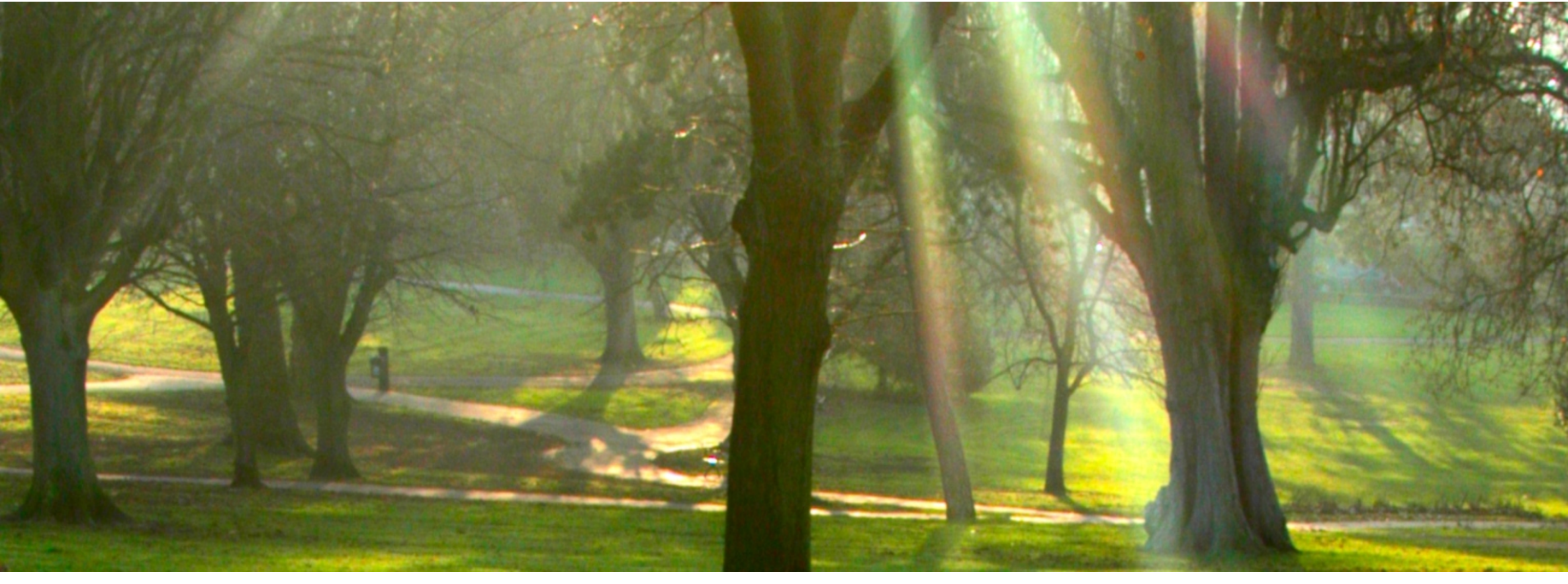
Better photography
with your compact digital camera



Tony Mills

Better Photography with your compact digital camera

by Tony Mills

All pictures in the book are taken by the author using exclusively compact digital cameras, of various brands and vintages, ranging from 1.3 to 10 megapixels. The camera used is indicated alongside each photograph. Please zoom in on the photos to see more detail if you wish.

Text in a *rectangle* links you to somewhere else in the book. Except that one.
If you want to read as little as possible and improve your photos, go straight to *Last Word.*

Thanks to the Sheppard family for allowing the use of some of my photos of them.

www.tonymills.me.uk

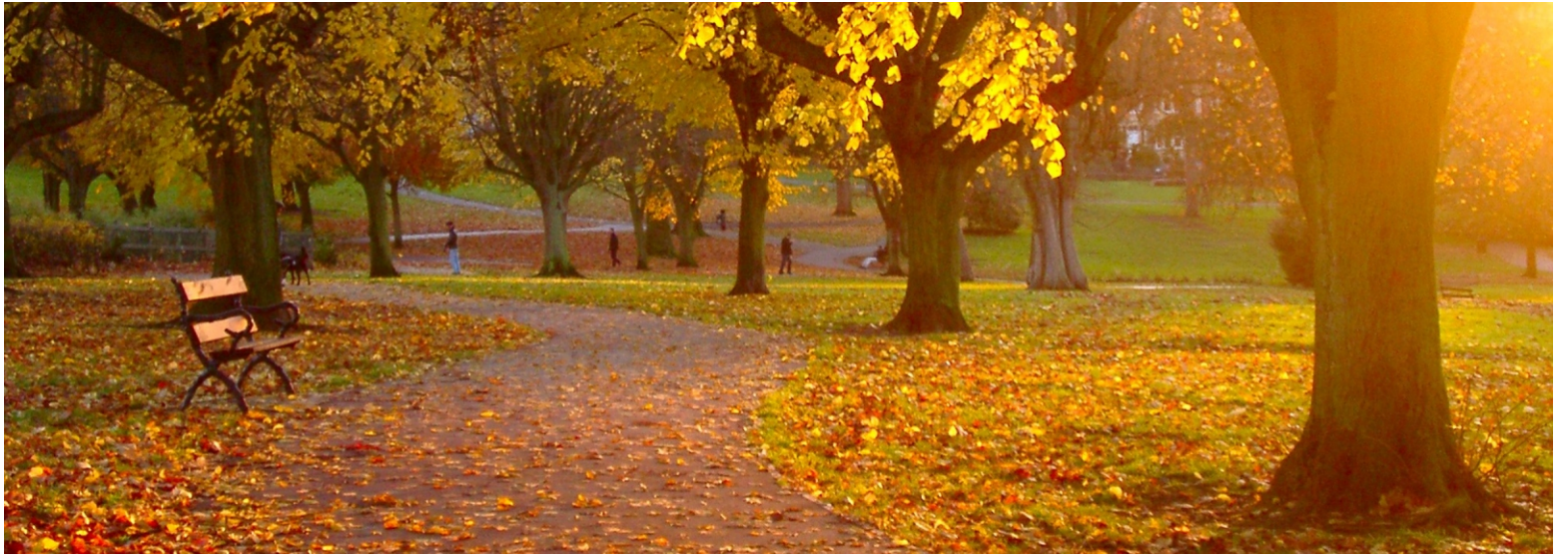
Cloister window at Salisbury Cathedral
Fuji Finepix MX-1700

Introduction

The purpose of this book is simple – to get you more good pictures, in more situations, to miss fewer and fewer opportunities and to make fuller use of the many facilities that today's compact digital cameras are packed with (and when to switch some of them off!)

All of this is easily possible, no matter what your current level of familiarity with photography. I am also assuming that you won't want to get too technical. The book is not meant to replace the camera's instruction manual, but to give you information that probably isn't included there and may take a lot of research in different places to find out (even if you do know what to look for.)

Hopefully, the information and guidance here will also help you enjoy your camera and your photography more than you thought possible before, which has its own added bonus – you will find yourself always looking at the world with curiosity and wide-open, photographer's eyes!



St Andrew's Park, Bristol, in Autumn (cropped) – Pentax Optio 330

Whether or not we consider ourselves photographers, almost all of us are now benefitting from the invention of the digital still camera. Some of the advantages are well known and obvious – now you can review, delete, re-shoot your pictures as necessary and they are available to view and share straight away.

If you have a memory card bigger than the tiny one normally handed out with the camera (the one *essential* accessory), then you can also take an amazing number of shots before you 'run out of film'. Also, these can be dozens of shots of the same subject, if that's what it takes to get the best picture you can.

