

Successful CAMERAfor Video
Series written and produced by Mik Parsons

FOREWORD

ViT's Successful Video Production is a series of programmes designed to help in the learning of a wide range of Video Production techniques:

CAMERA
NON LINEAR EDITING
LIGHTING
SOUND
TV NEWS
DRAMAEDITING

Although equipment is very much a part of the production process, the emphasis of the ViTseries is on principles and creative techniques rather than specific hardware.

The programmes, each around 30 to 40 minutes, are full of examples shot at a wide variety of locations covering aspects of both drama and documentary. The presenter is BBC broadcaster, Sean Street and programmes are subdivided into clear sections each beginning with a Topic Heading, and ending with a list of the Key Points covered.

This study guide uses the same Topic Headings as the video and expands on issues raised in the video. There is also a series of projects set within the text. The aim is to keep things as inexpensive and accessible as possible whilst working to the highest possible standards.

How to Use the Programmes

Although the study guide is designed to be read in conjunction with the video material, each can also be used separately. The recommended approach however, is to watch the first chapter on the video up to the Key Points and then read the booklet under the same Topic Heading. Hopefully you will be keen enough to try the projects suggested but obviously this will depend on your circumstances and personal aims. Once you're ready, start viewing again, stop when you get to the next Key Points, and so on.

The series was written and produced by Mik Parsons who is Senior Lecturer in Video and Interactive Media Production at Bournemouth University.

Mik began his career with an MPhil in Electronics but has since worked extensively within the Arts and Media. In addition to his professional experience within video production, he has also worked and lectured in design, computer graphics, music, animation, and interactive media.

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INTRODUCTION

Almost all portable video cameras nowadays are combinations of camera and recorder. They're called camcorders and they're designed to be easy to use. Whether it's a domestic format or of broadcast quality, it will have been designed to be usable by a single operator and so will have a number of automatic features to make life simpler.

This is deceptive though. The truth is that automatic functions will be very useful in some situations - in news reportage for example or covering a live event when there isn't time enough to do anything more than point and shoot. In other more controlled situations though, automatic functions will work against you and it is often best to switch them off. Commonly found automatic functions are auto-focus, auto iris, and auto-white balance, and many cameras are designed so that all these functions are normally switched on.

This is particularly useful if you haven't got the time or the inclination to be concerned about such details and encourages the popular notion of the 'point and shoot' approach.

The truth is that automatic functions really are useful but only in some situations. There are many situations where you have no directorial control over the action, recording a public event like a sports meeting for example, or an air show, or in a market place. Sometimes you may have only a second or two to react and so all you can do is point and shoot, but the results are often disappointing. A better approach would be to start with the automatic functions off and then to selectively switch on only the ones that you really need. In drama situations, where there is more time to set up each shot, automatic functions are best avoided altogether.

You'll probably want to be able to work in all these situations and so it's important to get to know your camcorder and experiment with it so that you can respond quickly to changing situations and remain in control of your equipment. Design details will differ between models, as will prices. As a rule of thumb, if you're buying, it's better to go for the highest quality recording format that you can afford, rather than a low quality format with extra features and automatic functions.

A broadcast quality camcorder is expensive because of its electronic, mechanical, and optical quality, not because of the number of automatic functions it has. The video programme looks at the main features which are common to most cameras.

Controlling the technical quality of the pictures is only part of the story however. How much control you have over direction and choice of pictures will vary according to the situation and the number of people in your production team, but there will be times when the production team consists of just you, so you'll need to know what type of shots to take and how they will edit together. The video looks at some of the issues involving camera and subject movement and framing within the picture

THE LENS

Depending on the type of camcorder you are using, the lens may appear to be anything from a circular window at the front of the camera, to a large detachable unit covered in numbers and with many moving parts. The qualitative differences can be enormous but in more general terms the purpose of the lens is the same. It captures a portion of a scene as a two dimensional image and presents it for recording onto video.

The analogy of the lens providing a window to the scene is a good one since ultimately the picture will be displayed on a television set, itself a window of fixed proportions four units across and three units high.

