. Cast
- 5.. Score Sequencing
- 6.. Animation Path
- 7.. Transitions
- 8.. Sounds
- 9.. SoundEdit Pro (Optional)
10. Preparing for Interactivity
11. Inking Objects
12. Paint Window
13. Interactivity
14. Tempo
15. Player for Windows

Software Configuration

System Configuraiton

- QuickTime installed
- Sound volume level turned up to level 6 or 7
- Display card at 8-bits
- TrueType font installed in System

Director Configuration

- Director memory partition set to 6Mb minimum
- Director open
- Panel Window open
- Cast window open showing only 2 levels
- **Stage background color set to black**

Sounds

- On The Money.sound

Director Movie

- Director Demo

COVERAGE

1. Introduction to Director

Starting Director

- Launch Director by double-clicking on the Director application icon.
- Open the Director Demo movie and play it in full screen mode.
- Run through the movie discussing what we will be doing in this demo.
- Close the movie.

Today, we'll show you how part of the Global Navigation System presentation was created using Macromedia Director for promotional and technical simulation purposes. Director was used because it allows you to combine and synchronize the five basic multimedia data types (text, graphics, animations, sound and video) into a multimedia production.

In this demonstration, we'll discuss three topics.

1. The process for creating multimedia productions in Director.
2. How Director was used to create the GNS presentation including the Stars background, spinning globe, and sound effects.
3. Platform and distribution issues.

Before going any further, its helpful to understand the four basic steps used to develop multimedia productions in Director.

The first step is to assemble your media sources.

The second step is to layout or sequence the media sources that were just assembled.

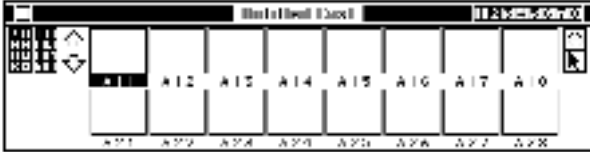
The third step is to add interactivity.

The fourth step is to distribute the finished production.

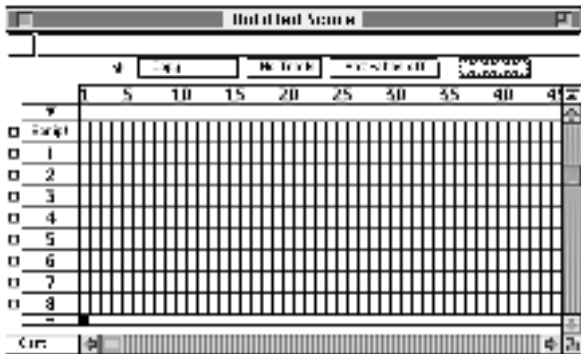
Now, let's take a look at Director's user interface.

2. Director's User Interface

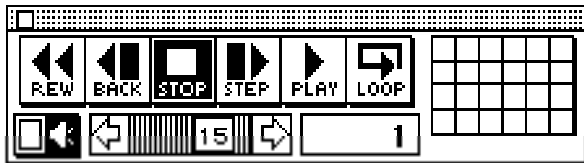
- Point to the Stage.
- Open and point to the Cast window.



- Open and point to the Score window.



- Open and point to the Panel window.



Director is based on a metaphor of a stage production. That is, Director has a stage, a cast of characters, and a score that tells the cast members what to do, where to be, and when to be there.

The **Stage** is the entire screen and is where the actual presentation takes place. The **Cast** is the collection of multimedia elements such as images and sound that are used in a production. The **Score** is where the actions of the castmembers are sequenced and synchronized.

The Score measures time in frames and an element must be in the Score in order to appear on the stage.

