ADVANCED TIPS FOR BEGINNER/AMATEUR PHOTOGRAPHERS

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A SHORT EXPLANATION OF ALL THINGS PHOTOGRAPHY

INTRODUCTION

If you are reading this book it probably means that you are where I was over 20 years ago, hungry for more information on photography with a burning desire to improve and move on.

For what it is worth, I have **never** lost that feeling; it is like a true passion that has stayed with me from 13, right through my adult life where other fads and interests have come and gone or just waned.

This book **won't** bore you with all the technical jargon, there is enough of that on the internet and other publications already, and I personally find it altogether quite unnecessary (unless you are aiming to become a digital engineer, retailer or "photography forum bore").

Note: Ever wondered why most pros own the most up to date, high end digital SLR's capable of doing everything possible that technology has to offer, and then switch to manual 95% of the time?

This book **won't** teach you how to cheat or enhance your images with Photoshop. There is a time and place for that, why run before you can walk with confidence?

This book **won't** tell you or influence your decision on what equipment to buy. That is a matter of personal preference and your individual situation, plus it is mostly irrelevant.

What it **will** do is take you back to basics, assume that you are at the beginning or just getting into digital/photography, and would like to learn simply how to get better! It will teach you how to take control, take better pictures and give yourself an idea of where you want to be in years to come.

It **will** only explain about the necessary terms and jargon that you need to know to get you on your way. Too much information at the start of your journey will only cause to confuse you. Learn how to take great pictures every time, easily, effortlessly and consistently and then you can move on.

If you are just starting or have found your interest in this hobby fairly recently, you are so very lucky. Although film in its day was obviously the way to go, I dread to think of the time and money that I wasted on various aspects that are no longer needed with digital;

- **Black and white darkroom** – The mess, the time, the waste of paper and money, the chemicals (bad for environment), although it ***was*** fun!
- **Colour Film processing** - The waiting for 2 weeks or more for the prints to arrive, the cost, the lack of Photoshop/powerful computers for editing (what you got was **what you got**), the possible loss or damage to film cartridges, care and storage of negatives and hundreds of prints.
- **Maximum 36 exposures** - Oh the stress of being **so** careful when shooting as each shot was **so** valuable. In a way this made you think more about the photos you took but having 400+ shots on one card is **such** a luxury!
- **Kids** - With the low cost of digital cameras and complete lack of processing costs, it is so nice to give young children "free reign" to learn this wonderful hobby from a much lower age. My son at just 2, having seen Daddy with his cameras so often, already knows how to scroll through images on our digital point and shoot camera!

The aim of this book is to ease you gently into the higher realms of photography and hopefully teach you about the more technical and advanced aspects **without** getting too technical if you get my drift.

I have tried, where possible, to include as many example images to illustrate the points further. The quality may not be high due to keeping the file size of the book to a downloadable minimum, but hopefully they will help.

What I will do often, is refer you to images that I have on my website, that way they are better quality but you will need an internet connection. You can either left-click on the link to load into the PDF file, or right-click and "open in a new browser window".

My first piece of advice at this stage is this: Whatever camera you have at the time of reading this book, stick with it for now. When I upgraded to digital from film, I chopped and changed for a couple of years as technology improved, until I was truly happy with the quality of images coming from my camera.

I am now at the point where I can more often than not, confidently walk around with my camera and instantly know the following:

- What exposure setting to use on the camera to suit the shot I want – Knowing the ins and outs of your equipment is a priority.

- What lens to use and how – Or what focal length (i.e. 24mm, 35mm, 100mm) to use if using a point and shoot or advanced compact.

- I know what will make a good shot by using **just** the camera.

- I also know what will make a good shot with a little help from editing in **Photoshop** later - Even if the image appears a little bland at the time of shooting.

- I know when to just leave it – Burning storage space and taking too many images is a **very** easy trap to fall into, but can also be quite useful. Learn what to keep and what to throw away.

By the end of this book, you will hopefully feel the same way. You will have more "keepers" and feel confident that you will "see" so many more pictures as you are out and about.

Things can become so "automatic" to you, you feel like you could just blink and the image is done! Finished, edited and ready to frame. Learn to see the image before you have even taken it!

Think about this;

Your eyes see at the equivalent of a 50mm standard lens. How would it feel if you could arrive at a scene and instantly imagine and know how the image would benefit from either a wide angle or telephoto lens, or a polarizer or grey grad filter?

This all comes about from knowledge and practice, once it "clicks" in your brain, your photography moves up to a whole new and exciting level. You will never look back!

1.

How Cameras Work and Taking Control

This is a very important aspect of photography, knowing all about and taking control of your camera. It is all too easy to become bewildered, worried and confused by all of the bits, buttons and features that your camera has to offer. Don't **ever** feel that you **have** to use them all, because you don't!

What I do suggest however is, that over time, you learn what each feature does so that **you** know what works for **you**. Simply read the manual at your own pace (I know how complex they can be), and just sit and play with the camera on all of its settings. Take shots in different modes, try different white balance settings and see the changes, try some custom functions too.

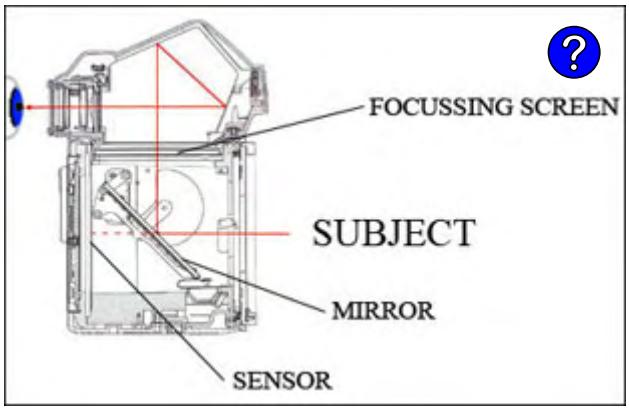
The more you learn about the equipment that you use the more confident and comfortable you will become when out photographing. It is a great feeling to be able to switch modes, lenses and settings in an instant to match the subject you are shooting.

