

**BETTER
PHOTOGRAPHY**



**THE RIGHT WAY TO
compose pictures**



Better Photography

Welcome to 'Better Photography.'

The learning materials on the 'Better Photography CD-Rom are designed to help you understand the principles of producing good photographs. We have also reproduced the materials in this booklet.

When you move onto the next page, the [Contents](#) page, you will see that the images in this collection have been organised under a series of headings which relate to the principles of good photography.

On the CD-Rom these headings in the [Contents Table](#) are navigation links - click on these and you will navigate to the relevant sections, each of which consists of notes on the technique involved, followed by a series of exemplar photographs. Within the booklet each section has been reproduced on a single page.

There is also a section of self-assessment quizzes at the end of the CD-Rom material, which you may like to try, to test your knowledge. These have not been reproduced in the booklet.

If you want to access any of the images on this CD-Rom for your own independent study you will find that all the images used in the materials are to be found in a separate folder on the CD-Rom, entitled **Photo Repository**. All the images are in the form of JPEGs.

The majority of the images in this collection have come from the [SCRAN](#) digital resource, and the remainder are copyright to [Cardonald College](#). This project was funded by [SCRAN](#). For copyright information on each image simply click on the large version of the photo within the CD-Rom.

Your Browser

The CD-Rom will run through the browser software on your computer. In order for the course to run smoothly you should have a version 4 (or above) browser with Javascript switched on. All modern browsers are suitable. The pages are intended to be viewed with a screen resolution of 800x600. No other plug-ins are necessary.

Table of Contents

1. Before Pressing the Button

- i. Filling the Frame
 - ii. Types of Framing
 - iii. Viewpoint
 - iv. Composition
 - v. Juxtaposition
 - vi. Choose the right film
 - vii. Film Speeds
 - viii. Visual Elements
-

2. Camera Technique

- i. Keep the camera steady
 - ii. Using manual focus
 - iii. Shutter Speeds
 - iv. Over expose back lit subjects
 - v. Use flash in daylight to avoid harsh shadows
 - vi. Depth of Field
-

3. Camera Accessories

- i. Filters
- ii. Lenses

Fill the Frame

Get in close and spend a little time to check that you have what you want in the frame and avoid distracting elements like people walking into the frame or objects like telephone poles sticking out of peoples' heads.



This photograph has no wasted space around the central subject.



Avoid distracting elements around the subject.



Don't have too much space around the subject.



Get close or zoom in so the viewer can see the subject clearly.

Types of Framing

To emphasise the subject you can frame it, by using an arch or circle as an outline. The frame can also be used as either a window or box. If your subject goes beyond the frame it is like looking through a window, your picture has an upbeat or unusual mood.

If your subject is photographed as a whole, within the frame, as in an object within a box, this can convey a formality or stillness as is found in many renaissance portraits. However, if the subject is placed in the corner of a frame a sense of being under threat or 'cornered' can be implied.



Placing someone in the corner of an image can make them seem more vulnerable, as in 'being cornered'.



The tube is an effective means of drawing the viewer's eye onto the workers.



The image of the doll goes beyond the frame, like a view going beyond a window. This type of framing makes the image more violent or upbeat.



The camera is completely surrounded by the frame, like an object enclosed in a box.



Putting your subject off-centre can make the image seem more lively.



The viewpoint distorts the height of the band leader, making him seem more powerful.

Find the best Angle or Viewpoint

Experiment with different viewpoints. Shooting upwards can make a view more dramatic or shooting downwards makes a scene or more unusual. Shooting downwards can also have the effect of making people seem inferior, and shooting upwards can make them seem more important or powerful.



The view from the sky makes the town look small. It is a good use of scale.



Different angles can give more information and a fresher outlook.



The height and camera viewpoint emphasises the repetitive pattern of the targets.



Off centre, rule of thirds. The man seems in isolation, a loner, emphasised by the placement of the haystack.

Try Different Compositions

Don't always put your main subject in the centre of the photograph. Sometimes you should apply the 'rule of thirds' technique, where the subject or horizon should be positioned to the side/top/bottom of a frame.