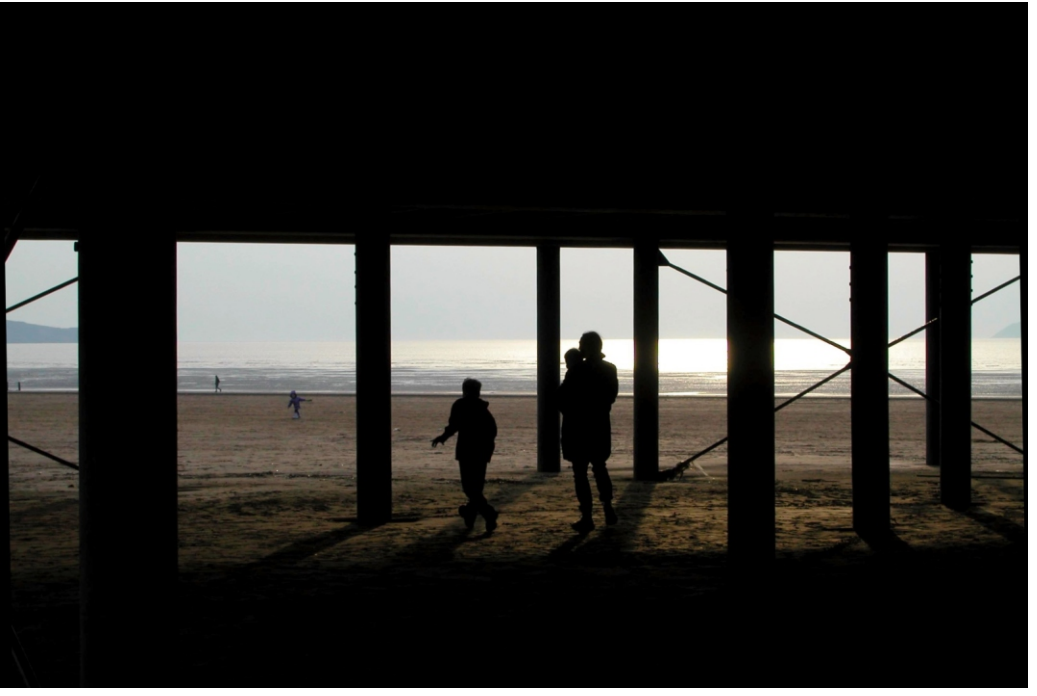
One big advantage a professional photographer used to have was his bag full of film, whereas us amateurs maybe had one or two precious 24 or 36 exposure reels and couldn't use the whole lot on one subject. Now this has all changed.

There are some other advantages to digital photography too, perhaps not so obvious.

You can now carry a camera in your pocket which is capable of taking pictures very close to tiny subjects (known as *macro* photography), because the screen shows you the actual view that the lens is seeing. With the old-style film compact cameras this was almost impossible due to the viewfinder seeing a different view to that of the lens.

Today's small digital cameras can also focus incredibly close – sometimes as close as 1cm from the subject! If you are interested in pictures of flowers, stamps, coins or even insects, it is worth checking out the limits of the camera you propose to buy.

Little yellow flowers - Minolta Dimage F300

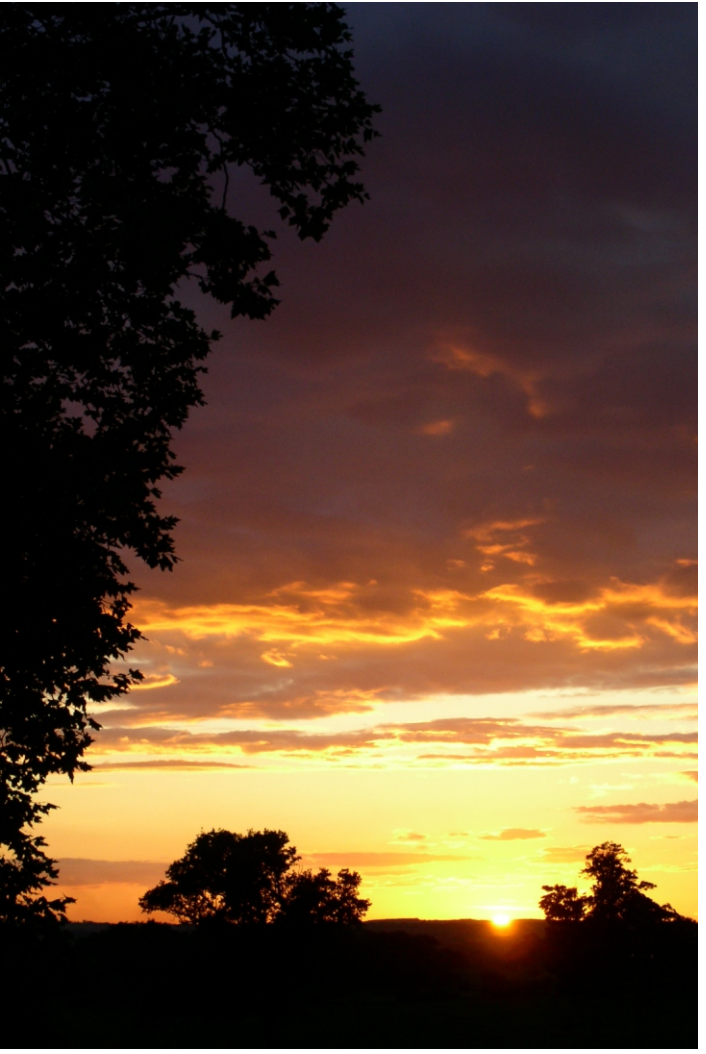


Under the pier, Weston-Super-Mare, Nikon Coolpix 5000

Perhaps the biggest advantage of all, however, is that you can learn to take better pictures with every single picture you take! A digital camera may be the ultimate photography teacher.

Every picture you take can be immediately assessed and re-taken if necessary. As you learn more and more ways to improve your photos, you will soon find yourself getting an image you want to keep and share almost every time you press the button.

So, let's get started...