The SLR camera in a nutshell!

The basic principle of capturing light to make a permanent image has not changed for hundreds of years. Artists from centuries ago used a simple, one element lens to throw a reversed and flipped image onto a piece of paper enabling them to trace the outline of a subject that they wished to paint.

This is how some of the oldest paintings are so incredibly accurate with regards to composition and proportions. Did you ever paint people with excessively large hands or small heads at school? It is difficult to judge, but when using the above methods, you cannot go wrong.

The SLR camera is no different. The light passing through the lens is flipped and reversed in the same way and firstly projected onto the focussing screen via the mirror. This enables you to see what will be recorded and make adjustments to the focussing and composition.



When you take the shot, the mirror is lifted, the shutter opened and the light hits the sensor at the back of the camera.

The distance from the rear of the lens to the focussing screen (when bounced from the mirror) is **exactly** the same as the distance from the lens to the sensor. This is necessary to be able to "shoot what you see".

Quite simply, if you focus, compose and expose your subject well, that is **all** you need for a good shot! In a nutshell, most of the features of modern Digital SLR's *could* be redundant; they are there to increase speed, efficiency and to satisfy our desire for gadgetry, technology and sometimes, laziness.

As proof, take your camera outside and try this. If you have a tripod, use it. Set the camera to fully manual including setting the lens to manual focus. Line up the shot, focus carefully, use the camera's built in light meter (the led bar in the bottom of the viewfinder) to set the shutter speed and aperture correctly and just take the shot.

Just adjust the aperture and shutter speed until the bar in in the center. That means the exposure is correct.

Now switch the camera to Program mode or fully auto including focussing. Take another shot and have a look at them both. Apart from varying depth of field due to aperture fluctuations, the images should be practically identical. Many people, including myself as a youngster, mistakenly think that "Fully Auto" means better pictures.

My point is that it is not important to get caught up with all the latest updates, upgrades and features when what you should really be doing is improving your "eye". Your ability to see a great shot, capture it well and process it to perfection are more important than all the technical jargon that is widespread nowadays.

One of the most famous photographers of our time, who sadly died in 2004, was Henri Cartier-Bresson. He mainly used a simple 35mm camera with a standard 50mm lens and very little else. You can see some of his work here.

No filters, no matrix metering, no 45-point autofocus and no Photoshopping, just a keen eye.

Of course, in the real world, we all crave knowledge and understanding. It is sometimes necessary to know how the modern cameras function and how to put their features to best use, especially in a more professional capacity when time and perfection are of the essence and that is where this book comes in.

In my opinion, it doesn't matter how an image was created, if it looks good, it looks good but everyone is different and has different tastes, styles and techniques, which brings me back to my original point. Learn the functions and features of your equipment, find what "works for you" and get out and enjoy yourself!

Just for your information, the settings that I **personally** use 95% of the time are these:

- **Focussing** – Auto, centre-point only, one shot (Servo for most sports). See Chapter 11.

- **Metering** – Evaluative. I.e. an average of the whole scene. I use exposure lock on many occasions to make any necessary adjustments. See Chapter 4.

- **Mode** – Av or Aperture Priority. For most of the work I do, I would rather have control over the depth of field than the shutter speed. If I need a fast speed, I simply whack open the aperture to the largest to give the fastest possible shutter speed. See Chapter 10.

- **ISO** – 100 to 200, the difference is barely noticeable. Have used up to 6400 on occasion.

These chop and change depending on what and where I shoot but are the general settings I tend to use.

Experiment with different set ups to find what is good for you and your style of photography, all the practising "sinks in" over time and you will have a much better understanding of your equipment and how it works.

2.

METERING

If you already have an **eye for a picture**, as they say, the next big hurdle is to get the metering right.

So many people that have written in to my website asking for help on metering, all have the same problem. They are all too often caught out by tricky lighting situations where the camera takes on a mind of its own and they end up with a poorly exposed image.

With practice, you can and will overcome this and learn to evaluate a scene and judge how the camera will record it, and then make any necessary adjustments.

There are also little tips and tricks that you can learn to help get the metering spot on each time. If you are **unable** to do it at the point of exposure, work out how best to capture the scene knowing you can adjust later in Photoshop or your favourite editing program.

For example, if you just **have** to leave part of the scene slightly underexposed, i.e. a shady or dark area, take the shot (in RAW mode if possible) and pull out the details by lightening the area in your editing program later on. Remember though, you **cannot** easily put **back** details from an **overexposed** image.

TIP: IF shooting in a low light situation where flash is not allowed, indoor sports for example, try this. Shoot RAW and increase the ISO but also *underexpose* by adjusting the "exposure compensation" **down** by 2 stops (-2). This will give you 2 extra stops of critical shutter speed. Then simply re-adjust the exposure back up by 2 stops in your RAW editing program.

It is so important **NOT** to delete images that you think are under or over exposed when reviewing on your cameras LCD screen. The amount of times that I have saved a shot later on using Photoshop is incredible; some of them have even ended up being some of my favourite shots.