The relationship between objects can be metaphorical and effectively help to tell a story. The picture of this man sitting near a haystack seems to suggest that he is a loner. Pictures of people in their environment can tell a story.



This image is centered.



Off centre, rule of thirds. The effect is to give emphasis to the scene, not the climbers.



By centering this image on the notice it is made to dominate the picture and take on ironic importance.



Soldier and child – innocence and brutality. The subjects of soldier and children may also symbolise returning home and the end of war.

Juxtaposition

Putting two contrasting subjects together within a single picture can create a strong effect. By juxtaposing two different images the photographer can convey a powerful message, or even multiple messages.



The airport road sign seems somewhat surreal against a deserted field.



The unusual juxtaposition of people, sheepdogs and sheep gives a comical twist to the picture.



The positioning of the men and the woman could be seen as either comic or threatening.

Choose the Right Film

There are essentially three types of standard film. Colour negative film is good for prints. Transparency film (Slide) is good for projections but requires precise exposure control. Black & White film is good for neutral monochrome or sepia photographs (some B&W films such as Ilford XP2 are for colour processing).



The use of colour can suggest a mood. Here the reflected colour of the sunset gives a strange beauty to a modern skyscraper.



The use of black and white gives a 'documentary' feel to an image.

Use the Right Film Speed

Films have different speed ratings (A.S.A. or I.S.O.). High-speed films (400ASA - 1600ASA) are good for low light conditions without flash or for freezing action. Medium-speed films (100ASA - 200ASA) are good for outdoors but fairly bright days. Low-speed films are good for bright sunny days or when maximum detail is required. The medium and low film speeds need a tripod or an extra artificial light like flash in low light conditions.



High-speed film can freeze action. The detail of the bikers is captured by a fast shutter speed, which is possible with high-speed film.



High-speed films can also be used in poor lighting conditions, like this night shot.

Look for Visual Elements within the Subject

You can make a photograph visually affective by emphasising one or more of the following subject aspects: Shape; texture; pattern; form; colour; and contrast. Low sidelight offers texture and dramatic shadows.



High contrast images emphasise shape and pattern.



Low contrast photographs have more detail and give a 'softer' tone to the image.



Pattern is pleasing to the eye. The design draws the eye along the image.

Look for Visual Elements within the Subject

Using texture, shape and pattern.



The repetition of the three summits is an effective image.



The texture of the wool gives the picture character and also offers a contrast with the pattern of the stones behind.



The intricate pattern and colours here make the photograph more appealing.

Keep the Camera Steady

Try to have a firm grip on the camera and keep your elbows tucked in to avoid camera shake. It is important in most photographic situations to have sharp detail that conveys all the key information.

With manually-operated cameras the shutter speed should not fall below $1/60^{\text{th}}$ of a second without the use of a tripod or similar support. Monopods are easy to use and offer effective support.

With long focal length lenses the shutter speed should be close to the focal length of the lens, i.e. $1/250$ for a 300mm lens.



The blurring of the image makes the picture weak.



As you can see the image is much stronger now.

Using Manual Focus

Take time to check that what you see is in focus. When taking portraits always focus on the eyes. With autofocus cameras there is sometimes a Focus Lock Button that holds the focus on the centre subject and allows the photographer to reposition the subject away from the centre without the camera refocusing.

On most occasions an out-of-focus photograph is a careless error. Try to focus on a sharp edge. However, some out-of-focus images can create a dreamy or surreal effect.



In this image the picture is not properly in focus.



Getting the image properly in focus gives a much sharper result.

Shutter Speeds

Avoid slow shutter speeds without a tripod. Don't take photographs with slow shutter speeds, as this will make pictures blurry. With manual cameras choose a shutter speed that is close to the focal length of the lens but do not go below 1/60 without using a tripod.