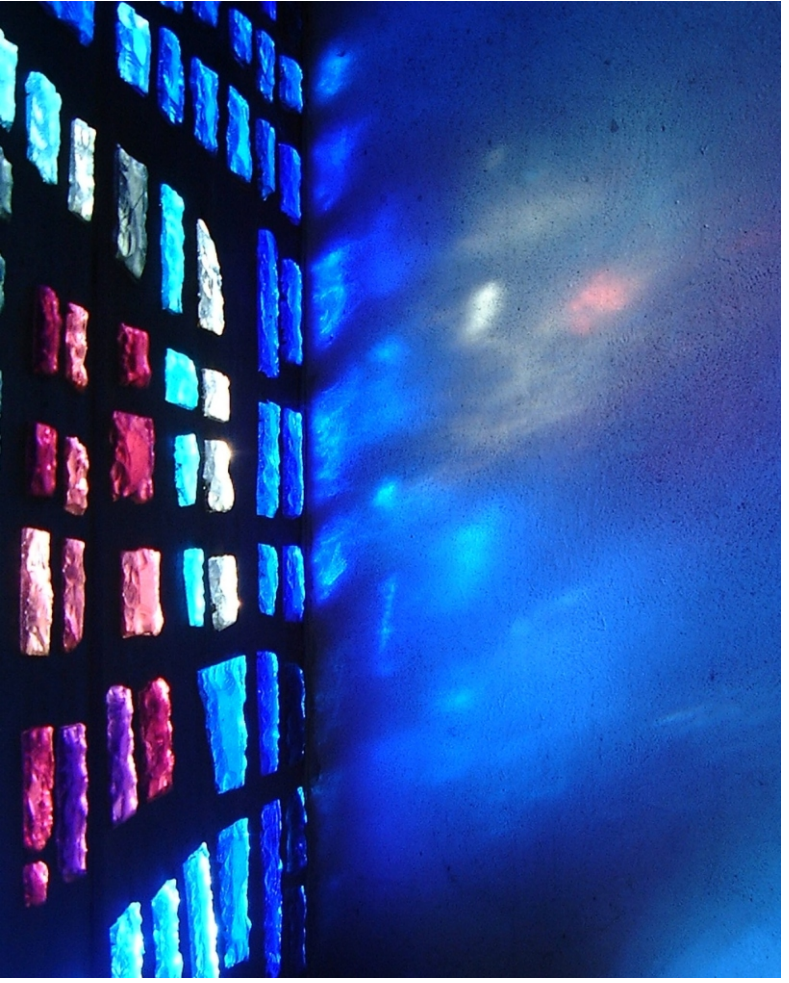
Sunset - Minolta Dimage F300

Choosing a camera

There is, undoubtedly, a camera out there that does pretty much everything that you need. If you have no special requirements then there are probably a whole heap of them. If this is the case then you can choose a camera based mostly on a size, handling and design that you like.

To give the best results, a digital camera not only has to have a sharp lens – in the old days, you could pick a different type of film if you didn't like the colours that you were getting, but this is all built in to a digital camera's processing chips. Thankfully, most of the major brand digital cameras now produce excellent results and this is one of the reasons to go with an established photographic brand – they work very hard indeed to get all this stuff right for you and have long experience in what is required.

Established online review sites, such as *www.dpreview.com* and *www.steves-digicams.com* can show you real examples from each camera along with an assessment or review. Traditional camera magazines can also be extremely helpful.



Stained glass, Buckfast Abbey - Fuji MX-1700 – just 1.3 megapixels

Pixels/megapixels

For a long time, one of the important questions about a digital camera was “how many megapixels (millions of pixels) does it have?” In the early days this was a real concern, but now it is almost impossible to buy a digital camera that doesn’t have enough pixels.

5 million pixels can print an excellent A4 sized print (approx 12” x 8”) and currently 10 million pixels or more is the norm (at the time of writing.) If you only ever need to view the pictures on a screen or use them on a website, well 10 million pixels is about a dozen times the size of the average computer screen!

Of course, there may be certain particular requirements that you have from a camera, so let’s look at what they may be...

Special features

This section is not meant to cover the many features that are standard on a compact digital camera, but to point out some of the features that are available on *only some models* which you may decide will be useful for you.

Unusual zoom lens range

Most digital compact cameras have some kind of zoom lens, that is, a lens that can vary its magnification of the subject. Most pocket cameras will give you a range of 3-4x from the widest angle to the closest telephoto. You may, however want a longer telephoto, for distant subjects, or a wider angle to fit more of the landscape, room or group into the picture.

The camera industry uses an 'equivalent' lens measurement based on the popular 35mm film camera format, because this is well established and widely understood. If you need a particularly wide view, then look for a camera that has a wide angle 'equivalent' of 28mm or lower. Many photographers consider this to be the more useful end of the zoom range to expand, as although we can crop a picture to bring out a small detail and mimic a longer telephoto, it's impossible to fit more in the picture than when we took the shot.

If you regularly take close pictures of distant subjects, like sports, 'planes, wildlife or similar, then you won't want to be cutting off three quarters of every picture to get that close-up result. In this case, look for a camera with a longer telephoto. There are several models available with 8x, 10x or 12x zoom lenses built in. This guarantees that you will have the extra magnification, but it's worth bearing in mind a couple of

Church interior - Nikon Coolpix 995 with ultra-wide-angle adapter

points: firstly, the camera will almost certainly be bigger than a standard 'compact' and, secondly, the longer the telephoto lens, the harder it is to keep it steady as you take the shot. Magnifying the subject also magnifies every twitch and tremor of your hands!

Image Stabiliser

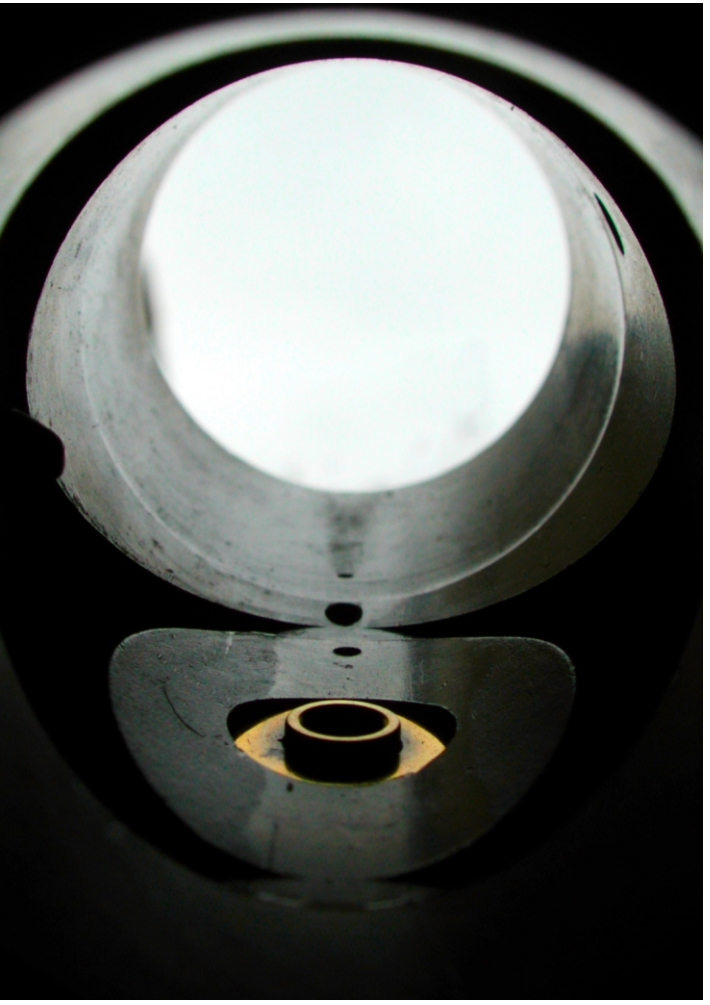
Thankfully, many of these cameras have an image stabiliser built in. This uses either an optical or digital system to steady the shot even if you are shaking a bit, and, frankly, it's worth it's weight in gold in this type of camera. It will greatly increase the number of sharp pictures you get at the longer telephoto settings. Another advantage of the stabilising feature is that you can hand-hold the camera successfully in lower light without resorting to using the flash, opening up a range of possibilities for pictures in low light. For this reason, an image stabiliser is a useful feature even in a camera with a relatively short zoom lens. In a camera with a long zoom it is, pretty much, indispensable.

Fern curls - Canon Powershot 1000IS

Macro (close-up)

I'm sure many photographers still cringe at the use of this word to describe this facility, as it used to have a very specific meaning (*macro* meant that the small subject was the same size on the negative as it was in real life, ie. 1:1 or life-size reproduction.) Today, it is used as a general term for the ability of a camera to take a picture of something small. This feature used to require a big camera and an expensive 'macro' lens, but most compact digital cameras now have a special setting for this, and they're often very good at it.