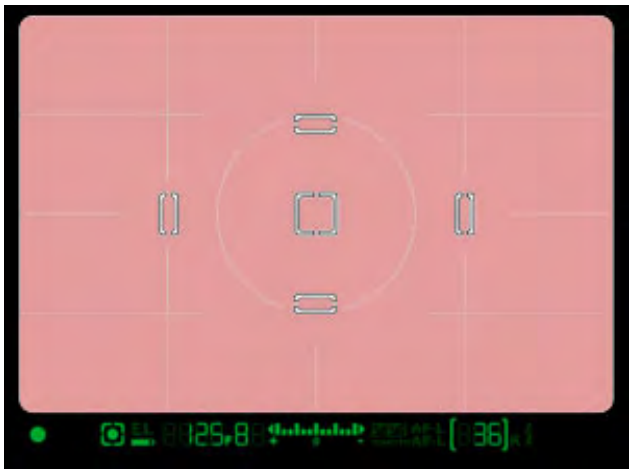
Also, the shot below was well underexposed at a wedding shoot due to the exhausted batteries in a speedlight giving up! I **did** get two shots either side of this one, but as luck would have it, this was the best.

Luckily, as I shot RAW, I was able to pull the details back, convert to black and white and even win the "Bridal Portrait of the Month" in a professional monthly competition with it, you just never know!

It all takes practice. Before I go into finer details about capturing an image, here is a quick run down of each metering mode that your camera may have.

- **Evaluative**
- **Partial**
- **Spot**
- **Centerweighted Average**

EVALUATIVE (Pink Area)



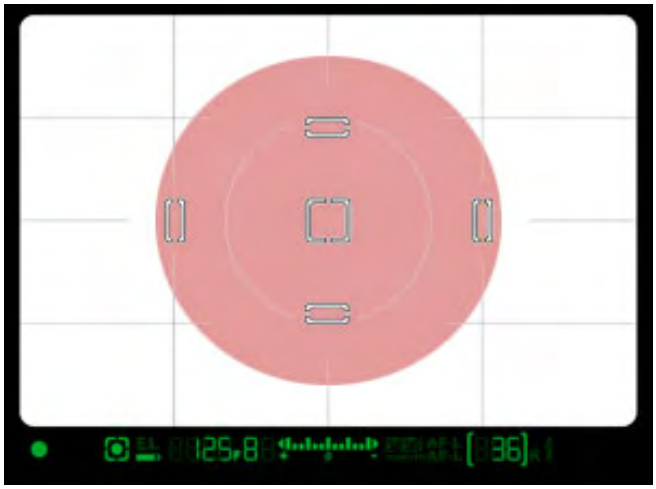
This is your cameras standard metering mode which most people use for most situations. It is well suited for most subjects including those that are backlit. It is basically just what your eyes do when looking at anything.

The camera will assess the subject's position in the viewfinder; record the brightness of the general scene, front and rear lighting conditions and also the orientation of the camera (horizontal or vertical).

It will then set the correct exposure based on all of this information.

For general photography using natural light, I use this setting the most. Knowing that I can tweak light and dark areas later on, I just let the camera record an average reading of the scene.

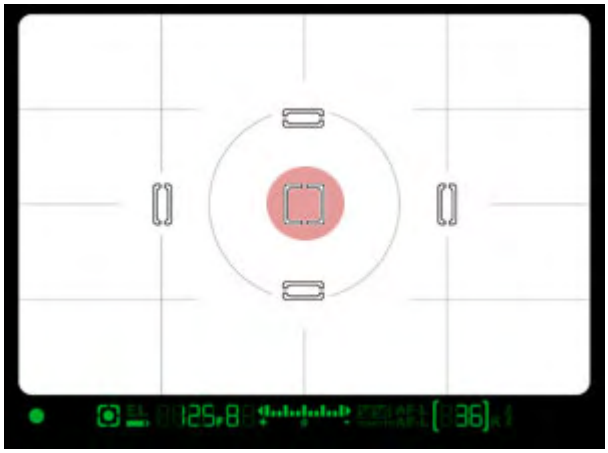
PARTIAL



This setting is useful when your subject is strongly or overly backlit. The metering is weighted towards the centre of the viewfinder covering approximately 13.5% of the area. This will inevitably lead to your subject being correctly exposed, with a blown out background.

This effect can be quite nice and concentrates the eye on your well exposed subject, but if you wanted a more evenly spread image it is worth having an image that is "slightly" **overexposed** behind the subject with the actual subject being "slightly" **underexposed.** You can then darken the background and lighten the subject later on for a more evenly spread exposure.

SPOT



I don't know why but when I was starting out with photography as a teenager, I desperately wanted a camera with spot metering, it sounded **so** professional. Now I have it, I rarely remember to use it!

Not all cameras have spot metering; it is mainly reserved for the more professional cameras as the manufacturers know that it wouldn't be used on many occasions by most people.

What spot metering does, as you can imagine from the name, is to take a meter reading from a specific part of a scene or subject. The metering is heavily weighted to the center (or pre-selected focussing point) covering just 3.8% of the viewfinder area (on average).

Let's say you were photographing a huge barn on a sunny day and the main doors were wide open. Although the exterior looked well lit, the inside was still very dark, and the door area took up a large portion of the scene.

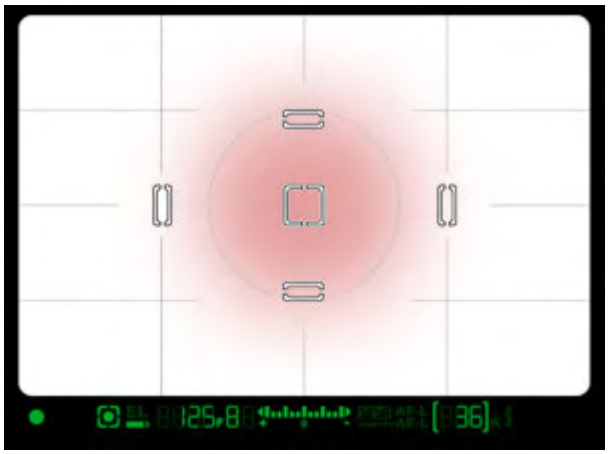
Using **evaluative** metering, the inside of the barn would stay pretty dark and the exterior would be perfect. But when using **spot** metering, you aim the center point of the viewfinder at the doorway, take a reading (and maybe hit exposure lock), re-frame and shoot, you would end up with a well exposed interior and probably an overexposed exterior.

