

## CHAPTER 6

### TECHNICAL ASPECTS

#### The Film

Films used by most film societies are 16mm gauge. This refers to the width of the film strip. The 16mm film has sprocket holes on one edge and the sound track on the other. Silent 16mm films occasionally have sprocket holes on both edges. Commercial cinemas, and some film societies, use 35mm film with sprocket holes on both edges and the sound track located on one side of the film image. (See Fig. 6.1.).

The "standard" or Academy image on the film (16mm and 35mm) has a height-to-width ratio of 1:1.33 ( same as television). Some filmmakers use a 'widescreen' ratio of 1:1.66 (or 1:1.85) by masking the height of the 16mm or 35mm image..

An even wider image is obtained by the "CinemaScope" ('Scope) process. This basically consists of photographing the film through an anamorphic lens which reduces the horizontal width of the image without changing the vertical dimension. Thus a much wider image is squeezed onto the "standard" ratio. If this film were now screened using the normal projection equipment, the image would be of the same size as a normal "standard" film but the actors would appear squashed. To screen the film correctly you require a 'Scope (anamorphic) lens placed in front of the normal lens. This will stretch the picture back to its original size giving an effective height-to-width ratio of 1:2.35 (35mm). Presto, you have Cinemascope — but don't forget to allow for a larger screen. It needs to be about 77% wider than the normal screen.

Originally, 35mm 'Scope films had an aspect ratio of 1:2.66 and a magnetic soundtrack, but to accommodate an additional optical soundtrack 35mm 'Scope was narrowed slightly to a ratio of 1:2.35. Unfortunately the 16mm 'Scope standard remains at 1:1.66 which means that a small amount of the 35mm frame is lost from the top and bottom of the frame when transferring to 16mm. This is not nearly as bad as transferring a 35mm 'Scope film to a 16mm standard screen Academy ratio print.

Most films shot in 'Scope end up as standard prints when transferred to 16mm for hire or showing on TV. To do this, almost half the picture area is omitted. Alternatively, the 16mm print may be "panned & scanned" which means while still in standard ratio the image seen is centred on the person talking. If that person is on the right hand side of the 'Scope image, after transfer, you see the person but not the left hand side of the original image. This can be just as disconcerting.

Thus if you have a choice of "standard" and "Scope" versions of a film you should opt for the "scope" print if you're serious about the film. However, make sure you have access to an anamorphic lens.

## **Venue**

Film societies operate in school or church halls, community centres, libraries, theatres, cinemas and sometimes in private homes. The venue you choose depends very much on the size of the film society, the cost and availability and accessibility to prospective members. One of the most important things to check when examining prospective venues is blackout, which may even be a problem at night. Nothing creates a worse impression than inadequate blackout. This results in direct light falling on the screen or reaching people in the audience. Stray light falling on the ceiling or walls is less troublesome but should be eliminated where possible.

Other facilities required are power points and light switches which are close to the projector, toilets, fire escapes, comfortable seating and coffee making facilities. If you can find a location which provides raked seating and some form of projection booth, this is even better. Heating in winter may be necessary and air conditioning in the warmer months is desirable. Large venues should be avoided. These have bad acoustics which ruin a film with too much echo, thus causing the sound track to be incomprehensible.

### **Seating Arrangements**

Comfortable seating and unobstructed viewing is an important requirement for presenting a pleasing program. If part of the audience is forced to sit too close to the screen, or too far away, or at too much of an angle, they will quickly lose interest, no matter how good the film. They may not realise why they didn't enjoy the screening but they won't be back for the next screening.

If the screen is positioned too low and the seats are not staggered in succeeding rows, the viewer up front will block the view of those sitting in the back. There is nothing more annoying than to have the screen in full view and not be able to read the subtitles.

The preferred seating arrangement and best viewing area are illustrated in Figure 6.2. The front row should not be closer to the screen than twice the screen width. The maximum viewing angle is given by making the back row not wider than six times the screen width. Be aware however, that there are some people who may actually prefer to sit closer to the screen.

The screen should be raised high enough to allow unobstructed viewing anywhere in the viewing area and the screen should be tilted towards the projector to keep the screen as nearly as possible at right

angles to the aim of the projector. This will allow focussing of a crisp, sharp image over the entire screen area

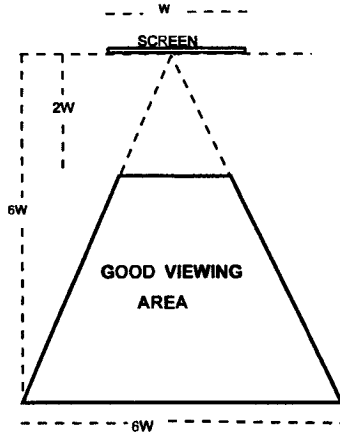


Figure 6.2

## Projectors

The projectors you use will determine the quality of the image your members will see. In this section we'll discuss some of the facts you need to know to help you choose the correct projection system for your location. But first, you're wondering where to get a projector? You should investigate the possibility of borrowing equipment rather than spending money on rentals. Many schools, colleges and universities have historically owned 16mm equipment and so have some community and church organisations, as well as your regional