There are variations in how close you can get - some cameras can get you a sharp picture 15cm (6") away from the subject, others as close as 1cm (less than 1/2".) This is amazing, but at that close range it can be tricky to light the subject without the camera's shadow getting in the way!



Inside of Yamaha motorcycle carburettor - Nikon Coolpix 990

Also worth checking out is how the zoom has to be set in order to use the macro feature. Few compact digital cameras can use this mode throughout the whole range of the zoom. Generally it will work at the wide angle setting only or the telephoto setting only, depending on the camera's design. If you take pictures of things that fly, hop or crawl away if you get too close, then a macro facility that only works at the wide angle setting is a handicap and you would be better off with a camera that uses the telephoto end for macro so you can maintain a greater distance from the subject.

With any macro photos, it is very important to know that you will need to keep steady and not move the camera at all once it has focused, as even the smallest shift of distance will put your subject out of focus!

Manual exposure control

There are a number of small digital cameras available that have manual or semi-automatic exposure control. If this is something that you are used to in your photography, then it may be something you'd like to continue using with your pocket camera too. There is often a wide range of shutter speeds available, although the aperture range is normally limited due to the tiny focal-length of the lens – don't expect very small aperture settings on a pocket digital.

Fly on a wall (colour adjusted) - Minolta Dimage F300

Accessories

Memory card

Get a big memory card! The one that comes with your camera is always of a limited size, unless you got a special package deal with a larger one thrown in. Cards with a relatively large capacity are now very inexpensive, so you'll be doing yourself a big favour by giving yourself space for loads of pictures. Also, using half of your time and battery power deciding which pictures to delete and which to keep is frustrating - better to use it for taking pictures instead and do the deleting when you get home!

Batteries

Today's digital cameras are far more able to take a good number of shots, even on a set of regular alkaline batteries, than the early models. This is great. Do consider using rechargeable batteries if you can. Many models have their own battery and charger supplied with them but if your camera uses AA batteries, a set of NI-MH (nickel metal hydride) AA rechargeables and charger will reduce the cost of your photography to practically zero. Plus, they last a good long time on every charge, as long as you don't

regularly leave them in a flat state for long periods, which reduces their life a lot - if you're leaving them for a while, try to leave them charged.

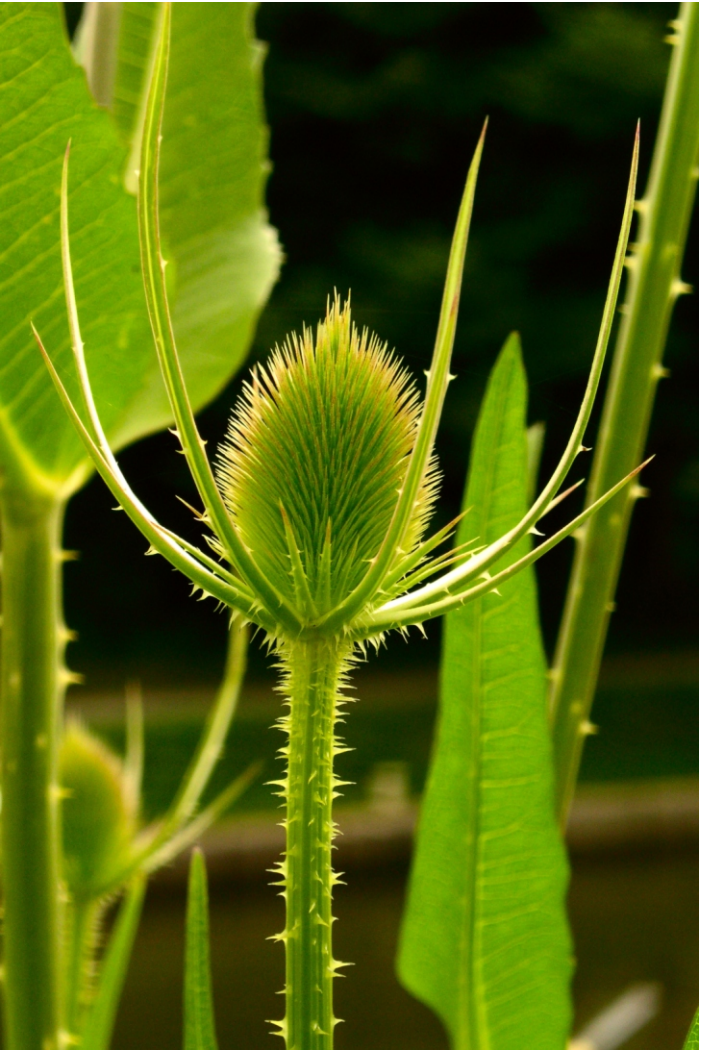
Tripod

A small pocket tripod can be a very useful accessory. Sometimes you may want to get in the picture yourself using the self-timer, or you may wish to keep the camera steady for a night-time scene which the flash won't light up, as the built-in flash is only designed for lighting things up to about 3-5 metres (10-16 feet) away.

Some tiny tripods are available now, and also some that will attach or grip to objects. This allows you to almost always find a secure support at the angle you need – even hanging above a scene or attached to a vehicle or wheelchair. If you are taking a night-time picture without flash, don't forget that the shutter will be open for longer than usual, so moving the camera as it takes the shot must be completely avoided – use a remote control if available, or fire the shutter using the camera's self-timer. See the chapter on *night photography*.

Other accessories

There are other items available for some compact digital cameras which you may find useful or fun. These include remote controls, wide or telephoto supplementary lenses, small effect filters which attach via clip-on adapters and even waterproof housings. The waterproof housings allow you to take shots several metres underwater in clear water. Regarding all of these extras, if any of these are items that you would use, make sure you check availability for the model you intend to buy.



Thistle - Minolta Dimage F300

Using the camera

Basic techniques and concepts that will help you with every shot you take.

Pressing the shutter

Yes, this sounds like really basic stuff, but it's really worth practicing!

If you were learning to fire a gun, one of the things that you'd be told is to *squeeze* the trigger. The reason is probably obvious - if you pull it quickly you are very likely to move the gun enough to miss the target.

When taking a photograph, especially with a small, light camera, if you jab at the shutter button, you may not miss the subject altogether but you are much more likely to end up with an unsharp picture due to moving the camera while it takes the shot. Instead, make sure that you *squeeze* the button, keeping the camera steady in the process. This can take a little practice before it doesn't feel too slow, but soon you will be able to take a photo quickly without ever hurrying on the button, and you'll get sharp pictures more of the time.

Little red bug - Minolta Dimage F300

Focus lock

This is very useful if you want your subject off-centre, or if it is not the closest thing in the picture. Even though modern cameras are often not limited to finding the subject in the centre of the picture, sometimes they just keep choosing the wrong thing! Half way down the shutter button's travel, there is a point where you get some resistance but the shutter doesn't fire just yet. Also at this point, you will get an indicator – a green/yellow light, a square or cross over part of the image on the display – which tells you that the camera has decided where to focus. As long as you *hold this pressure*, that focus distance will *remain the same*, even if you shift the camera. Get to know well where your shutter button does this. As well as letting you focus – re-compose – shoot, it also allows you to take very quick shots, as you will learn in the section *Slow camera? – Fast pictures.*

It's good to be aware that most cameras will also lock the exposure at the same time as the focus, so if you are focusing on a subject and then moving the framing before you shoot, watch for big changes in light, eg. including a sunny window when you focus which is not included when you take the shot, as this will muck up your exposure.