At home from the comfort of an armchair, the television 'window' remains fixed and the world moves within it but out on location the world is fixed and the 'window' is wherever you choose to place the camera and its lens, whether it be at standing eye level, from the top of a tower, or from a moving car.

The commonest image in broadcast television is of a person talking, either to another person or to the camera. This image, usually recorded at eye level and at normal perspective, is intended to be realistic and believable. It is so predominant in television that programme makers have evolved a convention of describing shot size based on the framing of a person. This is shown in Fig (1)

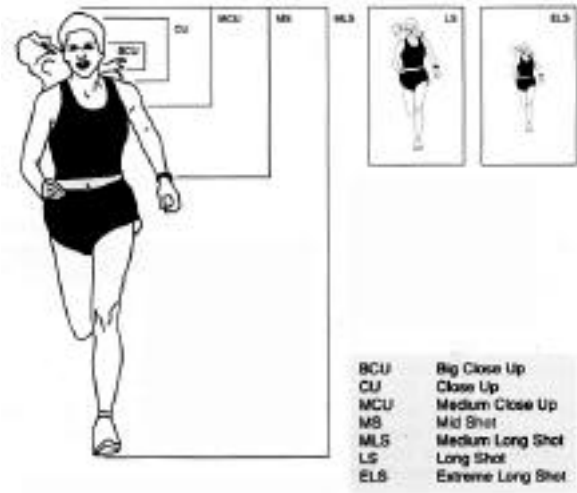


Fig (1). Shot size conventions.

The convention provides a useful shorthand for describing shots whilst script writing, or a set of spoken instructions from director to camera operator.

In multi-camera studio productions it's important that all the camera operators agree on the mid-shot and close-up convention otherwise shots may not match - when cutting between interviewer and interviewee for example.

In the next sections we'll look at the main control functions of the lens:

Focus

Aperture

Shutter Speed

Zoom

FOCUS

Keeping focus is usually a question of keeping the main centre of attention sharply defined by turning the manual focus ring at the end of the lens. Automatic focus systems will presume (often wrongly) that the centre of the picture represents the centre of attention. If you are slowly panning across a landscape, for example, and a bush appears in the foreground, then the camera will attempt to focus on it whether you wanted it to or not. The video shows two examples where auto-focus can cause problems. In the first example two people talking, one screen left and the other screen right, may need to be brought into focus manually to prevent the auto-focus from focussing on the centre of the screen which in the example was a background telephone kiosk.

In the second example the camera pans across a playground but railings in the foreground confuse the auto-focus causing it to 'hunt' backwards and forwards.

Sometimes you will find it impossible to focus altogether, because the subject is too close to the lens, or nearer than the Minimum Object Distance. Our eyes have the same difficulty. The (MOD) is much closer for a wide angle lens setting than for a narrow angle or 'telephoto' setting. Most zoom lenses can be switched to a 'macro' setting so that small subjects can be kept in focus right up to the lens. Zooming isn't possible in this mode and focussing is very sensitive but the picture results can be quite dramatic and will give viewpoints that the human eye does not usually see.

If you look at a scene through a telephoto (narrow angle) setting, you will find that when the lens is focussed in a given plane, closer and more distant objects will be soft and out of focus. The depth range of the shot which remains in focus is called the 'depth of field'.

Depth of field is very shallow at the telephoto end of the zoom and also at

the macro setting. You can make creative use of this by forcing the viewer's attention to a selected part of the scene - the only part which is in focus. By arranging the shot so that there is a relatively large distance between the foreground interest and the background interest, it is possible to shift our attention between the two by 'pulling focus'. The video shows an example of pulling focus between three Lego characters, from background to foreground

With a wide angle lens, the opposite is true. Depth of field is much greater and so virtually everything in the scene will be in focus from foreground to background. This will be effective providing the shot is not too visually cluttered otherwise you'll need to find some other way of directing the viewers' attention.

