How to use filmmaking techniques

Web designers have an entire history of filmmaking techniques to draw from and inspire them when creating digital content for the web. With Adobe Flash Professional, you can simulate traditional film techniques. As you design Flash movies, think of creative ways to incorporate these effects and look for opportunities to create new effects that may in turn inspire traditional filmmaking.

You can create the following popular filmmaking techniques with Flash:

- Pan, tilt, and zoom effects: Moving the camera horizontally across a scene is known as a pan. Moving the camera up or down across a scene is known as a tilt. Moving the camera away from or toward a subject in a scene is known as a zoom.
- Camera angles: Using the rule of thirds and adjusting the viewing angle can help emphasize a certain aspect
 of your subject.
- *Cross fades*: One image appears to fade in while another fades out, a transitional effect for moving from one image to another.
- *Bounce effect*: A moving object rebounds before stopping. This technique grabs attention and can focus viewers on an area of the screen. This effect is sometimes combined with a sudden sound effect, such as a "boing" or tire screech.

Create a pan, tilt, or zoom effect by using classic tweens

To set a scene in a movie, the camera moves over a large scene and then zooms in to a specific point. A pan (or tilt) followed by a zoom is a good technique to introduce a digital narrative. Zooming in focuses the viewer's attention on a particular part of the image.

To create a pan and zoom effect:

- **1.** Open an existing Flash document or create and save a new Flash document (ActionScript 3.0).
- **2.** Import an image to the Stage and convert the image to a movie clip symbol.

Note: To create a pan, tilt, or zoom, the image must be larger than the Stage. In the example, the image is about twice as large as the Stage (**Figure 1**).

3. Align the left edge of the image to the left edge of the Stage.

The image should cover the Stage from top to bottom and extend well beyond the right edge of the Stage.



Figure 1 Image shown to the right of the Stage

4. Click the Outline toggle button in the layer that contains the movie clip symbol (**Figure 2**).

The image (and any other content on the layer) is displayed as an outline.

Outline mode makes it possible to see the border of an object and the Stage or other objects below it (**Figure 3**).

5. In the timeline, select the frame where you want the pan to end and select Insert > Timeline > Keyframe.

The timeline now contains start and end keyframes for the tween (**Figure 4**).

6. Turn off Outline mode by clicking the Outline toggle button again.

Note: Turning off Outline mode makes it easier to select and reposition the image.

7. Select the end keyframe. Drag the instance of the movie clip symbol to the left until the right edge of the image is aligned with the right edge of the Stage and extends off the Stage to the left.

Note: You can hold down the Shift key as you drag to maintain the vertical position of the image.

8. Select the starting keyframe and select Insert > Classic Tween.

Flash adds the classic tween span between the start and end keyframes (**Figure 5**).

This classic tween moves the symbol horizontally across the Stage (a pan). The second keyframe that ends the classic tween will also serve as the starting point for the next tween.

9. Select Control > Test Movie > In Flash Professional to preview the pan.

The image pans left, as if the camera were panning right.

10. Close the preview window.

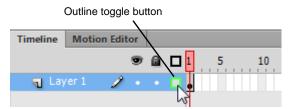


Figure 2 Timeline panel



Figure 3 Outline mode

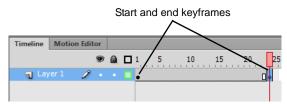


Figure 4 Timeline panel



Figure 5 Classic tween span

- 11. Add a third keyframe further along in the time line.
- **12.** Insert another classic tween between the second and third keyframes (**Figure 6**).
- **13.** Select the third keyframe and select Modify > Transform > Scale.

Note: You can also select the Transform tool in the Tools panel.

Transform handles appear on the image (Figure 7).

14. Shift-drag one of the corner transform handles to resize the image.

In this example, we made the image larger to create the zoom in effect.

Note: You can make the image smaller to create the zoom out effect, but the image needs to be larger enough to cover the boundaries of the Stage at all times.

- **15.** With the image still selected, select Modify > Align > Align To Stage.
- **16.** Select Modify > Align > Horizontal Center.
- **17.** Select Modify > Align > Vertical Center.

 The image will now zoom to the center of the image.
- **18.** Select the second keyframe (the start of the second classic tween).
- **19.** In the Tweening section of the Properties panel, increase the easing to a value between 60 and 100 (**Figure 8**).

The zoom will start quickly and slow down as it arrives at the resting point.

- **20.** In the Timeline panel, click the New Layer button (**Figure 9**).
- **21.** Rename the new layer actions (Figure 9).
- **22.** Select the last frame of the actions layer and insert a new keyframe.

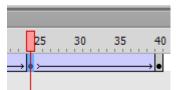


Figure 6 Classic tween span between the second and third keyframes



Figure 7 Transform handles



Figure 8 Properties panel, Tweening section

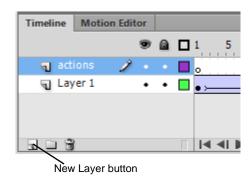


Figure 9 New Layer button in the Timeline panel

23. Select Window > Actions to open the Actions panel Make sure The Actions toolbox is open and Script Assist is turned on (**Figure 10**).