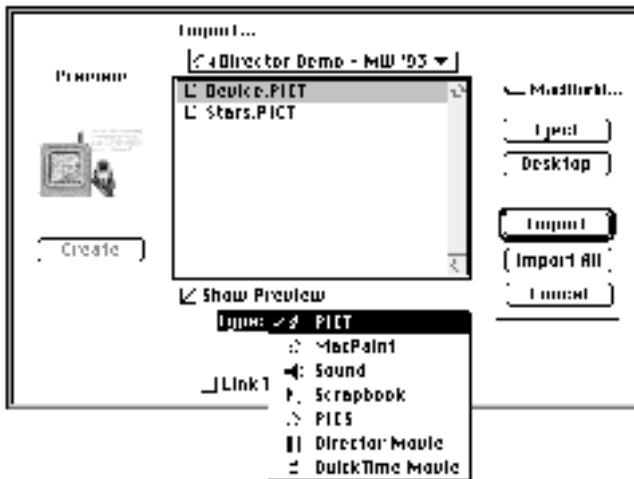
The **Panel** controls action on the stage with simple VCR-like controls.

Now that you're familiar with Director's user interface, we will begin to develop the GNS presentation. Our presentation will consist of a spinning globe on top of a background of stars. We will also include a picture of the Direction 2000 device, and add a music clip to give the presentation some life.

3. Importing

Import QuickTime logo

- select Import... from File menu
 - select PICT as the Import Type
 - select *Stars.PICT*
 - import all
-
- select Sound as the Import Type
 - select *On the Money*
 - import
-
- select QuickTime Movie as the Import Type
 - select *Earth.QT* file
 - import



As we discussed, the first step in developing our multimedia production is to assemble or collect the media sources to be used.

We can either import existing media sources or create new graphics and animations in Director.

In this case, we need to import the Stars background, the spinning globe, the image of the device, and the music.

The Cast window contains miniature representations or thumbnails of all artwork that is assembled into Director. Think of the Cast window as a multimedia database.

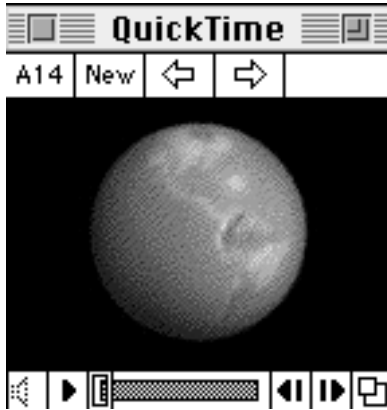
To do this, we select the Import option under the File menu.

Notice that we can import a variety of media sources as displayed in the pull-down menu consisting of the following formats: PICT, MacPaint, Sound, Scrapbook, PICS, Director movies, and QuickTime movies. The support of many data types enables you to produce media-rich productions and presentations.

Once we select the import type and file to be imported, we can click the import button to bring the file into the Cast window.

4. Cast

- double-click on the *Earth.QT* castmember to display the QuickTime window
- play *Earth.QT* movie



- select the Cast window again
- select Cast Info... from Cast menu
- select Loop checkbox to enable it
- click on the OK button



- close the QuickTime window displaying *Earth.QT*

The Cast window provides an easy way to organize and reference your source material as you develop your multimedia production.

Once the source material is brought into Director, we can also use the Cast window to view and customize the behavior of each element. For example, we can double-click the QuickTime movie to preview it as you see here, or bring up the Cast Info window to manipulate the behavior of the particular item.

In this case, we want the globe to continue to revolve during the entire time it is on the stage. We can do this by checking the Loop option in the Cast Info dialog box.

Now that we have assembled our media sources, we need to layout where and when we want each media element to appear on the stage.