A common mistake when working with a zoom lens is to forget to pre-focus it. This will usually catch you out when you attempt to zoom from a wide shot to a close up. The wide shot may have been in focus, but as the shot zooms in the close up will become more and more blurred as the depth of field gets narrower. To prevent this from happening, it's always best to zoom right into the centre of attention first in order to focus before you start recording (if it's a face then focus on the eyes), then zoom out to frame the shot. The lens should now remain in focus at any point along the path of the zoom

Key Points. Focus

- Use manual focus for greater control
- Use a macro setting for extreme close ups
- A wide angle setting gives deep focus
- A telephoto setting gives shallow focus
- Use pull-focus to direct our attention

APERTURE

The lens aperture affects the amount of light entering the camera. It can be enlarged or reduced by varying the iris control ring on the lens barrel. In bright conditions, the aperture needs to be small, in dark conditions, it needs to be wider open. Each closure of an f-stop on the iris ring represents a halving of the light entering the lens, for example f/5.6 to F8, Fig. (2).

The iris ring is calibrated with f-stop markings, each one of which represents a doubling or halving of the light entering the lens. These are numbered according to a conventional series, but note that the larger numbers indicate the smaller apertures (i.e. less light).

Under given light conditions, outside for example, you will need to set the iris to the correct exposure value. An automatic iris will work well if there is not too much contrast in the scene but if there is, the auto iris is likely to keep readjusting as you move the camera. If you frame some sky in the shot the auto iris will try to compensate by closing and will probably leave

the foreground far too dark.

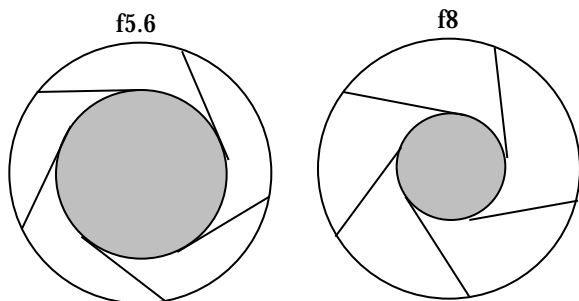


Fig (2) Aperture sizes

Manual iris will give you more control. If there are people in your shot, then you should normally check that the exposure looks right for their skin tones. If the skin tone has large flat areas of white, it's over-exposed. Reduce the aperture until the highlight areas are just beginning to go white.

More expensive cameras have a 'zebra striping' switch to help you judge this. At 70% white, visible diagonal stripes will begin to appear in the picture. For normal exposure you should see some of this effect in the skin highlight areas. Avoid the temptation to check the exposure by zooming in though because this may cause the shot to darken slightly (as the 'effective' aperture changes due to the narrowing angle of view through the lens - an effect called 'iris ramping').

If you have control over the lighting conditions, in a studio for example, you can adjust the light level to suit a chosen iris setting. Changing the iris setting is a direct way of controlling the depth of field. A small aperture setting at say f22 will give deep focus whereas with an open setting at say f2 the depth of field will be very shallow.

On a bright sunny day, the aperture will need to be set small and so everything will be in focus from foreground to background. If you want to be able to open the iris to reduce depth of field, you will need to block some of the light by placing a Neutral Density filter in front of the lens.

Many cameras have a filter wheel so you can introduce neutral density filters internally,

1/4 ND results in a loss of 2 stops

1/16 ND results in a loss of 4 stops

Key Points . Aperture

- In bright light close the iris
- In low light open the iris
- Avoid scenes with high contrast
- Open the iris to reduce depth of field
- Neutral density filters reduce brightness

SHUTTER SPEED

The shutter speed on a video camera is usually set at a fixed rate of 1/50th of a second. Some cameras however, are fitted with a range of shutter speed settings - typically from 1/60th to 1/10,000th of a second. Shutter speed is a term borrowed from photography where it relates to the length of time a scene is exposed to the film before the shutter inside the camera closes. A long exposure time will create 'motion blur' on movement whereas a short exposure will freeze action keeping it sharply defined. The video shows examples of this when applied to a moving Go-Kart.

Increasing shutter speed will reduce the amount of light that enters the lens. The light can be increased again by opening the iris to compensate. Increasing the shutter speed by one stop will reduce the exposure by the equivalent of one f-stop

Shutter speed then provides another way to control depth of field. It enables you to make aperture changes in preset lighting conditions

The problem with video however is that increasing the shutter speed will tend to make moving images jitter unnaturally. Slow motion and freeze frames can look very effective because of their sharp image quality - useful for sports coverage for example, but video pictures normally rely on motion blur to blend them together and provide a smooth impression of movement.