Image Quality settings

Your camera can take pictures at several different quality settings. There are two deciders of quality – image *size* and image *compression*. Many cameras let you alter these independently of each other.

Image size is simply the number of pixels in the image. For example, you may have a 10 megapixel camera, but it will probably also have settings to take a picture with as few as about 300,000 pixels and several settings in between.

The smallest settings are really for pictures that are only for use on a screen, website etc. This is useful if you don't want to bother making down-sized copies of a lot of pictures that are only for the screen. Prints from these will be disappointing, however, as there's very little detail. You can also use these smaller size settings to fit a huge number of pictures on a small memory card but again, only if you don't intend to print them and don't need much detail.

You may possibly find it useful to use a medium setting most of the time (eg. 3-5 megapixels), giving you more pictures without the images being too small to be useful.

Remember – you can always make a small copy of a large image, but you will never make a good, large copy of a tiny original.

Image size - not enough pixels!

Compression is the other factor. Your camera saves it's images – in most cases – as a JPEG (.jpg) file. This type of file can be compressed – 'squashed' so that it takes up less memory. You get the same number of pixels, but more compression means a smaller size in the camera's memory. JPEG is 'lossy' compression (more compression loses more information), and the more compression is applied, the lower the quality of the image becomes. Basically, the accuracy of which-exact-pixel is which-exact-colour gets less and less, and on the lowest quality (most compressed) setting this can result in noticeable banding on large areas of colour, like a gently graduated sky, and artifacts (wrong colour pixels) scattered around the edges of objects in the picture.

So, the combination of these two is your overall quality setting, and the overall decider of how many images you can fit on the memory card – as quality goes up, number of images goes down.

Once again, a large capacity memory card will save you from having to explore the more ropey end of either of these quality settings: big card – best quality settings – off you go!

Image quality - too much compression!
Zoom in to see the 'artifacts' around the insect...

ISO setting

ISO (International Standards Organisation – no need to remember that) is equivalent to film speed, or sensitivity. The higher this is set, the lower the light you can use the camera in and still get a result. It also extends the usable range of the flash.

Most small cameras are set by default to *Auto ISO*, and you may well just leave it at this most of the time and let the camera sort it out. But you can override this – the higher the value (100, 200, 400, 800 etc...) the faster the shutter speed the camera will be able to use in the same light, or the further it will pick up the flash's illumination.

There is, however, a compromise involved – as the ISO rises, expect the image to look increasingly *noisy* (like film grain), increasingly unsharp and *decreasingly* colourful. Some cameras now go to very high settings (even ISO 2000), but whether the results are usable is debatable.

High ISO settings can get you a picture, rather than no picture, on many occasions, and you can play with the result afterwards in photo software to reduce some of the quality issues to a degree.

Also, if you can keep the camera on a steady support and your subject is not moving, you may sometimes want to force a *low* ISO setting, to get maximum quality - this is often overlooked! See the section on *night photography.*

High ISO, no flash – Minolta Dimage F300

White Balance

This is automatically set by the camera in normal use. When we photograph a scene, the type of light that is illuminating it affects the colour balance of the result. This affects all the colours in an image, but white or grey is used as the reference, as it should be neutral colour. If the camera is set to *daylight* white balance, then white and grey will look correct in daylight, but they would look orange under traditional domestic bulbs, very orange under candlelight, and green under flourescent lighting!

It's worth knowing that you can also manually set the camera to the different lighting types yourself. One huge advantage of digital photography is that you can use almost any light and get natural colours in the image. As well as the camera's preset alternatives to 'auto' – incandescent, flourescent, candle, daylight – you may also have a *custom* setting. This allows you to show the camera a tone that should be neutral grey or white and it will adjust the white balance to make it so.

This opens up many possibilities for lighting set-ups created from whatever lights you have available. For example, if you like close-up or still life photography, you can make a mini studio using domestic lamps, setting the custom balance so that the result has perfect colour. Just make sure that you don't mix lighting types in the setup, eg. flourescent with traditional bulbs, as the camera will have trouble correcting for this.

Sometimes you may wish to intentionally set the *wrong* balance, for example, a candlelight scene with absolutely correct white balance – ie. all the orange colouration neutralised – may lose it's warm atmosphere. Setting to 'incandescent' (traditional light bulb) instead would retain more warm redness in the image.

The camera's flash will override any ambient light, so you can always leave white balance on auto if you're using flash.

Flash

Your camera's built-in flash will help you get loads of pictures you couldn't otherwise get. For this, it's fabulous. Flash is very useful, often essential, but it has physical and creative limitations. Firstly, it has a limited range, usually up to about 5 metres (16ft) or so. Think about this the next time you see all those flashes going off in the audience of a rock concert or football match – they're just illuminating a few rows of heads in front of the photographer!

The second major limitation, this time creative, is that if the flash will illuminate your subject, it will make it look exactly like every other flash picture, regardless of the ambient lighting that was present at the time. A room can be beautifully lit by candles but, as soon as the flash fires, that delicate ambience is drowned in a stark, white, generic illumination, unflattering and cold. The lights on your Christmas tree, which look so pretty, will disappear entirely if you photograph them with flash. You will have lots of clinical detail of the tree but zero atmosphere. It is well worth getting familiar with alternatives to use on, at least, some occasions – see *ISO setting* and *night photography*.

Red-eye reduction

Red-eye reduction does work, but only in certain situations and it always adds at least half a second or maybe a whole second to the shooting time. It shines a light, or fires a pre-flash burst at the subject, to make the subject's pupils shrink and reduce the chance of red reflection from the back of the eye (which is what 'red-eye' is – at least, the photographic sort that we're talking about…)

Unfortunately, it is not effective when the pupils are slower to respond. Old people often have slow pupil-shrinking responses, young children's pupils often don't seem to care if you shine a bright light at them, they can stay pretty open, and people who are at all drunk will also have less responsive pupils.

Elvis on the table – taken with the built-in flash
Minolta Dimage F300
Note the flat lighting and harsh shadow
(but no red-eye…)

Red-eye reduction flashes also confuse many people, as they don't know when the picture has been taken with all the different flashes going off. All told, this makes it ineffective in a lot of people pictures!

Red-eye can be removed automatically by most photo software, and many cameras can now do it too, so really, trying to do it with the flash setting is just a good way of slowing you down. Also, often you can use light that's already there to reduce red-eye. For instance, if there's a big window letting in light, a group arranged facing the daylit window end of a room will all have smaller pupils than a group facing into the dark end of the room.