5. Score Sequencing

Parts of the Score

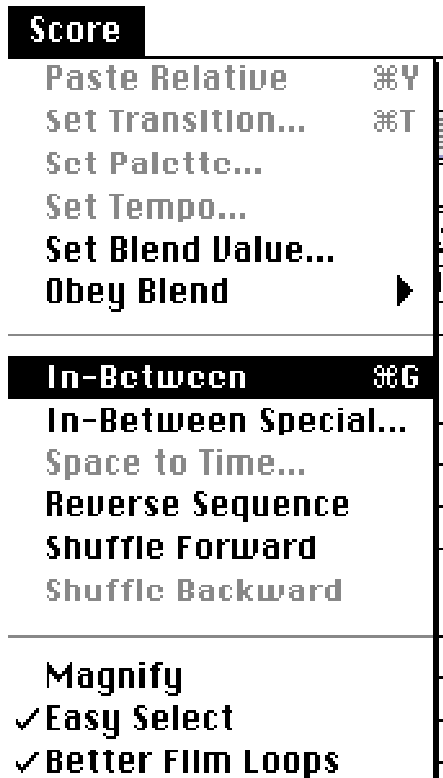
- select Score from Windows menu to show score
- click and drag across Score frame numbers to highlight all channels for several frames
- click and drag across Score channel numbers to highlight all frames for several channels

Placing the Background on the Stage

- select channel 1, frame 1 in Score
- select *Stars.PICT* castmember in Cast window
- drag onto Stage and center
- drag select channel 1, frames 2 thru 37 in Score

Tweening

- select In-Between from the Score menu



Playback Head

- Move the Playback Head forward and backward to show that the *Stars.PICT* is displayed from frames 1 through 37.

The layout or synchronization of the source material is the second step in our development process and is done using the Score window.

The Score is a powerful feature in Director since it allows us to integrate graphics, animations, sound, video, and text together to create compelling and productions.

The Score can be thought of as a virtual piece of film that moves from left to right. Each column represents an individual frame of the movie. Each row or channel represents a layer in which cast members may appear. The lower the channel, the further back the corresponding cast member is on the stage. The higher the channel, the closer the cast member is to the front of the stage. This way, individual media elements can be overlaid on the stage in much the same way special effects are created for the movies or television shows.

Let's place the background on the stage by selecting channel 1, frame 1 and dragging the image from the Cast onto the Stage. In order to keep the background on the stage for the entire length of the presentation, we need to fill up 36 frames of the score with this image. To do this, we select the object and then use the "In-between" option in the Score menu.

The "In-Between" menu option copies the selected image to each of the highlighted frames.

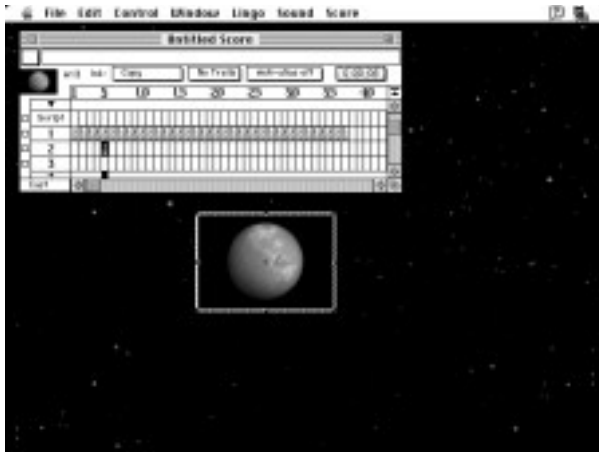
Notice that as we move the Playback head in the Score, the background appears and disappears from the Stage as we move forward or backward in time.

Next, we need to place the globe on the stage.

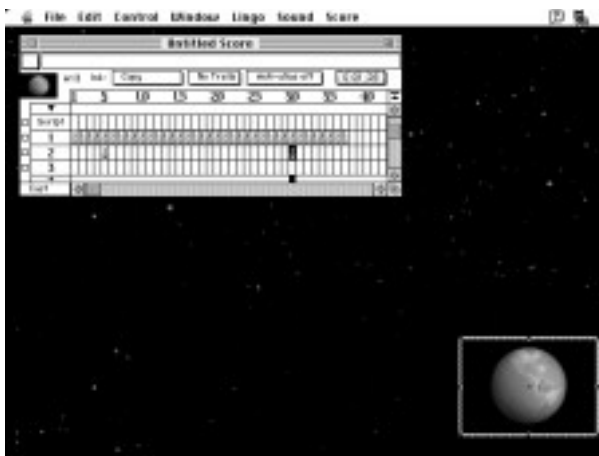
6. Animation Path

Setting Key frames

- select channel 2, frame 5
- place *Earth.QT* castmember in center of Stage



- select channel 2, frame 30
- place *Earth.QT* castmember in bottom right corner of Stage.



