## **CHAPTER 26**

## Illustrated Camera Techniques

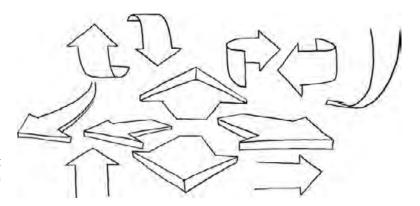
Camera moves and transitions can be shown with special markings on your story-boards. Arrows to show camera or object movement are the most common type of special markings. Other illustrated camera techniques in storyboards include the cross-dissolve between scenes, tilts, pans, and canted frames.

Arrows indicate to the viewer the direction the camera, actor, or object is moving. Any time there is movement in a frame, you should use arrows to make the action clear to all viewers.

The arrows shown here are just a sampling of the types of arrows that work well in storyboards. Three-dimensional arrows are more accurate that 2D arrows in representing motion in a 2D representation of 3D space.

Unlike road signs, an arrow pointing up does not mean move straight ahead. An up arrow means something goes up, or it could mean a camera tilt or boom. You need an arrow pointing away from the viewer in perspective to show something moving away from the camera.

If you just place an arrow in a storyboard, it may not be enough to tell the viewer what is moving or happening. Let's say you're trying to show that the camera tilts up. You can draw an arrow pointing up out of the frame. All that says is that something is moving up.



**Figure 26.1** Sample arrows that can help clarify the meaning of a storyboard image.





Figure 26.2 The arrow shows the rabbit turning and moving back into the distance. Timmy's Lessons in Nature storyboard by Mark Simon. (© 2006 A&S Animation, Inc.)

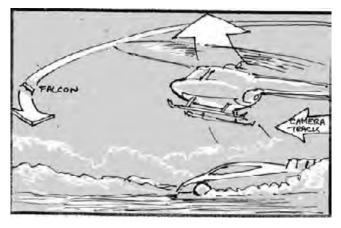


Figure 26.3 Two of the arrows are labeled to make clear which actions are being shown. Captain Scarlet board by Tracey Wilson, Lee Munday, Chris Drew, and Teri Fairhurst.

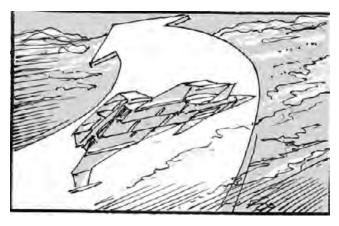


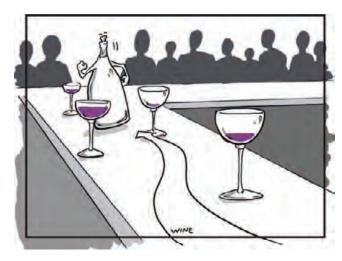
Figure 26.4 When an object is within an arrow, it becomes clear as to what the arrow represents. Captain Scarlet board by Tracey Wilson, Lee Munday, Chris Drew, and Teri Fairhurst.

If you simply write "Tilt" inside that arrow, it becomes perfectly clear that the arrow is referring to a camera tilting on its axis and pointing up. If you write "Crane" in the arrow, it would mean that the camera itself moves vertically. If an object or character is shown moving, then you should write the name of that object in the arrow to tell the viewer to what or whom the arrow relates.

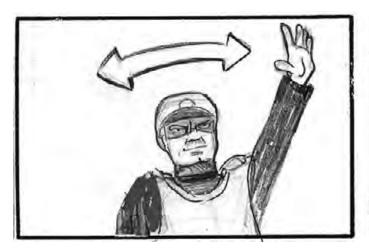
Another style for showing what object an arrow represents is to encase the object within the arrow itself. Arrows can also be used to show something or someone turning around or spinning or to illustrate an erratic route. A two-headed arrow shows the cycle an object makes, such as a swing or someone's arm waving back and forth.

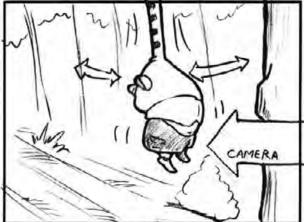
The dissolve or cross-dissolve symbol used on storyboards shows the viewer when one image is supposed to dissolve into the next image. This is done with an X placed between the two consecutive frames connecting opposing corners. Dissolves are used to soften transitions between scenes or to show that time has elapsed.

The symbol for a scene cut, normally used only in animation boards, is a small solid triangle pointing



**Figure 26.5** The path of the arrow shows the erratic movement of the wine bottle. Storyboard by Mark Simon of Animatics & Storyboards, Inc.





**Figure 26.6** On the *left* the arrow shows the man's arm waving back and forth. *Captain Scarlet* board by Tracey Wilson, Lee Munday, Chris Drew, and Teri Fairhurst. On the *right*, the arrows show the path of the snake swinging. *Timmy's Lessons in Nature* storyboard by Mark Simon. (© 2006 A&S Animation, Inc.)

down ( $\nabla$ ) between two consecutive panels. This means there is a cut between two backgrounds.