Buddhas by candlelight – no flash, Minolta Dimage F300
Notice how the picture retains the beautiful illumination of the candles

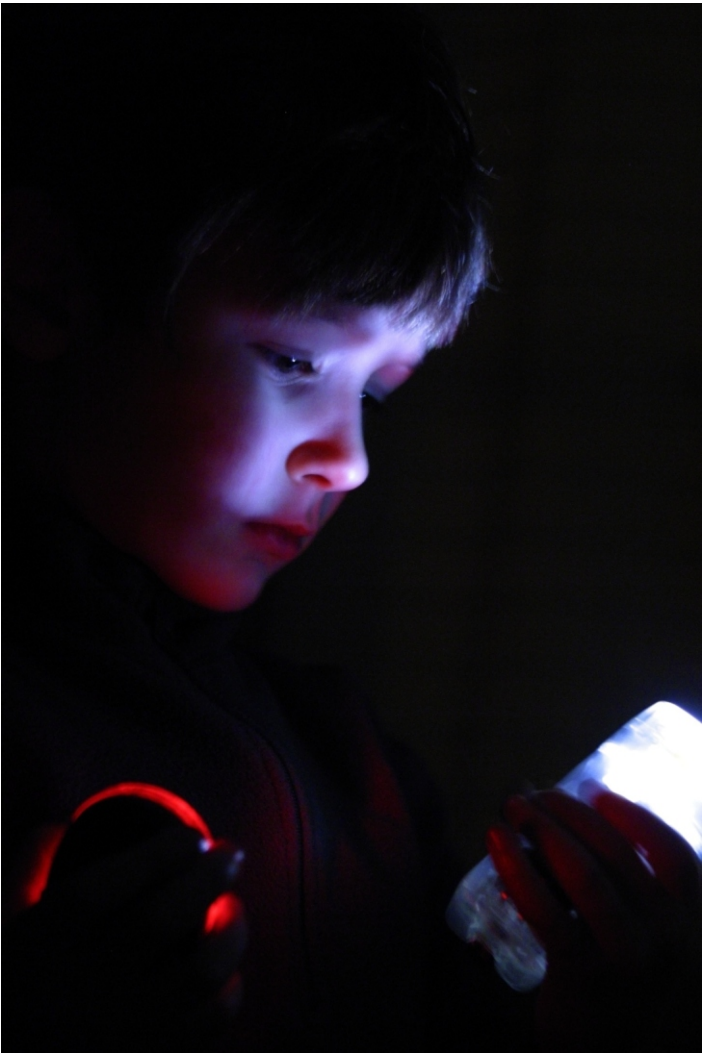
Exposure and compensation

All small digital cameras will work out the exposure for you, but sometimes they won't get the bit you want correct. You can often use software on the computer to adjust things a bit afterwards and get more like the result you want.

However, it's very useful to understand that under- and over-exposure are different. Detail that is too dark can, within limits, be 'pulled up' afterwards so that it is more visible. If detail is too light, ie. bleached to white, however, it's *gone for good!* So, when you check a shot after taking it, the most important thing is to check that the *brightest bits you need detail in* actually do have detail in them, as these can't be recovered later. This is quite common in very bright sun, where faces lit by sun can be too bright if they're quite small in the picture. Bright sunny weather is beautiful, but it can cause problems for a camera's light meter, as there is so much contrast.

You may have a *highlight warning* and/or a *histogram* feature available in the camera when reviewing the photos (check your manual for this.) The highlight warning will show any overexposed, whited out areas as blinking, which makes it very easy to spot. Often the sky in a picture will be blinking and this may be okay, but if part or all of the subject's face is blinking, for instance, then that's probably not okay, so you can re-shoot.

How do we change exposure if we need to? Most auto cameras have an *exposure compensation* feature – signified by a '+/–" symbol, either on a button or in the menu or display. This allows you alter the exposure up or down in fixed increments, usually of 0.3 or 0.5 of a 'stop'. One stop is equal to a doubling or a halving of the amount of light, so *-1.0* is half as much exposure, *+1.0* is twice as much exposure. If a detail is too bright, you may try setting this to *-1.0*, for instance, and shooting again.



Jasper with cycle lights - Minolta Dimage F300

The histogram is a graph. It's not as straightforward to use as the blinking highlight warning. Left-to-right shows dark-to-light, graph height shows the quantity of pixels. A large peak at the far right edge (white) means there's a lot of white pixels in the image, but you'll have to judge whether there should be or not, depending on the contents of the picture. In the example histogram below, most pixels are dark (the large peak at the left) and there is a smaller peak of pure white pixels at the other end. This is the white torch in the picture. If the peak at the right side was much bigger, then it would say that there are lots of white pixels, so it would probably mean that the face was overexposed too. The histogram takes some familiarity to become useful, so use the blinking highlight warning if you have one!

It is often possible to leave the camera set so that this highlight information is shown by default when it gives you the short automatic review after you take the image, meaning that a quick glance after shooting will tell you if the photo is exposed as it should be. This is definitely my preferred way to leave the camera's playback setting.

Example histogram for the picture on the left.
Most info is at the dark end, the peak at far right is the white light.

Hot legs (a found scene) - Canon Powershot 1000IS

Better, faster photos

This is the section that will make *big* differences to your photography. Getting familiar with even one or two of these suggestions will make an amazing difference to the quality and impact of your photos. Once these become second nature, which they will with only a little awareness and practice, prepare yourself for a future full of beautiful images!

Some of these will apply to every photo you take, and others will help you to take great shots in tricky situations – including pictures that you may have thought were not possible with your camera.

Let's start by finding out how to use the camera quickly, so that you don't miss the picture you want due to waiting for the shutter to fire…

Jake blowing bubbles - Canon Powershot G2

Slow camera? – Fast pictures

So, you take out your new camera, pop the batteries and card in, switch it on, aim it at the rest of your family. They all smile as you say “cheese” and press the button, and… sometime later, maybe after they’ve stopped smiling, or glanced somewhere else, the shutter fires. This is a very common scenario. Believe it or not, you can use this same camera to take pictures at the instant you want to, if you just change a couple of settings and practice a little on the shutter button…

First – turn off the red-eye reduction setting of the flash. This is shown by a little eye symbol next to the flash/lightning bolt symbol. When the eye isn’t showing, it’s off. See section on *red-eye reduction.*

Second – if you are taking pictures outdoors in the daytime, you can override the auto-flash setting and leave the flash off entirely. Just turn it on if you need it. If you take a shot and it needs a little fill-in light on the subject, then switch it on and take it again. With a little practice you will know in advance when you’ll need fill-in flash, and in the meantime it’s just slowing you down and draining your batteries.

The leap (cropped) - Nikon Coolpix 880

Third – use the *focus lock*. Huh? Really. This is a great trick – one that will turn you into a moment-grabber extraordinaire!

Your camera decides the focus point and the exposure when you half-depress the shutter button. When you just push the button all the way down in one go, the biggest cause of the delay in shooting is the time it takes to do this bit. So, say you're taking a picture of your child and you're waiting for that perfect expression. Are they moving closer and further away from you as you watch through the camera? If they're not (or not very much), then focus *now* – push the button until the little greenish light comes on or the square appears or whatever your camera does to tell you it's focused and *hold the button there*. Keep watching and when they look that perfect way then push the button the rest of the way – the camera will fire pretty much instantly, because all the hard work is already done. Practice this until it's second nature (it doesn't take long) and you will not believe the difference in what you can capture. If the distance keeps changing, keep lifting and re-setting the focus, just make sure it's always *already done*. Even if you have to grab a shot with little or no notice, practicing this and squeezing the shutter will mean you almost always get the shot – try it!

Composition

There is no single right way to compose a picture. Every 'rule' that helps to make a picture stand out from the crowd has also been successfully broken to exactly the same end. Still, as in many creative pursuits, breaking the rules often comes after learning a few first. To make full use of these guidelines, make sure that you know how your camera's *focus lock* feature works (although it won't always be necessary with the wide areas within which modern cameras are able to find the subject and focus.)

Include what you want, exclude what you don't

The first bit of the suggestion above is obvious, the second is not so obvious but transforms your results dramatically. It's also, arguably, the hardest rule to successfully break. Once it becomes second nature you will take better pictures all the time.

Take another look at the *Hot Legs* image on page 25 – it is a fairly random arrangement of objects, which I came across in a closing-down warehouse. Obviously, everything you can see, I deliberately included, but can you also tell that I, just as deliberately, *excluded* stuff too? Everything in the image seems to belong there, even the little white strips at the top and the wires on the floor. Simply put, there is nothing in the image that says 'I shouldn't be here - I'm a distraction!'