The Shutter speed settings (Time Value) can offer freezing or blurring effects, but these can only be used with the correct corresponding Aperture setting in order to keep the exposure from being too dark or too light. Fast shutter speeds (1/1000; 1/500) freeze action, while slow shutter speeds (1/8; 1/2) blur action. The ' B' setting is for exposures longer than one second.



The snow is literally 'frozen' by the fast shutter speed.



In conjunction with a tripod, slow shutter speeds can turn waterfalls into mist, while keeping the rocks and trees sharp



Long exposures can record sequential fireworks exploding on one frame



Panning is when you follow a moving object across your field and press the shutter while in motion. The effect freezes the moving object but blurs the background/foreground.

Overexpose Backlit Subjects

Backlit subjects can fool the camera meter and cause a silhouette effect when subject detail is otherwise needed. Some cameras have an Exposure Compensation Button or Dial which will give more light to the foreground. If your camera does not have this facility move in or zoom in towards your subject and use either the 'Exposure Lock Button' or use the meter reading for the subject, and then zoom out.



Overexposing avoids the details of the man's face from being too dark.



The light coming through the window can fool the camera's meter, making the foreground subject too dull.



Here the photographer has compensated for the background light and achieved a much better balance.

Use Flash in Daylight to Avoid Harsh Shadows

On sunny days, portraits can suffer from harsh shadows. By switching on the flash, you can 'fill-in' these shadows to give a more even light. With manual cameras you should calculate the appropriate exposure to avoid overexposure. Flash can be used outside on dull days as a way of distinguishing the subject from the surroundings.



This photograph was taken outside without flash. Notice how the shadows across the man's eyes and face block out details.



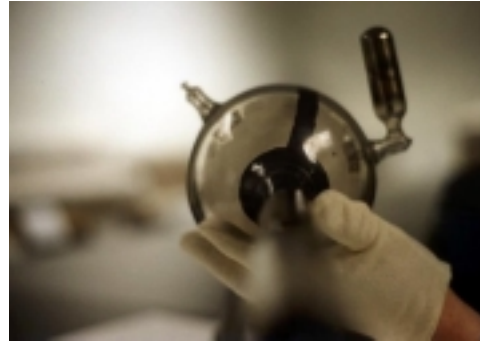
Under low daylight conditions flash gives details of the girl's face and goggles.



Flash used in daylight fills in the shadows of the man's face, giving more detail and tone.

Depth of Field

Controlling Foreground/Background focusing: The camera lens 'aperture' controls whether all or just part of the image will be in focus. Low aperture numbers (2; 2.8; 4; 5.6) create limited focus or 'depth of field'. Large aperture numbers (8; 11; 16; 22) give a greater focusing range or 'extended depth of field'.



Lower aperture number gives limited depth of field.



Limited depth of field due to the use of a telephoto lens and a low aperture number.



Greater depth of field – high aperture number.



The use of a wide-angle lens gives greater depth of field.

Using Filters

There are many different types of camera filters that offer a variety of visual effects. Here are some of the most popular:

- i. **POLARISER**- reduces reflections from and saturates colours. It also darkens blue skies for black and white photography.
- ii. **GRADUATED**- these come in various colours and give different colours to skies. They darken skies in black and white photography.
- iii. **COLOUR CORRECTION**- colour daylight film gives colour casts when used under artificial light. These filters correct these casts (orange under household bulbs and green under fluorescent lighting).
- iv. **SOFT FOCUS**- diffuses the light and is popular for romantic portraiture or landscape photography.
- v. **RED;ORANGE;YELLOW**- darken blue skies in black and white photography in varying degrees.



A graduated filter gives detail in the key and frames the subject.



By turning the polariser's outer ring you can make colours richer and reduce reflections. In this architectural photo adding the filter makes the sky more blue and reflections are reduced.



In black and white photography a red filter darkens blue skies, to make dramatic cloud scenes.