With cameras such as the Canon EOS 1D MKIV, you are able to take a number of spot readings (up to 8) from one scene and let the camera take an average reading and set the exposure accordingly. A great feature if I ever remember to use it.

TIP: If your camera doesn't have spot-metering but you **do** have a zoom lens and exposure lock, try this;

Zoom into the part of the scene you wish to meter from, press the shutter release lightly to get a reading, hit exposure lock, zoom back out, recompose, focus and shoot. This does pretty much the same job! I use this technique quite a lot, it saves messing about with the meter settings.

CENTERWEIGHTED AVERAGE



The metering is simply weighted at the center of the image and then averaged out for the entire scene. It is a kind of cross between evaluative and partial metering.

RAW or JPEG?

I won't go into the depths of **RAW** vs. **JPEG** here but will keep it related to metering. If your camera has RAW capture ability, I cannot stress enough how much your photography will benefit from using it.

It is difficult to describe the extent of the differences between Raw and JPEG, but if you imagine them in terms of elasticity for instance, it is easier to understand. There is only so much "pushing and pulling" you can do to a JPEG image before you start to lose the quality of the final image much like stretching a cheap jumper or jersey.

With RAW however, you can push, pull, tweak and poke that much more, to really get the most from an image before even saving and editing, **and** keep the detail and quality all the way.

Before you even **load** the image into your editing program you are able to adjust the following, using your RAW processing software;

- Exposure +/- (increase/decrease, over/underexpose)
- Temperature/White Balance (see Chapter 7)
- Shadows
- Brightness
- Contrast
- Saturation
- Sharpness
- Noise Reduction

If you didn't get these settings right on the camera at the time of shooting, you have another chance to get it right on your computer later on…magic!

Most of these adjustments relate to, and can "enhance and adjust" the metering **after** you have taken the shot, and **then** you can get to work on the levels, curves and finer sharpening etc. It really **does** add a whole new dimension to digital photography.

Taking the Photos

Let's start with assessing the scene;

Before you even raise the camera to your eye, stand back and have a look at what you want to photograph, experience will tell you how it should appear as a final image.

Is the entire scene, including your main subject, well and evenly lit? Are there patches of shaded or dark areas? Is the main point of interest strongly backlit? Do you have a dark grounded area alongside a bright skyline? Is the sun in front or behind you?

You must teach yourself to not just **point and shoot** and hope for the best, old habits die hard in some people.

Move yourself around

Don't just settle for where you first stand, move around the subject, landscape or whatever. See it from different angles and perspectives; look behind you, see how the light alters as you move. Add some foreground interest to keep the end viewer happy.

Maybe zooming in to crop out a particularly light or dark area will help the camera to meter the scene more evenly? You can always zoom in, take a reading, set the exposure lock, zoom back out and shoot like before!

If a scene appears too bright, add something a bit darker to the foreground of the image to level it out some. Remember, **you** are in control of the camera so get it to do what **you** want. Kneel down, jump on a wall, look at all the possible perspectives, you will be surprised how much the light and image changes from making a few small manoeuvres.

Backlighting

If your subject is heavily backlit, you have a few options open to you;

- Take the picture as normal with "evaluative" metering leaving a well exposed background and underexposed or "silhouetted" subject. This is an effect that may suit the scene well, although you **can** lighten the subject in an editing program later. This will inevitably lead to the detail in the subject becoming grainy and deteriorated as you pull the details out.

- Take the image as above but use fill-in flash to lighten the subject. This way you get a perfectly exposed all round image.

- Instead of a flash, use a reflector to brighten the subject, very natural and effective. Lastolite make an excellent range of expandable circular reflectors.

- Use center-weighted or spot metering to take a reading from just the subject. This will expose the subject well but leave the background over exposed.

If possible do a 180º turn and put the sun behind you and the subject in front. The lighting will change dramatically and you can take a normal reading and get a perfectly exposed image.

Side lighting

When shooting any subject with side lighting you are going to end up with deep shadows. These may well enhance the mood of some scenes and be quite welcome and effective, but for most "people photography" this can be quite unflattering unless again, you are aiming for a certain mood in the image.

Your options here are similar to those above; either move your subject around to use back or front lighting or use fill-in flash.

Top Heavy lighting

As with side lighting, you are going to get shadows on most subjects. Use the above techniques to suit the mood. Take a few shots using different techniques; the beauty of photography is that no two subjects and no lighting situations are ever exactly the same.

Everyone has their own techniques and preferences and only practice will bring out your own personal and unique style. Remember that you don't have to always follow the rules.

Full frontal lighting

Whilst this is the most pleasing of all lighting for everyday subjects (i.e. the light source is behind the camera), and is the easiest to expose correctly, there are times when it can cause its own problems.

Bright sunlight on a person can cause them to squint meaning facial lines and small eyes. Not very flattering. Unless you want the subject to wear sunglasses, you can use the backlighting technique above using a reflector or fill-in flash.

If the subject is anything other than human, the standard evaluative metering is best with the sun behind to take an overall reading from the entire scene. Of course there are times when you want to play with the light, i.e. shooting **into** the sun which is beaming through the Eiffel Tower or similar subject, creating a fantastic and impressive silhouette.