In-Between Special

- drag select in channel 2 to select frames 2 to 37 in the Score
- select In-Between Special from Score menu
- Click on In-Between button
- Rewind and play the presentation

Let's place the globe in the middle of the stage and tell Director to move the spinning globe down to the lower right-hand corner of the stage using a technique called **Key Frame Animation**.

Key Frame Animation allows us to specify a beginning and end point in the animation path. Director then creates an animation by filling in the missing points based upon the key frames specified. Adding animation makes the presentation more exciting and maintains your audience's attention.

Let's select channel 2, frame 5 as the first key frame in the animation since we want the globe to display on top of the background. Next, drag the image from the Cast onto the center of the Stage.

Now, let's select channel 2, frame 30 as the second key frame in the animation. Again, we drag the image from the Cast onto lower right-hand corner of the stage.

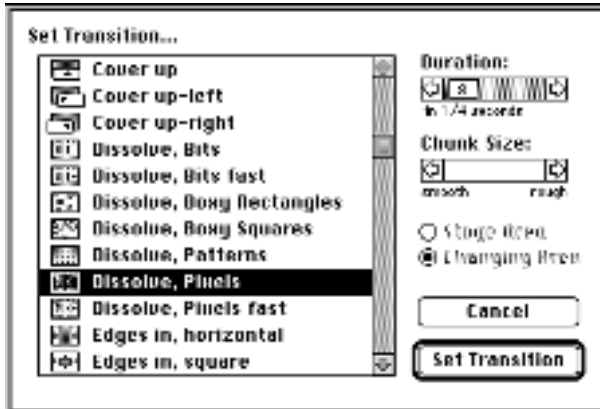
The power of Director lets us use the position of the Key Frames to define the path of the animation. By highlighting the range of frames and choosing **In Between Special**, we can define a smooth animation path across the highlighted frames. Alternatively, we can define each frame of the animation if desired.

Let's look at the production so far.

7. Transitions

Setting Transitions

- double-click in transition channel, frame 5
- select Pixel Dissolve
- select eight 1/4 second intervals for the time delay
- Click on the Set Transition button



- Rewind and play the presentation

Now lets add some pizzazz to the presentation. There are special channels in Director that enable the user to address the Tempo, Palette, Transitions, Sound, and Scripting.

The Transition channel is the channel with the gradient upward arrow icon.

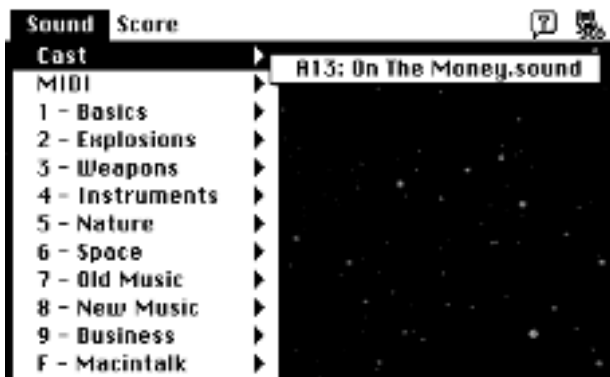
Transitions control the stage entrance and exit of objects. In this case, we'll tell Director to perform a Dissolve for the globe when it first appears on the Stage.

Review the transitions.

8. Sounds

Setting sound

- select sound channel 1, frames 5 thru 37
- select sound *On The Money .sound* from the Sounds menu



- review.

Next, let's add the sound to this presentation. Adding sounds to presentations and productions really grabs the user's attention and adds impact to the point you are trying to make.

The Sound channel can be identified by its speaker icon and allows us to add music, sounds, and voice-overs to our production. There are two sound channels that can be used to combine voice with music or sound effects.

Let's select the first sound channel from frames 5 through 37. Next, we select the On the Money sound clip from the Sounds menu.