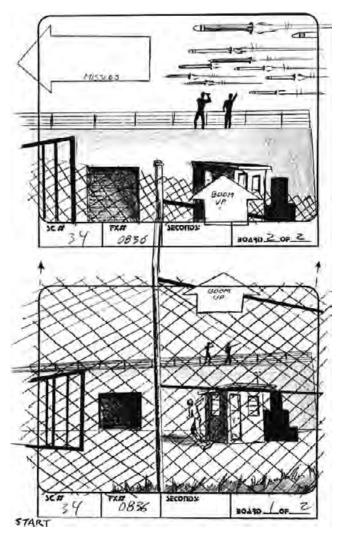
Camera moves can be indicated in a few ways. Pans, tilts, and tracking can be shown by drawing one image over two or more frames and using arrows to indicate the camera movement. Zooming in or out can be shown by outlining the framing of both extremes in one frame and using arrows to show the direction of the zoom. Camera shakes can be illustrated by drawing multiple canted frames around a panel.

An arrow that enters or exits a frame represents an object entering or leaving frame. To show a camera shake, usually due to a large impact or explosion, you can draw lines around the corners of the frame. Camera zooms can be indicated by drawing the beginning and ending framing of the shot with arrows showing which direction the zoom goes, in or out.

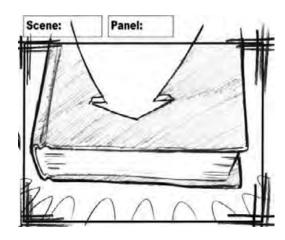
These camera and transition symbols, when used properly, help make storyboards more valuable and easier to understand for the entire crew.



**Figure 26.7** There is a cross-dissolve between the first two frames, as shown by the X drawn between the corners of the frames. There is an edit between the second and third frames, shown by the small solid triangle drawn between them. *Creepers* storyboards by Mark Simon. (© 2006 Lyons Entertainment, Inc.)



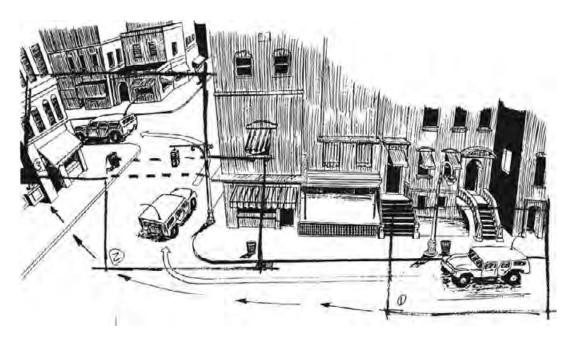
**Figure 26.8** The labels on the arrows are there to show the type of camera movement in this shot.



**Figure 26.9** The book enters frame, as shown by the arrow, and the camera shakes on impact, as shown by the lines on the corners. *Howl High* storyboard frame by Mark Simon.



**Figure 26.10** The camera zooms tighter on the pilot to the final framing that's shown here. *Captain Scarlet* board by Tracey Wilson, Lee Munday, Chris Drew, and Teri Fairhurst.



**Figure 26.11** seaQuest DSV example illustrating a tracking shot. The camera follows from frame 1 to frame 3 along the route shown. Board by Mark Simon. (© Universal City Studios, Inc. Courtesy of MCA Publishing Rights, a Division of MCA, Inc.)

## **CHAPTER 27**

## Numbering

Numbering may seem simple enough. Just mark down a new number for every drawing and that's enough, right? Wrong. Improperly numbered boards can become a major waste of time for productions.

There are three main reasons to properly number your boards. One is to make it easy to view the boards in the correct order. Two is to keep them in the correct order. The third reason is to help the production team break down the number of shots needed for any particular scene. If a script is broken into scene numbers by production (never come up with scene numbers on your own), use those scene numbers as reference.

In live action, you may need to number the scenes, shots, and panels. Not every director wants storyboards numbered according to each individual shot, so ask first.

Numbering your panels for continuity (the order in which they should be viewed) means each new panel should have a new number. Let's say you draw a sequence. When you are finished, the boards go out to the crew and then the director tells you that she wants to add a new panel in the middle. It is to be placed between panels 83 and 84.

This new panel will be numbered 83A, to make sure the entire crew is working with the same information. Many times changes occur after storyboards get distributed to a number of people. If you change the numbering scheme on your existing boards, it will confuse all the crew members who have been working with the original numbering scheme, and mistakes between crew members would likely happen.

Production is broken into sequences, scenes, shots, and storyboard panels. A *sequence* contains one connected series of actions and/or dialogue. Many animations number their sequences; live-action productions almost never do.

Each sequence may have one or more scenes. You will have a new *scene* every time there is a change in location or time. If a character walks from his living room to his car, the living room shots are in one scene and the car shots are in another. If he stays in his living room and there is a flashback to what happened there the night before, the flashback is also another scene. (In 2D animation, we count new scenes every time we have a new background, even if it's in the same room.)

Scenes are not numbered by production until they feel the script is just about locked. Do not make up your own scene numbers. Number by shot until production gives you scene numbers to use.