Long exposure is useful in photography when there isn't much light, but it's not possible in video. A video scene is electronically scanned every fiftieth of a second and that limits the maximum exposure time possible. Low light conditions can only be accommodated in video by increasing the camera's sensitivity by adjusting its electronic gain

Shutter speed control can be very useful when you are recording a scene which has a computer screen in it. On video, computer screens will often appear to flicker because they are being electronically scanned at speeds slightly different to video scanning rates. Varying the camera's shutter speed will compensate for this although it's usually a matter of trial and error finding the right setting

Shutter Speed. Key Points

Increasing shutter speed will:

- reduce motion blur

- cause moving images to flicker
- reduce scene brightness
- enable reduced depth of field
- help prevent computer flicker

WHITE BALANCE

In order to be able to reproduce colours accurately, a video camera must be white balanced according to the colour temperature of the prevailing light.

Daylight tends to be bluer than artificial tungsten light and although our eyes adjust rapidly to changes, video cameras usually have to be set manually.

If the camera white balance is set to a preset daylight average colour temperature of 5600 degrees Kelvin, a white card will look correct when recorded outside, but will appear orange if recorded under tungsten light.

Tungsten video lighting runs at a much lower colour temperature of 3200 degrees Kelvin. It gives out a more orange light and will need a different white balance setting.

Using the white balance 'tungsten' preset, the white card looks correct when recorded under tungsten light but blue when shot outside.

It's always advisable to white balance the camera in the prevailing light conditions since this will take into account any variations from the preset temperature values. You can do this simply by holding a white card in a lit area of the scene, zooming in so that it fills the frame and pressing the 'auto white balance' button.

The situation can become more complicated if there are different types of light source within a scene. Each light source will have a different colour temperature. The classic example is a scene lit by tungsten video lighting but with a window in shot letting in daylight.

If you set the white balance for the daylight colour temperature then the tungsten lights will appear orange and so you will need to add blue correction filters to them. Alternatively if you set the white balance for the tungsten light temperature the window light will appear blue and so you will need to put orange correction filter over the window.

In practice compromises are often made, for example if the white balance is set to the daylight preset, half blue correction filters over tungsten lamps can be used to give the scene a slightly warmer orange colour. Another useful technique in a mixed lighting situation is to 'split the difference' by performing an auto white balance on a white object which is illuminated by a carefully chosen mix of light sources.

Key Points. White Balance

White balance for the dominant light source

Daylight is blue at 5600 degrees K
Tungsten light is orange at 3200 degrees K
If light is mixed, use correction filters

ZOOM

There was a time when changing the shot size involved either moving the camera or changing the lens. Some early cameras had a 'turret' of fixed lenses which could be rotated into position but nowadays it is more convenient to use a zoom lens to give a continuously adjustable range of shot sizes.

A zoom lens setting can be described by its focal length or by its horizontal angle of view. Angle of view is often useful in studio productions especially when looking at diagrams of sets. It's possible to work out what parts of the set will be visible by drawing in angled lines from the camera position.

The perspective of normal vision corresponds to a camera angle of between 20 and 27 degrees, and since our eyes don't have a zoom function, the extreme ends of a zoomed shot will appear to have abnormal qualities.

It's more common for a lens to be described by its focal length or in the case of a zoom lens, the focal length at wide angle and the focal length at telephoto. The important thing to remember here is that short focal length means wide angle, and long focal length means telephoto/narrow angle. Focal length is actually a less useful description than lens angle because for a given perspective, the focal length will be different according to format (ie. between domestic camcorders and broadcast Betacam, as well as between 16mm and 35mm film cameras).

Zoom enables you to frame your subject so that it appears closer or more distant than it really is. It's a very useful function and can be used in many different ways. It can also be misused though and unfortunately some people use it as a lazy way to get all the shots they need without needing to move the camera. These are the same people who like the zoom function so much that they like to see it used repeatedly, zoom in here, zoom out again, pan across a bit, zoom in over there and so on.