Using Different Lenses

There are four types of lenses that effect a photograph's angle of view, range of focusing, and perspective:

- i. Wide-Angle- extends the angle of view and increase the range of sharp focusing. They also distort shape by stretching distances.
- ii. Standard - gives an angle of view similar to your eye and does not distort perspective.
- iii. Telephoto- reduces the angle of view and decreases the range of sharp focusing. This also distorts shape by flattening perspective.
- iv. Vari-focal - offers a variety of angle of views by zooming in and out. These lenses can be wide angle to telephoto (35mm-150mm) or be just within the wide angle or telephoto range (24mm-35mm) (75mm-150mm). Vari-focal lenses offer more choice than fixed focal length lenses, but their limited widest aperture settings of 4 or 5.6 can limit you in taking pictures in low light.



Tele-photo lenses get close without getting in the reflection.



A wide-angle lens offers a greater depth of field than a standard or telephoto lens.



A wide-angle lens covers all the detail in a confined space.



A wide-angle lens covers a wide angle of view and exaggerates distance.

Copyright Information

Copyright information is also contained on the CD, and obtained by clicking on the large versions of each image.

Section 1: Before Pressing the Button

Filling the Frame

1. Actor Sean Connery talking on the telephone.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-202-240-R

2. The Misses Phemie and Jessie McLean.

Image Copyright:	Robert D Clapperton Photographic Trust
SCRAN ID:	000-000-112-717-R

3. Family holiday snapshot.

Image Copyright:	By courtesy of the Trustees of the National Museums of Scotland
SCRAN ID:	000-000-464-902-R

4. Fife Drama Festival.

Image Copyright:	Gerry McCann
SCRAN ID:	000-000-136-941-R

Types of Framing

1. Workers at the Ben Nevis power scheme.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-749-R

2. Picture of a doll.

Copyright Cardonald College, 2002.

3. Men digging for razorfish.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-132-993-R

4. A camera within a formal box frame.

Copyright Cardonald College, 2002.

5. Cornered man.

Copyright Cardonald College, 2002.

Viewpoint

1. Boys playing bagpipes.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-201-227-R

2. Aerial view of Aberdeen.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-039-R

3. The new lifeboat at Wick 1 & 2.

Image Copyright 1:	Marius Alexander
SCRAN ID:	000-000-134-711-R
Image Copyright 2:	Marius Alexander
SCRAN ID:	000-000-134-726-R

4. Bowmaker Mr. W. Law and his son.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-715-R

Composition

1. Graemsay crofter, Orkney.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-107-R

2. Short Horn bull.

Image Copyright:	Perth Museum and Art Gallery
SCRAN ID:	000-000-480-880-R

3. Climbers overlooking Strathyre.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-697-R

4. Sign to encourage soldiers to reuse German shells.

Image Copyright:	National Library of Scotland
SCRAN ID:	000-000-485-607-R

Juxtaposition

1. Soldier with two little girls.

Image Copyright:	National Library of Scotland
SCRAN ID:	000-000-485-357-R

2. Sign warning of Low Flying Aircraft.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-132-918-R

3. Sheep and dogs.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-294-R

4. Men on the Shetland Islands.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-295-R

Choose the Right Film

1. Forum Hotel.

Image Copyright:	Scottish Media Group
SCRAN ID:	000-000-117-463-R

2. Boxes being unloaded from a van.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-407-R

Film Speeds

1. Motorcyclists, Livingston.

Image Copyright:	Almond Valley Heritage Trust
SCRAN ID:	000-000-199-105-R

2. Beltane Fire Festival.

Image Copyright:	Gerry McCann
SCRAN ID:	000-000-136-956-R

Visual Elements: Colour Contrast

1. Men digging for razorfish.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-132-994-R

2. Men building a Haystack.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-366-R

Visual Elements: Texture, Shape and Pattern

1. North Ronaldsay Sheep.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-056-R

2. Bell's Bridge.

Image Copyright:	Scottish Media Group
SCRAN ID:	000-000-115-640-R

3. The Stacks of Duncansby.

Image Copyright:	Marius Alexander
SCRAN ID:	000-000-134-741-R

4. Detail of stained glass.

Image Copyright:	Scottish Media Group
SCRAN ID:	000-000-116-617-R

Section 2: Camera Technique

Keep the camera steady

1. Problems of camera shake.

Copyright Cardonald College, 2002.