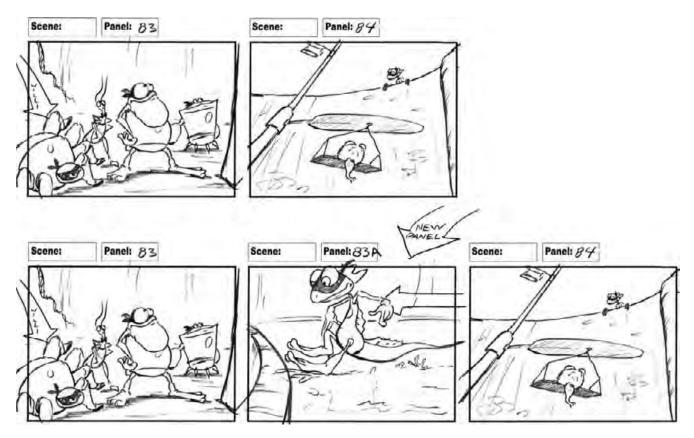


Figure 27.1 Numbering stays the same for existing panels when a new panel is added.

Each scene is made up of one or more shots. A *shot* is one camera angle. Every time the camera rolls from a new position or portrays a new period of time, it is a new shot. If you are in a room with two characters speaking and you start with a wide shot of the room, cut to a close-up of one character, and then cut to a tight two-shot, that scene will have had three shots.

In storyboarding, each shot is illustrated with one or more *panels*, *frames*, or *drawings*. The number of panels is dependent on the action. Some shots can be illustrated with one panel. Some may take dozens of panels. You always start each shot with panel number 1. Animation boards will always have more panels than live-action boards. In animation, the boards help dictate the acting, so every nuance should be demonstrated on the boards.

The most basic form of numbering, and no less important, is numbering the pages. This helps keep your dozens, sometimes hundreds, of pages in the correct order. Always number your pages as you work and fill in the other numbers as necessary.

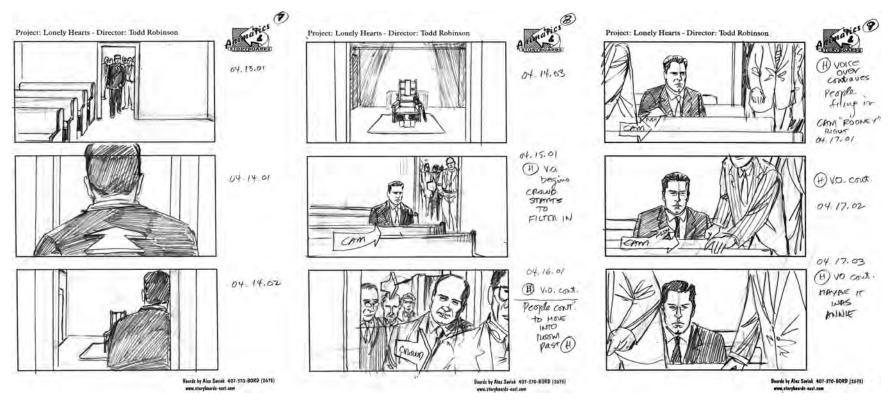
When scanning panels and pages, always use a common numbering formula so that your images in the computer are saved in the proper order. If you have 99 or fewer pages (or panels if you scan each panel), start numbering with 01, 02, and so on. If you have more than 100 pages or panels, start numbering with 001, 002, and so on.

Figure 27.4 shows how improperly numbered files are arranged in a computer. After panel 1, you see panel 11, then 12, and then 2. Figure 27.5 shows how properly numbered files appear in the correct order. Proper numbering benefits the entire production and ensures easy insertion of new and revised boards.

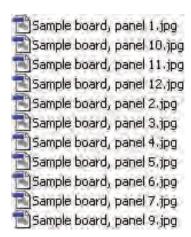
In addition, you should give each set of files a specific name, such as scene number or a title—for example, "Rose\_panel\_01.jpg" or "Sunflower\_panel\_01.jpg." This way if you send boards for more than one scene or commercial, the client won't get two sets of boards called "Panel\_01.jpg."



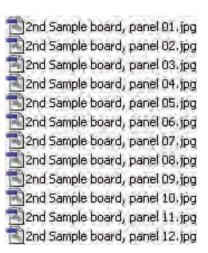
**Figure 27.3** Redrawn boards from Fox's *Wilde Life* TV movie by Mark Simon. Panels are numbered and broken into separate shots. Notice that even though there are nine panels, there are only five shots, or camera setups (**a** through **e** equals five shots). Panels 3, 4, and 5 are all the same shot. Panels 4a and 5a are new, inserted shots.



**Figure 27.2** Production on this movie, *Lonely Hearts*, already had broken the script into scene numbers. The numbering on these panels refers to scene, shot, and panel. Scene 04, shot 13 takes only one panel to draw. Shot 14 takes three panels to draw, and so on.



**Figure 27.4** Improperly numbered files arranged in the wrong order in a computer.



**Figure 27.5** Properly numbered files appear in the correct order in a computer.