Let's take a look at the presentation so far.

9. SoundEdit Pro (Optional)

Record sound

- bring SoundEdit Pro to foreground in MultiFinder (or launch from Finder)
- set recording level with MacRecorder, speaking "Direction 2000"
- select record button and record "Direction 2000", speaking 2 or 3 times
- select stop button
- select Play button to listen
- drag select best waveform of "Direction 2000"
- Copy and Paste into new sound file
- Save new sound file as "Direction 2000"

Import Sound

- Import sound file "Direction 2000"

Setting sound

- select sound channel 2, frame 35
- select sound "Direction 2000" from Sounds menu

Besides importing sound, we can also use another Macromedia product called SoundEdit Pro to create a new sound on the fly.

Here, we can digitally record the name of the product "Direction 2000" using the MacRecorder.

Once the sound is recorded, we can import the sound and sequence it into the rest of the presentation.

10. Preparing for Interactivity

Placing the Device on the Stage

- select channel 3, frame 36 in the Score
- select *Device.PICT*castmember in Cast
- drag onto the Stage in left center
- highlight frame 36 and 37
- select In-Between from the Score menu

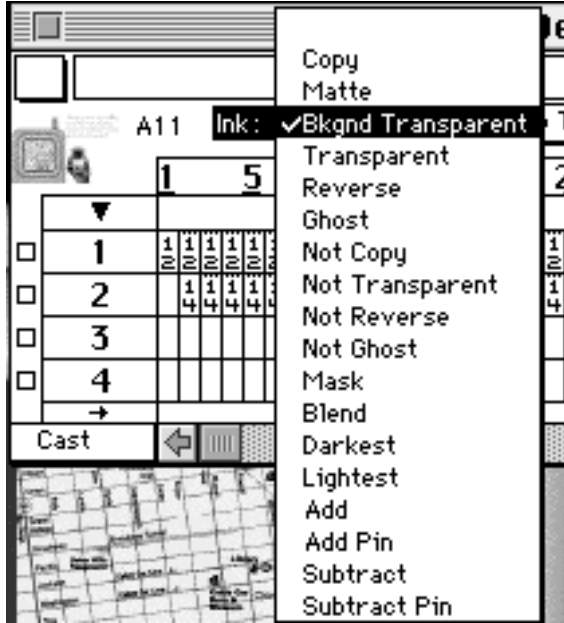
The last element that we will place into the Score is the image of the Direction 2000 device.

We want the device to display at the end of the presentation after the user clicks a button on the screen. This step will set us up for the third step in our development process which is adding interactivity.

Since we want to display the device at the end of the presentation, we select channel 3, frame 37 to drag the device into the score.

11. Inking Objects

- select channels 3, frames 36 to 37
- select background transparent from ink pop-up at top of Score



Notice that the background doesn't show through as the device object appears on the stage. We can easily fix the appearance so that the background shows through by using the Inking feature in Director.

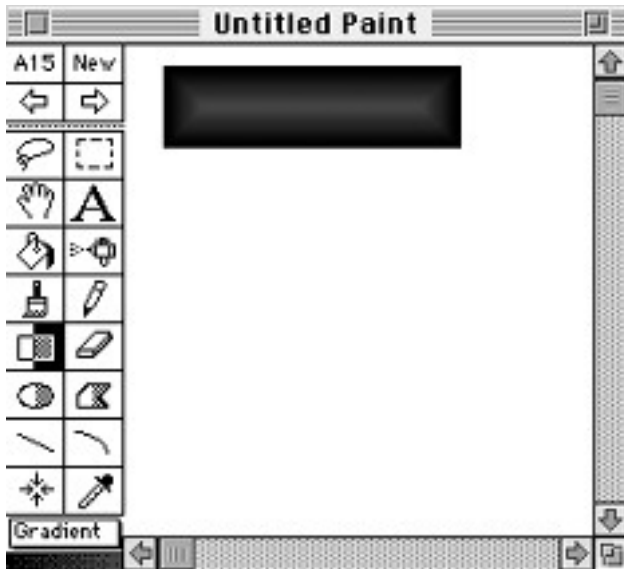
Notice how the background shows through after the inking process.