Take a moment as you compose the shot – what is in the view that you don't need? In many, many photographs there's something, or lots of things, that confuse the eye when we look at the photo. It takes a while to work out what the subject is when it's cluttered with possible subjects, and in great photographs there's rarely anything there that isn't part of the photo's 'message'. Ideally, everything in the shot should reinforce the subject, and nothing should distract

Jasper drives the bus – Nikon Coolpix 5000

from it. This doesn't mean every shot should have a Zen-like emptiness, just that if there is a lot of background it should tell you more about the subject if it is included, otherwise, leave it out. Use whatever method you need to to accomplish this – zoom in, move closer, shift the view, but always check this and your results will shine.

Bear in mind that the screen or viewfinder on your camera probably shows you something like 85-90% of the photo the camera will actually record, so sometimes you will end up with stuff at the edges that you didn't plan. Never mind – you can always crop a little afterwards if need be, and the more you practice, the better you will anticipate this.

Jake with blue flowers – Minolta Dimage F300

Get close

This is similar to the previous guideline, but is worth mentioning separately anyway.

When we look through an eye-level viewfinder (if anyone still does...) we tend to naturally home in on the subject and not notice the surroundings with our eye, as if we were looking through a telescope. Over the years this has become a habit, unless we've had it pointed out to us.

A digital camera's screen is a great aid – you are looking at a framed picture, with definite edges, so be aware of this and use the frame to compose the shot. Very often you will find that you can make the subject much larger in the frame, and instantly get a shot with far more impact.

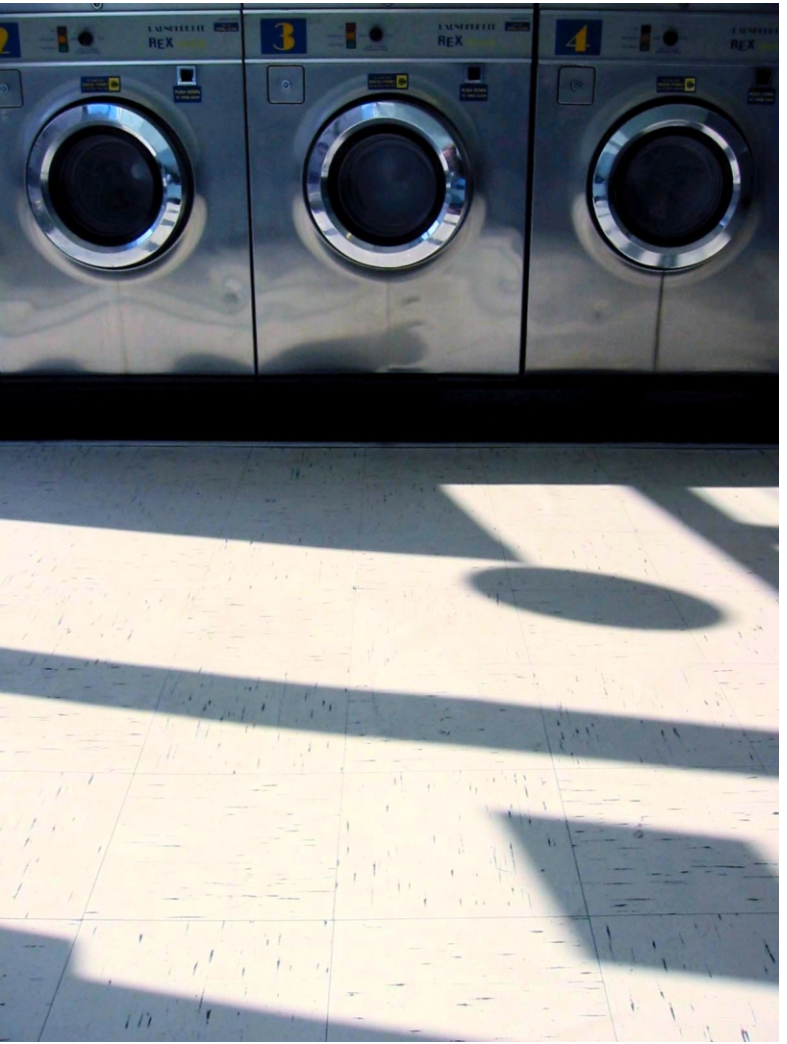
Abbi the cat – Minolta Dimage F300

Beware of putting faces in the centre

We are used to cameras encouraging us to put the subject in the dead centre of the viewfinder (because that's where they've always focused) and sometimes that's exactly the right thing to do. A lot of the time, however, it isn't.

This is especially true of half- to full-height pictures of people (or cats!) Normally, we will be focusing on the face of the person, so our habit would lead us to put the face half way up the frame. Whether we have the camera held horizontally or vertically, what we end up with if we do this is a photo where the top half is background and the subject is only in the bottom half. This almost always produces an uncomfortable composition – when you see it you want to grab them under the shoulders and lift them up into the space above!

Much more pleasing is to arrange it so that the subject's face is closer to the top of the frame. If you have a newish camera, it may even have automatic face detection, so you can compose the picture this way without even having to use the *focus lock* – just point and shoot.



Launderette – Canon Digital Ixus

Rule of thirds

This guideline is as old as painting, and continues to be useful in photography. Mentally divide your picture into thirds each way. The lines and intersections are places that we find pleasing for the subject to be situated. Who knows why? But we do and it works. Obviously you need to decide which 'intersection' suits the subject in each case, but it's a very simple way of giving a picture a touch of class.

Daffodils – Olympus mju:300

Reading on the beach – Minolta Dimage F300

Use lines to lead the eye

Again, this is an old trick but we still use it because it works. Lines leading towards the subject, like a fence, railway tracks etc., point our eye towards the subject, and they don't have to be straight lines, they can be curves too. This can be very successful when the subject is relatively small in the picture (see *little red bug* image, page 16), which is sometimes unavoidable, and can make a good shot from an unpromising one.