In this case, the camera will do a "digital squint" much like you would, and expose for the sun and the sky leaving the foreground darker.

All round lighting

When you have good, all round and even lighting, you can play a bit with your exposure settings. Try differing aperture settings to create dramatic depth of field variations. Again, the evaluative metering is best here for an average, all round reading.

Dusk or Dawn/Sunset Sunrises

In any situation where you have dying or little light, your normal readings are going to give you slow shutter speeds and wide apertures. This means using a tripod. If there is no visible sun, but a nice even glow, take a normal reading of the entire scene.

When shooting into a setting or rising sun, I would also suggest using standard evaluative metering.

If you were to take a spot or center-weighted reading from the sun itself, you would end up with a beautiful, well exposed and dark orange/golden sun, framed by near darkness and silhouettes as the camera exposes for the sun only.

The evaluative setting would take an overall average giving you much more chance of a well exposed sunset/sunrise with a slightly overexposed sun. With an evenly spread exposure, especially when shooting RAW, you can really enhance and improve the image to get it spot on.

Flash

This is a more tricky area for many people, even the more experienced. There are probably more combinations and chances of things going wrong here, than with any other type of lighting. It all depends on;

- Is your flashgun or speedlight "dedicated" to your camera?
- Does it have a full range of settings, including E-TTL (Canon), i-TTL or D-TTL (Nikon) or full auto?
- Does it fit on the "hotshoe" or base of the camera?
- Does it have a bounce and swivel head?
- Does it have "Slave" capabilities?
- Does it have enough power?

I will cover all of these in detail in chapter 14, but for now let's just cover the metering side of things.

In the days of old when I first started in photography, I just had a fully manual SLR and fully manual flashgun with a complicated chart I needed to use to get the exposure right. I guess if anything, it taught me about the qualities and properties of light.

You needed to work out the distance of your camera to the subject via the focussing ring, check the table on the back of the flashgun and set the aperture accordingly, all very time-consuming.

Then came along flashguns with what was called a "Thyristor". This was a small sensor at the front of the flashgun that would measure the amount of light bouncing back from the subject at the point of exposure and immediately cut off the flash's power leaving a well exposed image.

Nowadays, the manufacturers have moved things on nicely with their fully integrated speedlight systems that work in conjunction with, and dedicated to your SLR/DSLR.

Daylight/Fill-in Flash

You are pretty much able to just set your camera up as normal with the settings you desire and simply set the flash to auto. It will work with the camera and "ping" just enough light to fill in the gaps using a modified version of the "Thyristor" I mentioned earlier.

Try using Av mode or aperture priority for fill in and just shoot as normal. Take a reading from behind your subject, recompose and shoot. The fill-in flash will take care of the main subject and your reading from behind will take care of the background.

It is well worth practising with your own set up as once you get the hang of it, you may well use flash for a lot more than just night or fill in shots.

I use the above for flower shots to decrease the shadows and enhance the colours or for pet shots to add some catchlights to their very dark eyes.

Night/Indoor Flash

Not my favourite of lighting as direct flash at night can leave the subject looking "whitewashed" and cause some pretty horrendous shadows. Here are a few tips for better flash photography;

Increase the Aperture in Auto/Program mode

With some DSLR's set to "program mode (P)" with auto or E-TTL flash, such as the Canon EOS 60D or EOS 1D MKIV, the camera automatically sets the shutter speed to 60^{th}/sec and the aperture to F4 and leaves the rest to the speedlight.

If you want to increase the depth of field by decreasing the aperture size, try this;

You want to **close** the aperture for added depth of field and **increase** the flashguns power to compensate and give out more light!

On your DSLR, you should have a **FEC** (flash exposure compensation) button. This allows you to increase or decrease the power output via an override to the automatic system.

If you want to **decrease** the aperture for more depth of field, you need to close the aperture thereby letting in **less** light. To compensate, you must **increase** the power output on the speedlight.

I usually close the aperture to around f6.7 or f8 and up the FEC by +2 or +3 stops. This works quite nicely.

Bounced Flash

The idea behind bouncing the flash from another surface is to break up the intensity of the light and diffuse it. Direct flash as we mentioned before tends to leave harsh shadows, overpowering light and sometimes causes "red-eye".

If your speedlight is capable, and you are shooting indoors, try simply aiming the flash at the ceiling and shooting that way.

For effective bounced flash lighting, remember these tips;

- By bouncing the light away from the subject, you are almost doubling the distance that the light travels. This may cause the camera to underexpose slightly. If it does you can either up the FEC +/- (flash exposure compensation) by 1 or 2 stops to increase the power output, or do the same with the camera's exposure compensation to let in more light. Either option will allow for more light to hit the subject thereby cancelling the effect of bouncing.

- The angle at which you bounce the flash is directly related to the distance of your subject from the camera. For example, if your subject is a matter of 3 or 4 feet away, you need to aim the flash straight up. Anything else and the flash will bounce straight over their head and hit the area behind them.

  If they are on the other side of a room, you need to angle the flash at about 45º so that it bounces from the ceiling and onto them. To simplify it, imagine you are throwing a ball at the ceiling at different angles, where will it land? That is

where the flash light will land.

This basic principle applies also, if you are bouncing the flash from a wall or white card.

- If your flashgun has a second "fill in" flash bulb like the Metz CL-4, use it. With both the bounced flash **and** fill-in flash, the effect is superb, almost studio-like!

Move the subject away from any walls

If you just **have** to use direct flash, if possible, move your subject away from any walls or large objects. This way you illuminate the person or object without the nasty shadows in the background.