At this point, the presentation has a background made up of stars, a spinning globe, the device image, and music.

- select channel 4, frame 37 to deselect sprite
- play the presentation

12. Paint Window

- select Paint from the Windows menu to open the Paint window
- double-click on filled box tool to bring up gradient dialog
- set gradient type - colors foreground black to destination red, shape burst
- click Set button
- draw a rectangular button
- close the Paint window



- select channel 4, frame 34
- drag the button onto the stage in the bottom left corner
- copy and paste frame 34 into frame 35

Now, we'll use Director's 24-bit paint window to create a button for the user to control when the Direction 2000 device is displayed.

The paint window provides a standard set of drawing and color tools and we will use the Filled Box tool to create a rectangle.

By double-clicking in the filled box tool, we can select the color and pattern of the rectangle.

Once the color and pattern have been selected, we can draw the button.

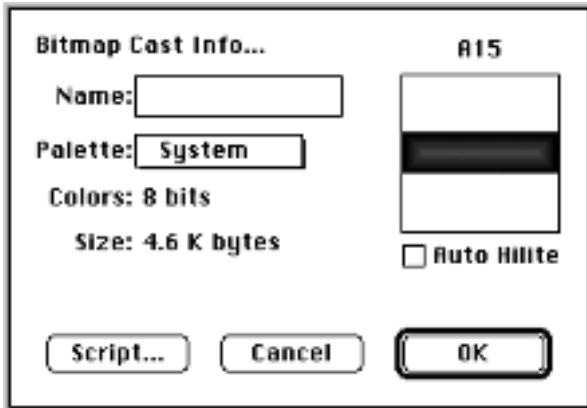
Notice that the new button is automatically added to the Cast window after we closed the paint window.

Next, let's select channel 4, frame 34 and drag the button from the cast window onto the stage. We need the button to remain on the stage for two frames so we can also copy and paste frame 34 into frame 35.

13. Interactivity

Cast Scripts

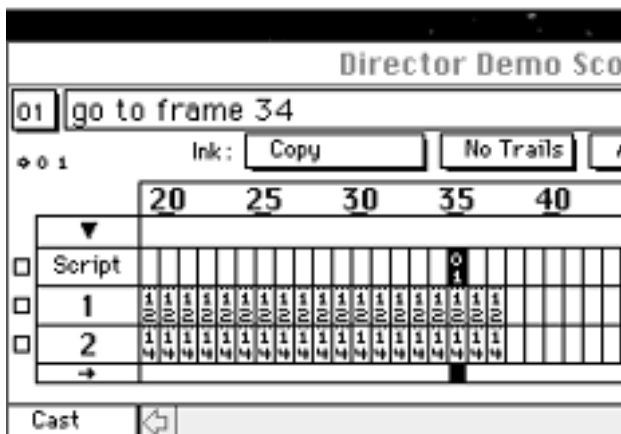
- open Cast window
- select button just created
- select Cast Info... from Cast menu
- click on Script... button



- enter [go to frame 36]

Score Scripts

- click on script channel, frame 35
- click on frame script editor at top of Score
- Enter [go to frame 34]



- close Script window
- Rewind and play the presentation

Now that we've finished the second phase of our development process, synchronizing our media elements, its time to move onto the third stage, adding Interactivity. Adding interactivity creates a more compelling presentation that draws in the user and increases information retention.

In this example, we're going to add intelligence to the button we just created through the scripting capabilities of Lingo, Director's Hypertalk-like scripting language. There are also four types of scripts in Director: Frame Scripts, Cast Scripts, Sprite Scripts, and Movie Info Scripts.

In this example, we'll use Cast and Frame Scripts.

First, we'll add a script to the button to go to frame 36, where the device image is displayed.

Next, we'll add a script to a specific frame in the Score that will loop the playback head back from frame 35 to 34.

Now let's run the presentation so we can see what it looks like.