The fact is that zooming is such an unnatural device - our eyes don't zoom - that it's best to use it very sparingly. An edited cut to close-up will usually look more natural than a zoom-in. Of course if you're covering a continuous piece of action like the football match on the video, then editing wouldn't be a possible option. Here it would be better to avoid zooming in too close because you would be unable to follow the action and would have to immediately zoom out again to find the ball.

There are many occasions where the extreme telephoto end of the zoom provides the only way to get access to the shot you want. A sporting event for example where you can't get close enough to the action, or a situation

where you need to be an unnoticed observer, recording wildlife perhaps.

Conversely, the wide angle lens can be useful in confined spaces where there isn't enough room to move the camera back very far and there's no other way to frame the shot.

There are many other occasions though where you will be free to choose whether to have the camera close in and the zoom angle wide or have the camera at a distance with the zoom angle set to telephoto. The results will be quite different and it's worth taking the time to experiment with your camera to find out just how different and which is the most appropriate choice.

If you choose to shoot at extreme telephoto then you'll notice that the picture is much harder to hold steady. You'll almost certainly need a tripod although if your camera has an image stabiliser, this will help to a certain extent.

You'll also notice that the depth of field becomes very shallow so that focussing becomes critical. If you're recording a subject against a background full of distracting detail then the telephoto shot is a good choice. The narrow angle of view means that only a small portion of the background will probably also be out of focus.

If on the other hand the subject is moving towards you then the telephoto choice means that you may have to keep refocussing to keep the subject sharp. A telephoto lens will also reduce depth perspective so that movement towards the lens seems slower than it really is. This depth compression has the effect of making the picture look two dimensional. Imagine looking through a telescope at a distant racing car speeding towards you. The car would appear to be travelling much slower than in reality and would look strangely compacted in length.

On the other hand if the movement is happening across the lens, a telephoto shot used to follow the subject will result in a lot of motion-blur from the background, giving the impression of great speed. This is demonstrated in the video as a character is pursued through the woods. The telephoto shot of him running across the field of vision gives a greater sense of speed than the telephoto shot of him being pursued towards the camera lens.

The comparison is also made using a wide angle lens. Wide angle increases the depth perspective so that foreground objects appear close and background objects seem very distant. As the two characters run towards the camera they appear to cover more distance and therefore appear to travel faster than in the compressed space given by the telephoto shot.

Try and be aware of the implications of changing the depth perspective, the video shows some different situations. For example a wide angle shot of a face can be very unflattering. You can make your subject's nose grow several inches and small movements towards the lens can seem quite intimidating. On the other hand if you're recording a landscape with visible lines of perspective like a path or a fence on the clifftop stretching away from the foreground, you can enhance their presence by choosing a wide angle lens.

The video also shows the example of an over-the-shoulder interview where the relative head sizes of the two speakers can be reduced and made to look more natural by moving the camera position back and changing the zoom position to telephoto.

In all the examples discussed so far we've presumed that the camera is mounted on a tripod. This is usually good practice, but there are times when you'll need to take shots with the camera hand held, either low down suspended from a wrist perhaps, or higher up supported on the shoulder. Whatever position you choose you should automatically make the decision to shoot wide angle in order to keep the picture as stable as possible. The further you zoom in, the more the picture will wobble.

Key Points. Zoom

- Telephoto setting gives:
- Shallow 2D pictures
- Critical focusing
- Slow movement towards the lens
- Fast movement across the lens
- Unstable handheld pictures
- Good portrait results

A wide angle setting gives:

- Deep perspective pictures
- Sharp focus throughout
- Fast movement towards the lens
- Slow movement across the lens
- Stable handheld pictures
- Distortion problems with portraits

Projects

1. Look through a selection of magazines at a variety of photographic images. In each case comment on whether the shot has been taken at normal, narrow, or wide angle perspective

2. Either find a photograph or video-record for yourself an image which demonstrates most effectively one each of the following characteristics:

telephoto two-dimensional effect

critical depth of field at telephoto

distortion of scale between background and foreground (telephoto)

accentuated depth from wide angle lens

deep focus

distortion of scale between background and foreground (wide angle)

MOVEMENT

There are many parallels to be drawn with photography when learning camera skills, particularly in relation to using the lens, but a key difference between the two subjects relates to the treatment of movement. Photography is often concerned with creating the 'illusion' of movement using techniques such as motion-blur which we've mentioned earlier, and also by using design techniques to lead the viewer's eye into and across the picture according to the distribution of colour, space, and form.