In the shot above, I took a meter reading from the background knowing that the couple would be well under-exposed. By pinging in a bit of flash, the whole scene was well lit with no unsightly shadows. I made sure that anything in the background was a long way away.

Filters to Assist Metering

When I was about younger and browsing through my favourite photography magazines, I remember being awestruck, a little jealous but highly motivated by the images I saw.

"How **did** they do that"? I asked myself, and would only become frustrated when I couldn't get it right and similar to what I had seen.

That really is the beauty of photography. No matter how good you get or how far you progress, there is always someone better to aspire to. You constantly look for new ideas to challenge your processes and techniques, and new subjects and places to capture.

It took a while but once I learned a little about filters and accessories, my photography took on a new life altogether. At first it is tempting to keep your favourite filter on the lens, but when you learn **how** and **when** to use them; your images start to come close to those displayed in the glossies!

Grey Gradual (Grey Grad) or Neutral Density Grad

If you are into landscape photography, the grey grad is an essential but inexpensive piece of kit. It will fool and assist your cameras meter and add some real punch to your images.

How does it work?

Picture this common scene. You have a beautiful landscape in front of you with colourful, rolling meadows and have found the perfect spot to shoot from. However, the sky from the angle that you are facing is particularly bright.

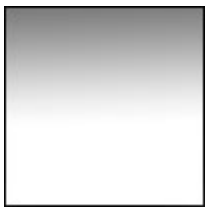
When you take the shot using any metering available to you, you either end up with a well exposed sky and under-exposed landscape or the opposite, a well exposed landscape and over-exposed sky! Sound familiar?

How does this happen?

The scene will generally have two lighting sections, the bright sky and darker landscape. It is virtually impossible to get the scene perfectly exposed without a little assistance unless you have a few clouds to "muffle" the intensity of the light in the sky. The camera normally has to meter for one **or** the other.

How does the filter help?

As the name suggests, a "gradual" filter has one half darker than the other which blends seamlessly into itself leaving no visible signs of use.



Placed over the lens, it will darken the sky just enough to "level" out the differences and match it to that of the land. A grey grad or neutral density filter will work great as they simply darken the area without affecting the colours.

For effect, you **can** use a "tobacco", orange or other coloured grads, to enhance sunsets for instance.

Using this filter effectively will "flatten" the entire scene, leaving both the sky **and** land perfectly exposed.

Polarizer Filter

A polarizer will basically do two things;

- Enhance colour saturation
- Reduce reflections from glass surfaces and water particles in the sky

I won't get too technical here (I will leave that to the link that follows), but would suggest that at some point, you purchase a **good**, "circular" polarizing filter.

A poor or "linear" polarizing filter will not help your images at all and if anything will harm them.

A polarizer filter enhances colours and reduces glare by reducing and redirecting "polarized" light allowing you to see right through it. Imagine you are looking at someone sitting in their car; your view is normally hindered by all the reflections on the glass.

A polarizer will reduce these reflections, if used at the right angle, and allow you to see right through.

The same principle works with practically invisible light reflected from airborne water particles allowing the deep, rich colours of the sky to shine through.

When used with a sunny beach scene for example, the reflection on the sea is also diminished giving rich colours in the sky and a clear surface to the water, the differences are quite amazing.

I do a lot of travel photography and use a polarizer filter a lot of the time. It really over-emphasizes the richness of colours which is what you see on all of those shiny, glossy holiday magazines!

For an incredibly in-depth and scientific explanation of polarizing filters, follow this link: http://www.colorado.edu/physics/2000/polarization/polarizationI.html

3.

EXPOSURE LOCK

The exposure lock function on your camera does exactly what it says. It will take an exposure reading at any point and lock it into your cameras memory once you hit the "exposure lock button". Normally the reading stays locked for a period of around 10 seconds before re-setting itself, which should be enough time for you to re-compose and take the shot.

The exposure lock feature is actually one of the most used buttons on any of my cameras. There are times when I just don't have the time to mess about with exposure compensations or bracketing, but I need to know I have the right exposure there and then.

So how does it work and when should we use it?

As I mentioned in the previous chapter, this function works in a similar way to the spot metering that many cameras have. When faced with a large area that you wish to photograph, you may have many differing light readings in the scene meaning confusion for your light meter.

Let's say you are photographing through a dark arch for instance, as in the image below.

Your camera's natural instinct, if using the "evaluative" or standard metering, is to meter for the largest area in view, which in this case is the interior of the arch. As it is dark it will overcompensate, and give a slow shutter speed or large aperture to allow more light in and therefore "overexposing" the outside.

What I would do in this situation is to walk to the arch, put my camera through, take a reading for the scene outside and lock in the exposure. Then move back, re-compose and take the shot.

Now we have an image that is well exposed outside and underexposed inside. Remember. the golden rule is that you **can** pull details from a darkened or underexposed area but **never** put them back to an overexposed or overly light area. Therefore, you are better off having dark areas that you need to work on rather than light areas.

In some cases, the dark arch may be quite effective as a silhouette, but it you **really** want to include the details; you have 3 options open to you;

1. Take the reading from outside, lock it in, step back and shoot **using fill in flash** for the interior of the arch. You will end up with both areas perfectly exposed.

2. Use a tripod; take 2 images being careful not to move the camera at all in between shots. One is exposed for the exterior, one is exposed for the interior and then merge the 2 in Photoshop or similar editing program later on. A bit tricky and time consuming, but quite effective. You can do this in a number of ways, the most effective being to mask the lighter areas in one image using the pen tool, and paste the new, darker areas into it.