14. Tempo

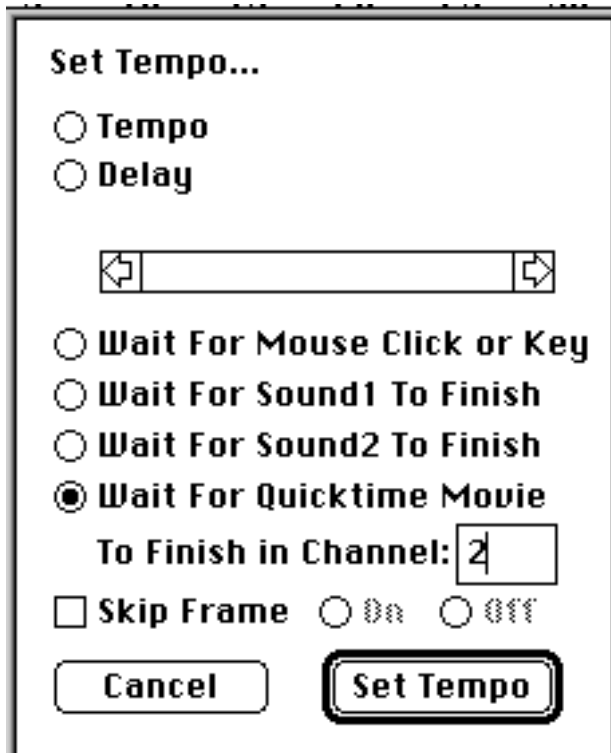
Playback rate

(bring up Panel window if not showing)

- show playback rate in control panel - 15 fps

Wait for QuickTime

- Double-click tempo channel, frame 2
- Set tempo to Wait For QuickTime Movie to Finish In Channel...
- Type 2 into Channel Number
- Click the Set Tempo button



Wait for Sound

- Double-click in Tempo channel, frame 37
- Select Wait for Sound
- Enter Sound Channel 1
- Click the Set Tempo button
- Rewind and play the presentation. Show the mouse icon at the end of the presentation to highlight the Wait for Mouseclick Tempo setting.
- Play the complete GNS presentation again with additional text and tempo effects.

The last thing we are going to add in the Score is a Wait for Mouseclick in the Tempo channel.

The Tempo channel is the channel with the clock icon and enables us to synchronize the entire production such that we can precisely control the flow of the presentation.

We have control over the frame rate for playback and can set time delays, wait for user interaction, and waits for sounds to finish playing before moving ahead in the presentation.

In this example, we want the globe to play through once before moving down the screen. Also, we want the music to finish playing at the end of the presentation before looping to the beginning.

Review.

15. Player for Windows

(have Completed Director movie pre-gaffed and loaded in Director Player for Windows on PC)

- Point at Macintosh this demo is being given on
- Hold up CD-ROM and/or floppy disk
- Pass CD-ROM and/or floppy disk to person at Windows PC or insert disk into PC drive
- Click on Play button to start playing on Windows PC

The fourth and final step in our development process is to distribute our completed production. There are three ways to distribute Director productions:

1. Playback as an application on other Macintosh computers with Director installed.
2. Run as a Player using the Macintosh or Windows Player.
3. Videotape. By the way Director also supports frame-by-frame recording for broadcast quality videotape production.

Porting the Director presentation from the Macintosh to Windows is a simple one-step process. Once the presentation is on the PC, it looks exactly like it did on the Macintosh.

CONCLUSION

You have seen how Director 3.1 can quickly and easily allow you to create and combine animations, text, graphics and video frame sequences and synchronize it all with sound.

In this demonstration, we discussed the:

1. Process for creating productions and presentations in Director.
2. How to use Director to create the GNS presentation with the Stars background, spinning globe, text, and sound effects.
3. Platform and distribution issues associated with completed Director productions and presentations.

Director 3.1 allows you to be the director and create powerful multimedia presentations, visualizations, training applications and desktop video productions. It is this multimedia integration power which makes Director the premiere authoring tool for multimedia productions.

Thank you.