In video, movement is a fundamental reality and without it, pictures will lose interest very quickly. Static images should usually be simple and direct in their meaning so that they can be held on screen for a shorter time and edited into sequences. Of course there is a big difference between 'static' and 'stillness'. Stillness can be used to suggest suspense or tranquility, from the gentle sway of moored boats at sunset to the hunter's delicate movement approaching his prey. Notice though that both these examples still rely on 'delicate movement', or 'the gentle sway' to illustrate their stillness. Stillness can also be used where the attention should be held more by the sound content than the pictures - an interview or a voice-over perhaps. At other times it is the picture that leads the attention and you will need to develop a consciousness of how movement can be used. Broadly speaking movement falls into two categories: subject movement and camera movement

Subject movement may often be down to planning and direction in front of the camera. In drama for example, a dialogue scene between two people may be set to take place across a table. Quick and easy to cover perhaps but rather static and not particularly interesting or challenging for anybody concerned, including the actors. If they're in conflict, an encounter on a staircase for example might provide a more imaginative setting. The way in which they approach each other, move past each other and change positions on the stairs will open up many more possibilities involving body language, light and darkness, viewpoint, and framing.

In documentary, the seated interview shot is very commonly used but usually needs to be supported by editing in lots of separately recorded supporting visual material in order to maintain visual interest. If the interview is concerned with some activity or process, think about the visual possibilities of conducting the interview with the subject involved in the activity.

Camera movement will at times be essential but it should be done for a reason and not just haphazardly. A good tripod is an essential part of the camera operator's kit and you should always endeavour to use it. Resist the temptation to go hand-held unless the situation demands it.

A tripod will help you to get steady shots when static and providing it has a 'fluid' head, it will give you smoothly controlled movement as well. The two main movements are pan (horizontal pivot) and tilt (vertical pivot). Camera moves should be planned and rehearsed if possible and they should always have a beginning, a middle, an end - and a reason.

Avoid the temptation to use the camera to pan around a scene, a series of edited static shots will be more effective and will give more control to the editor. If you decide on a slow, surveying pan, then presumably you have chosen it because it is visually more relevant than cutting from one shot to another. Perhaps the middle of the pan shows relevant detail, or as in the video example, the pan represents a 'point of view' (POV) of an observer. Remember though that it is often difficult for the editor to cut smoothly from a moving shot, unless the cut is to a similar movement in the next shot.

You may have chosen a pan to follow the subject movement, someone walking for example. In this case try and anticipate the movement slightly - frame slightly ahead of the subject so they have room to move into. The closer you are zoomed in, the more difficult it will be to follow effectively but the greater the impression of speed. Focus will also be critical so be prepared to zoom out slightly if things get too difficult.

Camera movements from a tripod are limited to tilt and pan but another type of camera movement involves physically shifting the camera position. The most convenient option is to go hand-held. Now you have the freedom to move sideways, backwards, forwards, to crouch, and to stand up, but it will be difficult to keep the camera stable - impossible if you are on telephoto. Widen the lens angle and move closer if possible.

More controlled camera position movements will require some extra equipment, although it's often possible to improvise. The video shows moving camera shots taken from a glass elevator, a ferris wheel, and a trolley. A wheelchair or a moving car provide good platforms too. Using a tripod in these situations may be problematic, either through lack of space or general vibration and instability, and so you may need to rely on good hand-held technique.

There are many specialist camera mounts available professionally although it's usual to have a specialist operator or 'grip' to supervise their use. The video shows an example of a simple tracking set-up whereby the camera is mounted on a wheeled platform and pushed along a set of track guides. The other example shown is a simple jib arrangement. A counter-balanced beam is mounted onto the tripod enabling the camera to be raised and lowered or swung backwards and forwards (generally referred to as a 'crane shot'). Equipment like this does open up greater visual possibilities but remember that it takes time to set up and needs careful operation.