3. As number 1 above but if you either do not have a flash or the time to use it, and no tripod, leave the arch darkened and pull out the details later on in Photoshop or your favourite editing program. If your camera has RAW capabilities, use them. It is much easier to manipulate this kind of shot with RAW. Pulling details from dark areas in a JPEG image can lead to some nasty noise or grain that is difficult to remove.

For me, I could come across a situation during any kind of photography that warrants the use of this handy "locking" feature. Whatever part of the scene I want to be well exposed, I will aim the camera at it, press exposure lock, re-compose and take the shot. Whatever happens to the rest of the image, I know that the most important part, the subject, will be exposed correctly.

As a test, the next time you are out set your camera to Av or aperture priority and have a play with the exposure lock function. As a rule, try to aim the camera at the lightest part of the scene and set the lock, then practice pulling out the details later.

Also aim at the darkest area and see the difference. Which is easier to manipulate and "save" later on?

Once mastered, you will find this technique invaluable in many circumstances.

So, the next time you see a professional photographer wildly swinging his camera up, down and left to right, you have a pretty good idea what he is doing!

4.

Bracketing

Due to the nature of what it means, bracketing has in the past been reserved for the professional photographer who could afford to **and** found it necessary to "burn" a lot of emulsion film to get the shot spot on.

Now with the introduction of "almost" in-exhaustive and cheap to run digital photography, we can all practice with and learn from bracketing techniques using your cameras exposure settings, white balance settings and flash photography settings.

So what is bracketing?

Bracketing is the ability to be able to take **three shots** of the **same scene** each with differing exposure, white balance or flash values. One is taken with a correct exposure according to the metering setting on your camera, one is **under**exposed and one is **over**exposed.

The under and over exposed shots can be taken within a range of **+ or -** 3 stops either way with half stop increments.

Exposure Bracketing

For example, your camera tells you that for the scene you are photographing, you need a shutter speed of 125th/sec and an aperture of F8. With exposure bracketing, and depending on whether you are in Tv (shutter priority) or Av (aperture priority) mode, you can alter the shutter speed or aperture for each shot.

So, if you are in aperture priority mode and set up for a 1 stop bracketing shot, your camera will adjust the shutter speed and you will end up with the following 3 exposures (as above);

125th/sec @ F8 – correct exposure
60th/sec @ F8 – overexposed 1 stop
250th/sec @ F8 – underexposed 1 stop

If you are in shutter priority mode, your camera will adjust the aperture values and you will end up with the following;

125th/sec @ F8 – correct exposure
125th/sec @ F5.6 – overexposed one stop
125th/sec @ F11 – underexposed one stop

Why and when would you use it?

You may come across a scene that has a wide "dynamic range", or bright areas coupled with shaded or dark areas and, in essence, have a "confused" meter reading from your camera.

Do you expose for the light area or dark? Do you use fill in flash or pull details from the dark areas in post processing?

If the range is quite broad and the scene is quite difficult (much like the white of a wedding dress against the black of a wedding suit), you could expose the first shot to a neutral area (not too bright and not too dark) and use a 1 or 2 stop bracketing exposure to ensure that one is correct.

Note: With weddings, I would first of all shoot RAW for security and peace of mind, and I would take my reading from the dress.

White Balance (WB) Bracketing

White balance is a function on your camera that compensates for different colours of light being emitted by different light sources. When a camera has been calibrated to correctly display white, then the camera is white balanced. Once it is calibrated for white, other colours should display properly.

It is a way of calibrating a camera's color response to take into account different color temperatures of light (i.e., fluorescent light is greenish; sunlight, more blue; incandescent light, yellowish).

This calibration allows the camera to define what the color white is under any of these various lighting conditions. Failure to white balance your camera could result in an unsightly, unnatural color cast.

With digital SLR's for example, you will normally find a yellow or red colour cast when using "Auto White Balance" in JPEG mode, particularly with Canon cameras shooting indoors.

This is no biggie and is easily corrected in Photoshop using the color correction tools as explained here.

There are three main ways to get the correct setting for white balance;

- **Use a grey card to take a reading from the scene in which you are photographing.**

  A custom, or preset, WB setting requires a grey or white card to allow the camera to lock in a particular color temperature based on what it sees from the reference card. You set the camera to its custom WB mode and with whichever lens you're using, fill the frame with the grey or white card and take an exposure. The camera takes a second to process the information and will indicate whether the custom WB is good or not. Obviously you want to

ensure that you hold the grey card in such a way so that the ambient light falls on it in order to take a custom WB reading.

Once the custom WB is set, you revert back to shooting mode and all exposures taken will now reflect this color balance until you adjust the WB setting again. The grey card method is relatively cheap since grey cards sell for $20 or less. This is a favoured method for JPEG shooters because it helps to reduce post-production editing significantly and allows for a fairly neutral color balance (depending on the age and condition of the grey card).

- **Shoot RAW**

  By shooting **RAW**; you are able to adjust the white balance **after** you have taken the shot, during post processing. When your file is opened, you can adjust the white balance or colour temperature to whatever setting looks correct.

  This is for me, the best way of making minor adjustments to a shot when I don't have time to mess around during the actual shoot. It is also why I **always** shoot weddings in RAW mode.

- **Bracketing**

  If you are fairly confident that the white balance setting you are using is close to being right, or if indeed you are using "Auto White Balance", you can almost guarantee the correct setting by bracketing the shots.

  As with exposure bracketing, you can take 3 shots with differing WB settings. One will be as you or the camera set it, one will be higher or "warmer" and one will be lower or "cooler".

  You can vary the increments according to your cameras allowances (i.e. 1/3, ½ stops)

I would recommend that if your camera has this feature, have a play and practice in different situations, i.e.