2. The camera kept steady.

Copyright Cardonald College, 2002.

Using manual focus

1. Manual focus not used correctly.

Copyright Cardonald College, 2002.

2. Manual focus used correctly.

Copyright Cardonald College, 2002.

Shutter Speeds

1. Heavy snow falling in Glasgow.

Image Copyright:	Scottish Media Group
SCRAN ID:	000-000-122-476-R

2. Merced River and Vernal Fall.

Image Copyright:	James Gardiner
SCRAN ID:	000-000-113-495-R

3. Edinburgh Festival fireworks.

Image Copyright:	Marius Alexander
SCRAN ID:	000-000-134-381-R

4. A car caught at speed.

Copyright Cardonald College, 2002.

Over-expose backlit subjects

1. Farmer bringing in hay.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-050-R

2. A studio room wrongly backlit.

Copyright Cardonald College, 2002.

3. A studio room correctly backlit.

Copyright Cardonald College, 2002.

Use flash in daylight to avoid harsh shadows

1. Schoolgirl swimming.

Image Copyright:	Gerry McCann
SCRAN ID:	000-000-137-180-R

2. Taken outdoors without flash.

Copyright Cardonald College, 2002.

3. Taken outdoors with flash.

Copyright Cardonald College, 2002.

Depth of Field

1. Dunblane Cathedral

Image Copyright:	Marius Alexander
SCRAN ID:	000-000-133-812-R

2. John Trenouth holding Baird Telechrome tube.

Image Copyright:	Adrian Hills
SCRAN ID:	000-000-091-170-R

3. Boxes of fish.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-633-R

4. Monks at Evening Prayers.

Image Copyright:	Colin McPherson
SCRAN ID:	000-000-134-040-R

Section 3: Camera Accessories

Filters

1. Forth Rail Bridge.

Image Copyright:	National Museums of Scotland
SCRAN ID:	000-000-100-578-R

2. Composite picture with polariser.

Copyright Cardonald College, 2002.

3. Cloud Formations.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-129-R

Lenses

1. Visually impaired athletes.

Image Copyright:	Gerry McCann
SCRAN ID:	000-000-137-176-R

2. Boat Building.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-132-988-R

3. Claymore Creamery.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-132-977-R

4. A Snow Covered Road.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-391-R

Quizzes

Quiz 1

1. Boat Builders.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-046-R

2. Children helping a farmer.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-176-R

3. Cow being taken to ferry.

Image Copyright:	Chick Chalmers
SCRAN ID:	000-000-133-128-R

4. Checking the coach wheels.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-200-381-R

Quiz 2

1. Billy Bremner.

Image Copyright:	Hulton Getty
SCRAN ID:	000-000-202-332-R

2. A worker at the Tayspinners Works.

Image Copyright:	Colin McPherson
SCRAN ID:	000-000-134-327-R

3. People watching the QE2.

Image Copyright:	Adam Elder
SCRAN ID:	000-000-133-183-R

4. A family group.

Image Copyright:	By courtesy of the Trustees of the National Museums of Scotland
SCRAN ID:	000-000-467-925-R

Quiz 3

1. Ben Cruachan.

Image Copyright:	Ruaridh Pringle
SCRAN ID:	000-000-133-749-R

2. Bowling Champions.

Image Copyright:	Robert D Clapperton Photographic Trust
SCRAN ID:	000-000-112-736-R

3. Girl Paddling.

Image Copyright:	Museum of Childhood, Edinburgh City Museums
SCRAN ID:	000-000-093-997-R

Quiz 4

1. Dounreay Power Station.

Image Copyright:	Marius Alexander
SCRAN ID:	000-000-134-732

2. A Man and a Cow.

Image Copyright:	Tom Kidd
SCRAN ID:	000-000-135-381-R

3. Wellington's Statue.

Image Copyright:	Scottish Media Group
SCRAN ID:	000-000-121-544-R