Mixing camera and subject movement can provide some quite challenging opportunities within a scene. Drawn storyboards aren't very helpful when trying to visualise such complex movement - in fact they can be quite inhibiting. Try using overhead plans like the example shown in Fig (3) Character and camera movements can be planned very effectively like this.

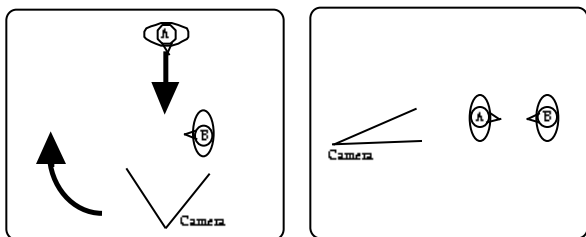


Fig (3)

Key Points. Movement

- Camera and subject movement increase interest
- Basic camera moves are 'tilt' and 'pan'
- Advanced moves include 'track' and 'crane' or 'elevate'
- Use hand-held shots only when appropriate

Projects

1. You are asked to record an interview with;

a white water canoeist
 a dentist
 a factory foreman
 a competitive cyclist

Write down some possible treatments which may be visually more appealing than a conventional sit-down interview.

What additional facilities and equipment might you need to take along in each case?

2. Write a list of ideas for providing improvised moving camera positions.

FRAMING

Framing is about showing the appropriate information about a scene at a particular time, and also about the composition within the frame. Wide angle viewpoints will show where action is taking place and are often used to begin or to finish a sequence but video generally works better with close-ups where detail, movement and character are seen more directly.

A photograph, like a painting, can contain a lot of information and detail but video is not effective with complex images. The image quality is not good enough to resolve fine detail and besides, the audience will expect a visually complex scene to be broken into a sequence of close-ups. This idea of sequencing is an essential approach in video. It's not enough to try and capture a scene in a single wide shot, you'll need to find the centre of atten-

tion of a scene, close in on it, and follow it as it moves. This may involve continuous camera movement if it's a live event or if you're planning a moving or 'developing' shot within a drama scene, or it may involve a series of shots from different angles to be edited later.

When the image is stationary, the rules of composition within the frame follow the same principles as in photography or design. It's worth practising some simple set-ups and experimenting with different framings to understand some of the effects on the picture of colour, space and form. When framing people, check that they have space in front of them to speak or to move into, and check that there isn't too much or too little head-room above them.

If characters are moving, try and anticipate the movement slightly so that there is space in front of the movement. Zoom out slightly if it's too difficult to follow. Remember too that movement will affect the editing process. It's generally more effective to cut during a movement providing there is a matching movement on the next shot. Allowing characters to enter or exit the frame also provides more choices about where to edit.

If you know that there is going to be an edit within a scene then make sure to move the camera to a new position so that there won't be a 'jump cut' to a shot which is too similar. On the other hand, when you do move the camera, avoid crossing the 'line of action' within a scene otherwise people will appear to look or move in the wrong direction. Examples of crossing the line are shown on the video.

Key Points. Framing

- Frame appropriately for the subject
- Use close-ups to break up complex images
- Use framing to affect dramatic emphasis
- Frame the subject so you can follow easily
- Anticipate movement by giving space
- Entrances and exits give good edit points
- Don't cross the Line of Action

Projects

Equipment:

Camcorder and video playback

1. Write a short dialogue scene between two characters (about four sentences each) and then use overhead plan diagrams to choreograph possible character and camera moves.
2. Construct a simple still life scene (a table, a chair, and a bowl of fruit will do). Using a tripod and camera connected to a monitor;
 - a) set the lens angle to normal perspective and view the arrangement from different camera heights and positions. In each case try and obtain the most aesthetically balanced picture you can and record the result. Try and describe why some images appear better than others.
 - b) vary the lens angle as well as the camera position and record some more viewpoints which you find aesthetically interesting. Comment on the results.