Note: If the Actions toolbox is hidden, click the triangle or drag the vertical bar to open it. If you don't see the parameters area in the Actions panel, click the Script Assist button.

You need to place a *stop* command at the end of the timeline to prevent the movie from looping continuously.

- **24.** In the Actions toolbox, choose flash.display > MovieClip > Methods and locate the stop method.
- **25.** Double-click the stop method to add it to the Script pane in the Actions panel (**Figure 11**).

Note: You can also locate the stop and other methods by using the Index located at the bottom of the Actions toolbox.

- **26.** In the Script pane, select stop method. Then click in the Object text box in the parameters area of the Actions panel.
- 27. Click the Insert Target Path button (Figure 11).The Insert Target Path dialog box appears (Figure 12).
- **28.** Select the Relative option and select root to stop the main timeline from playing when the play head reaches the last keyframe in the movie.
- 29. Click OK to close the Insert Target Path dialog box.
 The Script pane shows the correct code for stopping the movie (Figure 13). The object "this" refers to the root of
- the current timeline. **30.** Close the Actions panel.
- 31. Select Control > Test Movie > In Flash Professional.This time the image pans, zooms, and then stops.
- **32.** Close the preview window.

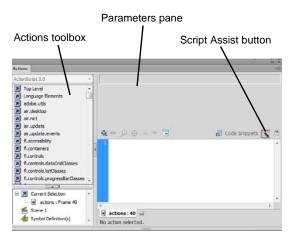


Figure 10 Actions panel



Figure 11 Stop method in the Script pane in the Actions panel

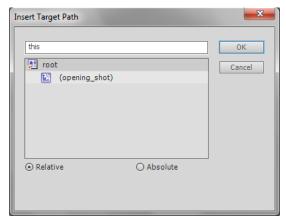


Figure 12 Insert Target Path dialog box



Figure 13 Stop method in the Script pane

Adding frame labels

You may want to add frame labels to the keyframes. Frame labels help you remember (and help other designers understand) what is happening in a particular frame.

To add a frame label:

- Add a new layer called labels as the top layer of the timeline.
- 2. Select the blank keyframe in frame 1 of the labels layer.

 This aligns with the beginning of the first tween (the beginning of the camera pan).
- 3. In the Label section of the Properties panel, click in the Name box and type a label, such as "panning right" (Figure 14). Press Enter (Windows) or Return (Mac OS) to confirm the label.

The label appears in the timeline (**Figure 15**).

- **4.** Insert a blank keyframe in the labels layer that corresponds to the start of the second tween.
- **5.** Add a second frame label above the start of the second tween and name it "zoom."

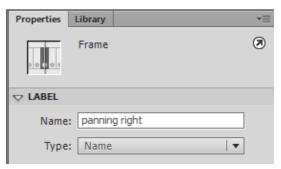


Figure 14 Properties panel, Label section

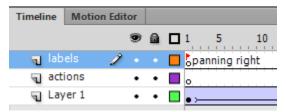


Figure 15 Frame label in the timeline

Further ideas

- For a documentary: Slow the process down to reflect the pace of the narrative. For example, a slow pan and zoom go well with a documentary style narrative.
- For humor or action: Make the zoom-in portion of the pan quick and somewhat unsteady, as if you are looking for the subject of the scene. You might zoom in and out several times during a pan to show you are looking for something.
- For drama: Pan or tilt the scene without a zoom. This method presents a sweeping landscape, such as a mountain range leading to the ocean. Because it takes in the majority of the landscape, the effect adds depth and seriousness to the tone of the narrative.

Camera angles

When you have several images on the screen in a digital narrative, you can use some tricks for emphasis. Use the rule of thirds and adjust the viewing angle to emphasize a certain aspect of the subject.

- The *rule of thirds* states that if you divide the screen into a 3-by-3 grid, the intersections of the lines are areas where the eye will focus. Line up the items of focus at these intersections on the screen.
- You can add importance to a subject by presenting the subject as seen from below. Likewise, you can diminish the importance of a subject as seen from above.

Even though the girl isn't in the center of **Figure 16**, she catches your eye because she is near the intersection of the rule-of-thirds lines.

Looking up at the man having a moment in **Figure 17** makes him look powerful. Angling the camera down on him would make him look smaller and less powerful.

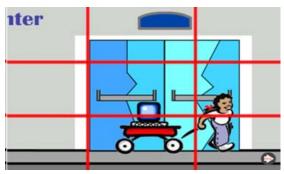


Figure 16 Rule of thirds



Figure 17 Camera angle

Create cross fades by using classic tweens

A transitional effect for moving from one image to another is to fade one image out as you fade the other in.

To create a cross fade:

- **1.** Open a new Flash document (ActionScript 3.0).
- 2. Import two images into the document library.
- **3.** Select the first blank keyframe in layer 1 and drag one of the images to the Stage. Convert the image to a movie clip symbol and center it on the Stage.
- **4.** Add keyframes at frames 20 and 30 in layer 1 (**Figure 18**).

The photo will display until frame 20 and then fade out between frames 20 and 30.

