# Topic no. 72 Film Production Overview

## **MULTI-CAMERA SHOOTING**

When shooting with two or more cameras, a director tends to think in terms of effective viewpoints rather than specific shots. The results may be similar, but the strategy is different; cameras need to be positioned to catch various aspects of the continuous action (Figure 3.22).

When planning a multi-camera production, directors have to consider a variety of situations:

Will one camera come into another camera's shot? Is there time for cameras to move to various positions?



What kinds of shots does the script dictate?

How will the microphones and lighting relate to the cameras' movements? (Visible mics or shadows cast by the boom pole, etc.)?

#### SINGLE-CAMERA PRODUCTION

A single lightweight camera is independent (has its own recorder), compact, and free to go anywhere (is not attached by a cable to a switcher). The director can be right there on the spot beside the camera, seeing opportunities and explaining exactly what he or she wants to the camera operator. In the case of documentary productions, the person devising and organizing the project may be operating the camera too (Figure 4.2).

This method offers the director incredible flexibility—both when shooting and later when editing. Directors can select and rearrange the material they have shot, trying out several versions to improve the production's impact. There is none of the feeling of instant commitment, which can typify a multi-camera production. But it is slow. Patience is a necessity (Figure 4.3).

Shooting with a single camera will often involve interrupting or repeating the action in order to reposition the camera. The problems of maintaining continuity between setups, even the way in which shooting conditions can change between takes (such as light or weather variances), are not to be underestimated.

It has been said that unlike multi-camera production, which is a "juggling act," shooting with a single camera allows the director to concentrate on doing one thing at a time, on optimizing each individual shot. The director is free to readjust each camera position, rearrange the subject, change the lighting, adjust the sound recording, modify the decor, and make any other alterations that are necessary to suit each take. That's great. But shooting can degenerate into a self-indulgent experimental session. It is all too easy to put off problems till tomorrow, with "We'll sort it out during the edit" or "Let's leave it till postproduction."

When shooting with a single camera, directors do not have to worry about coordinating several different cameras, each with its different viewpoint. Directors are relieved of the tensions of continually cueing, guiding, and switching between cameras. All production refinements and supplementary features from background music to video effects are added at a later stage, during the postproduction session. The other side of the coin is that when shooting with a

single camera, you finish with a collection of recordings containing a mixture of takes (good, bad, and indifferent; mistakes and all) shot in any order, all needing to be sorted out at a later time. So compiling the final production—including titles, music, and effects—can be a lengthy process.

### **MULTICAMERA PRODUCTION**

If you are shooting continuous action with a single camera and want to change the camera's viewpoint, you have basically two choices. You can move the camera to a new position while still shooting, or you can miss some of the action as the camera is repositioned at the next setup. A multi-camera production director simply switches from one camera to another, which is a clear advantage when shooting a series of events going on at the same time or spread over a wide area (Figure 4.4).

Unlike the director on a single-camera shoot, who is close to the camera, the director of a multi-camera production is located away from the action. This director watches a series of television monitors in a production control room and issues instructions to the crew over their intercom (talkback) headsets and to the floor manager who guides the talent on the director's behalf (Figure 4.5).

In a live multi-camera production, most of the shot transitions (cuts, dissolves, wipes, etc.) are made on a production switcher (also known as a vision mixer)

During the action, the switcher takes the outputs from various video sources (cameras, video recorders, graphics, etc.) and switches between them (Figure 4.6). There are no opportunities to correct or improve. However, the director does have the great advantage of continuously monitoring and comparing the shots Figure 4.7). The continuity problems that can easily develop during a single- camera production disappear during the multi-camera production because it is real time. An experienced multi-camera crew can, after a single rehearsal, produce a polished show in just a few hours. At the end of the recording period, the show is finished.

Multi-camera productions may be shot as follows:

• Live. Transmitted live to the viewing audience

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- *Live on tape*. Shot from beginning to end and recorded. This style of production allows the director to clean it up in postproduction
- Scene-by-scene. Each scene or act is shot, corrected, and polished one at a time.
- *Shot-by-shot*. Shot in short action sequences, with multi-camera switching to avoid interrupting (or repeating) the action (Figure 4.8)



Figure 4.5. Multi-camera production in a studio. (Photo by Josh Taber.)



FIGURE 4.6

Video production switcher. (Photo courtesy of Grass Valley.)



# FIGURE 4.7

Multi-camera production directors receive a variety of camera shots all at the same time and must choose the shot that best communicates the action. (Photos by Josh Taber and Paul Dupree.)



FIGURE 4.8

A sitcom is a good example of a scene- by-scene multi-camera television production. (Photo by Josh Taber.)

A multi-camera production can degenerate into a shot-grabbing routine in which the director simply cuts between several camera viewpoints for the sake of variety. But for directors with imagination, the ability to plan ahead, and a skilled team, the results can be of the highest standards.

#### Multi-camera ISO

When the action cannot be repeated or events are unpredictable, some directors make use of an *ISO* (isolated) camera. This simply means that while all the cameras are connected to the switcher as before, one of them is also continuously recorded on a separate recorder. This ISO camera takes wide shots of the action (cover shots) or concentrates on watching out for the arrival of the guest, for instance, or a specific player at a sports event, so that if the director misses the needed shot "live," it is still on tape. Shots on the ISO tape can be played back during a live show or edited in where necessary later.

#### Multi-camera production without a switcher

Another multi-camera approach is to use camcorders. Instead of cutting between cameras with a switcher, shots from their separate recordings are edited together later during a postproduction session. It is fairly simple to sync multiple cameras together on even some of the lowest cost nonlinear editing systems. Voiceover narration, sound effects, video effects, graphics, or music are then added in postproduction. The advantage of this type of multi-camera technique is that it significantly reduces the cost of having to pay for a large crew and a control room or remote production truck/OB van. The disadvantage is that the production is not over when the event is over; it still needs to be finalized in postproduction, which can be time consuming.