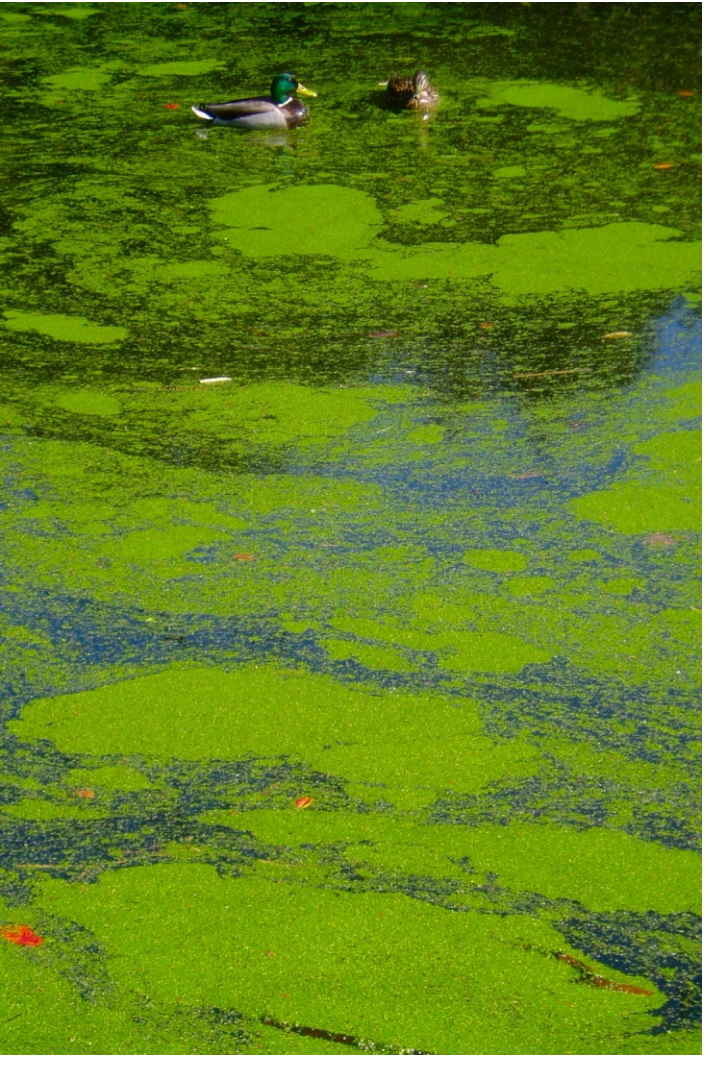
Sitting in the light – Fuji MX1700

Use frames

Another way to focus the viewer's eye on the subject is to place it in a natural frame – this frame can even be out of focus (this can help to stop the frame itself from being a distraction.) Trees, leaves, street furniture, holes in wood – there's loads of ways to do this!

You may have to play with the focus to do this if the frame is closer than the subject, and, depending on what's being used as the frame, sometimes an autofocus camera just won't play ball with this one. Many cameras will let you reduce the focus point to a small area, and this is very useful for getting it to look through or past the frame to the subject that you want sharp.

Andy flying a Cessna - Minolta Dimage F300



Ducks - Olympus mju:300

None of the above

Of course, you don't have to do any of these things.

Sometimes you just see a picture there and it just works…

Jasper leads the eye out of the frame – Minolta Dimage F300

Bath Guild Hall, Abbey and bus stop – Minolta Dimage F300

Night photography

This section is particularly about taking good atmospheric shots after dark – not pictures which are happily covered by using the flash but maybe city lights, large indoor spaces that the flash will not illuminate, the headlight trails of passing cars and any scene where you wish to preserve the appearance of the ambient lighting. See the section on *flash.*

Note - if you need to take pictures at night that require a moving subject to be captured sharply, without blurring the motion, then you will need to use the flash, as without it the camera can only get enough light by using a longer shutter speed, letting light in for a longer time, which will cause any movement to become a blur. It may be worth trying a very high *ISO setting* and no flash, however, in case there is enough light for your purposes and if you have time to experiment.

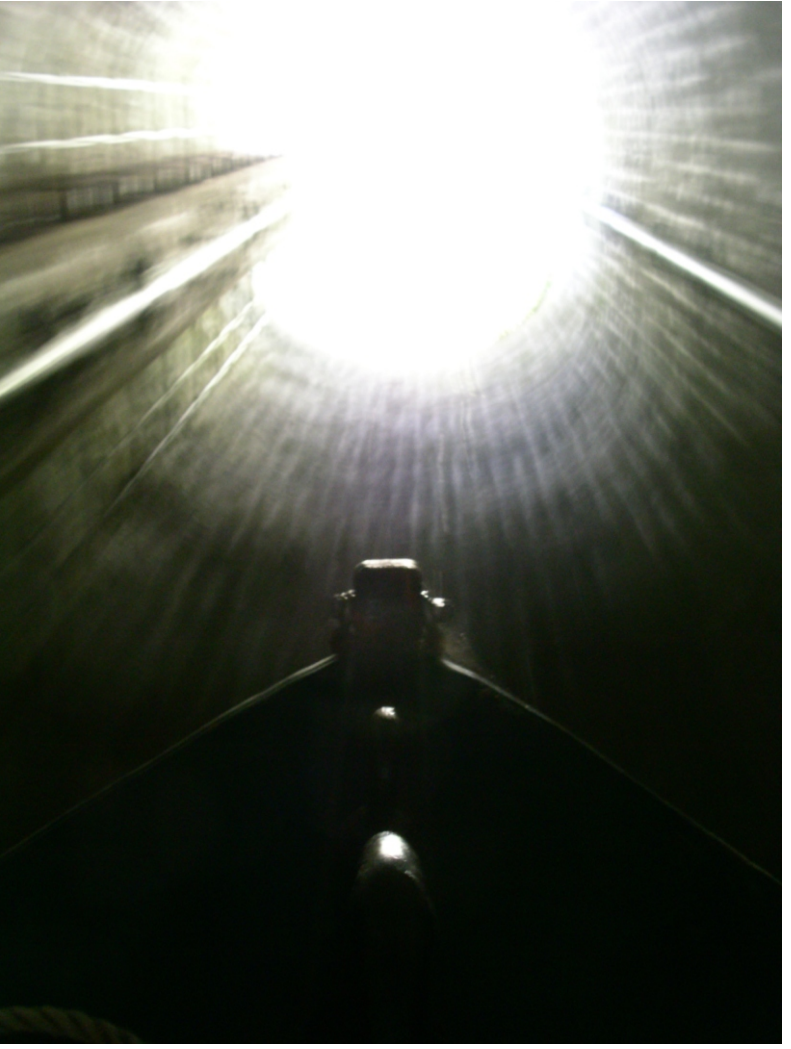
So – you switch the flash off. What now?

First – use your pocket tripod, or, bundle up a sweater or jacket and put the camera on that, or, rest it on a wall with some little 'anything handy' to prop it at the right angle. In short, put it on a support, so that it can keep the shutter open for longer without movement.

Second – set the camera's self-timer. Even on a support, if you are pressing the shutter release in the normal way, you will move the camera enough to blur the picture in low light. Use the timer so that the camera 'fires itself' a good few seconds after any movement you introduced has died down.

Third – if you have the first two points sorted, then turn down the *ISO setting* manually, if your camera allows this. This may seem counter-intuitive, but a high ISO is still intended to let you try to get a hand-held picture at a reasonably fast shutter speed. If you don't need this, because neither the camera nor the subject is moving, then increasing the ISO just gives you a far worse quality result – more noise and greatly limited colour range. Turn it down to the lowest (=highest quality) setting and let the camera use as long a shutter speed as it requires. This will give you a far better image, always. It also gives you longer and finer car headlight trails, and who doesn't want that?

The above points also apply to the 'night photo' mode that many cameras have. This combines flash with a long shutter speed, the idea being that you illuminate the foreground (person) with flash and the slow speed lets the background ambient lighting register fully as well. Although the flash is used in this mode, the long shutter speed will allow blur if you move during the exposure. If the image includes a living, breathing person, you may be best off leaving the ISO on auto for this type of shot, as telling them to keep completely steady for ages after the flash fires may not be appropriate!



Canal tunnel – Minolta Dimage F300

Last word

There's a lot of subjects covered in this book, although it only covers a fraction of photography, of course. So, where to start?

If this was all new, I'd practice a couple of things first – and *do* practice, as it will only take a little familiarity and the difference in your day-to-day photography will be *huge*. So, I'd start with:

Taking *faster pictures*

Composition – *include/exclude*

One of these will sharpen your finger (so to speak) and the other will sharpen your eye and photographic awareness, and if you only ever remember these two techniques you'll never look back. You've the rest of you photographic life to learn the rest.

Enjoy your image-making!

To see more of the author's photographs and other work, please visit www.tonymills.me.uk