Note: You can place the keyframes anywhere you want to adjust the length of time the photo displays and the duration of the fade. You can also adjust these later by adding or removing frames.

- 5. Select the third (last) keyframe in layer 1. This will be the end of the fade.
- **6.** Select the photo on the Stage. In the Color Effect section of the Properties panel, open the Style menu and choose Alpha (**Figure 19**).

The Alpha transparency value changes to the most recent setting you applied. The default is 0%.

7. Make sure the Alpha value is set to 0%.

The image is transparent on the Stage.

8. Select the second keyframe in layer 1 and select Insert > Classic Tween.

A classic tween span appears between frames 20 and 30 (**Figure 20**).

9. Play the movie in the Timeline panel to see the image fade out.

Next you add the second image and create the fade in effect.

- 10. Add a new layer in the timeline above the first layer.
- 11. Insert a blank keyframe at frame 20 in the new layer. This will be the start of the second photo fading in (Figure 21).



Figure 18 Keyframes for the first photo

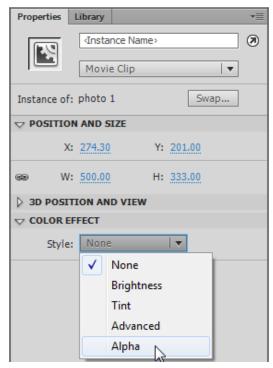


Figure 19 Color Effect Style menu



Figure 20 Classic tween

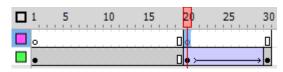


Figure 21 Start of the second photo fade in

- **12.** Drag the second image from the Library panel to the Stage. Convert the image to a movie clip symbol and center the image on the Stage.
- **13.** Insert keyframes at frame 30 and 50 (or later) in the new layer (**Figure 22**).

After fading in, the second photo will play to frame 50. You can put this farther down the timeline to display the second image longer.

- **14.** Select frame 20 in the top layer and select the photo on the Stage.
- **15.** In the Properties panel, open the Color Effect Style menu and choose Alpha. Change the Alpha value to 0%. (It should switch to zero automatically).

The second photo is now transparent and you can see the first photo underneath it.

16. With frame 20 still selected in the top layer, select Insert > Classic Tween.

The second image starts transparent in frame 20 and fades in just as the first image is fading out (**Figure 23**).

- **17.** Select Control > Test Movie > In Flash Professional to preview the movie.
- **18.** Close the preview window.

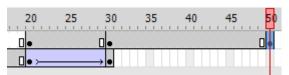


Figure 22 Keyframes for the second image fade

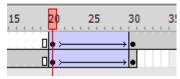


Figure 23 Fade in and fade out tweens

Create a bounce effect by using classic tweens

Some animated text and images that move onto the Stage will seem more life-like if you add a little bounce to them when they reach their stopping point. This is an old animation technique acknowledging that any moving object carries momentum and thus rebounds a bit before it comes to a stop.

To create a bounce effect:

- 1. Open a new Flash document (ActionScript 3.0).
- Begin by adding a symbol to the Stage.In this example we used the Oval tool to create a ball and converted the shape to a movie clip symbol.
- **3.** Position the symbol near the left side of the Stage (**Figure 24**).
- **4.** Insert a keyframe at frame 30.
- 5. Make sure the new keyframe is still selected and move the symbol to the right so that it touches the edge of the Stage (**Figure 25**).
- **6.** Insert a keyframe at frame 40.
- 7. Make sure the new keyframe is still selected and move the ball back to the left a little (**Figure 26**).
- **8.** Insert a classic tween between frames 1 and 30.
- **9.** Insert another classic tween between frames 30 and 40 (**Figure 27**).
- **10.** Click anywhere in the second classic tween span.
- **11.** In the Tweening section of the Properties panel, change the Ease value to 80.
 - The ball will appear to hit the edge of the Stage wall and bounce back, then slow ease to a full stop. You can fine tune the timing of the effect by adding or removing frames and by adjusting the easing values.
- **12.** Add a new layer in the Timeline panel and name it actions.
- **13.** Insert a blank keyframe in the actions layer at the end of the movie. In this example, that's frame 40.
- **14.** With the blank keyframe in the action layer selected, open the Action Script panel and add the *stop* method. Set the Object parameter to *this* to stop the main timeline from playing when the movie reaches the last frame (**Figure 28**).
- **15.** Select Control > Test Movie > In Flash Professional.

 The ball moves across the screen and bounces off the stage wall before coming to a stop.
- **16.** Close the preview window.

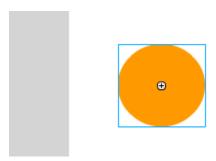


Figure 24 Symbol in frame 1

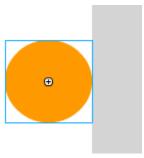


Figure 25 Symbol in frame 30.

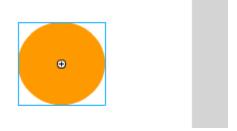


Figure 26 Symbol in frame 40.

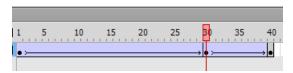


Figure 27 Classic tweens



Figure 28 Stop method