- Indoors with flash
- Indoors without flash
- Outdoors in particularly "colourful" areas such as green fields
- With scenes that have differing colour or lighting situation

5.

APERTURES

What is an aperture?

It's all about light! Think of an aperture like your eye and how it works. The aperture in your lens works in much the same way as the **pupil** in your eye. Too much light and the pupil will close to block it, not enough light and the pupil will widen to allow more light in!

The aperture is found in the lens of your camera and in modern cameras is adjusted via a control wheel or dial. If you ever owned a **manual film SLR** you will remember that the lenses had an aperture ring that you set manually with a "Click-click" as you turned it.

One of the most important things to learn about apertures is **Depth of Field** or **DOF**.

Depth of field is the amount or "depth" of the image that is in focus in your images. The rule is that a small aperture of say **F16** will give **good** depth of field or **more** of your image is sharp, and a large aperture of say **F2.8** will have **shallow** DOF or very **little** in focus.

Aperture and shutter speeds

Another thing to remember is that as you adjust the DOF one way, the shutter speed has to be adjusted the other way to compensate.

For example, if your camera meters a sports scene for **125th/sec at F8** and you want an aperture of F2.8 to create shallow DOF, you are letting more light in the lens so will therefore need to have a faster shutter speed to compensate.

In this instance, you have opened the aperture by 3 stops (F8 - F5.6 - F4 - F2.8), so you will need to increase the shutter speed by 3 stops (125th - 250th - 500th - 1000th).

The difference here is that **125th/sec @ F8** would give a ***reasonable*** **(**but normally not enough) "action-stopping" shutter speed and good DOF, but **1000th/sec @ F2.8** will give a fantastic sports "action-stopping" speed but very little DOF which could result in focussing and sharpness problems.

If I were shooting sports, I would opt for either of the middle settings (250th @ F5.6 or preferably 500th @ F4).

Personally, I almost always shoot in Av or Aperture Priority mode. This is where **you** set the aperture and the **camera** will automatically set the corresponding shutter speed. **I** would rather have control over the depth of field for work such as;

- **Weddings**
- **Portraits**
- **Commercial**
- **Still Life and Macro**

But if I need a faster shutter speed for sports or nature photography, I would whack the aperture right open, or to around F4 and see what shutter speed I get.

If it is still too slow, I simply up the ISO to 200 or 400 to again, allow more light in (actually, I am making the sensor more sensitive but it is the same principle) thereby obtaining one or two stops faster shutter speed whilst retaining the aperture setting. It is all a matter of personal preference how you make your adjustments.

Apertures with different lenses

The depth of field that a certain aperture gives you will dramatically change depending on what lens you are using, this is quite an important lesson for creative and consistent photography.

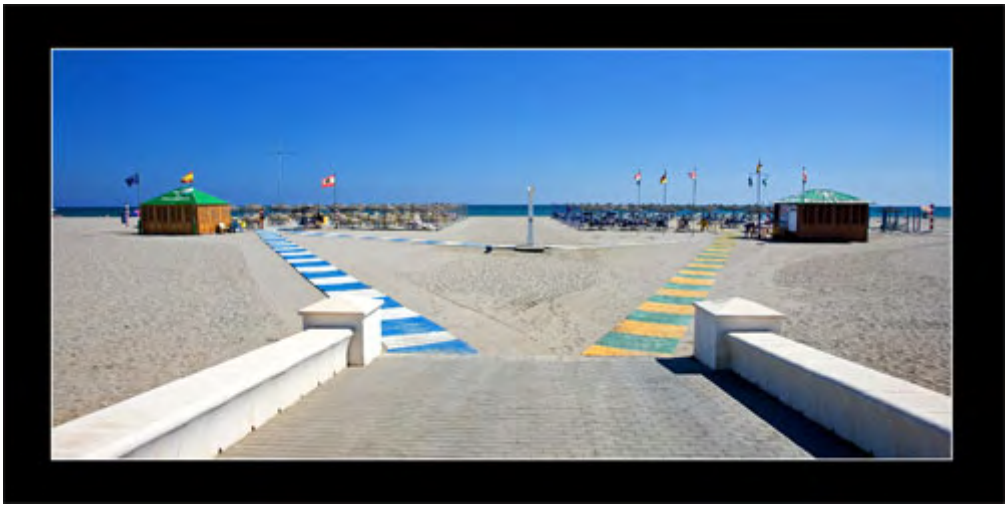
Wide open F2.8

Ok, you want very shallow depth of field in order to isolate your subject and "blow out" or blur your background.

NOTE: Remember here that a wide aperture will give a much faster shutter speed. If it is particularly sunny and bright, you may find that you don't have a fast enough shutter speed on your camera to block the light sufficiently to warrant the use of F2.8.

Here to compensate, you could either close the aperture a little, or keep the same aperture and use a polarising filter to block out some of the light.

Wide Angle Lenses - When using a very wide angle lens such as a **15-20mm** for landscapes, you won't see too much of an effect, for general scenes most of the shot will remain in focus using F2.8.



The only way to get a shallow DOF with a wide angle lens is to get close to your subject and focus on it ensuring the background, or some of it, is still in view.

Telephoto Lenses - With a telephoto lens however, it is a very different story. The longer the focal length (200-500mm), the greater the DOF obtained.

This is why most portrait photographers like to use 85mm to 200mm lenses, they will generally blow out the background enough to make the model or subject really stand out even at F8 for example.

The only problem here is that when shooting **wildlife** or **sports** with a long telephoto such as a **500mm**, your depth of field is severely shortened meaning more precise focussing is required or a smaller aperture of say **F8 - F11**. Even then you have to be spot on with your focussing.

Closed F11 – F16

A closed aperture at these settings will invariably give good depth of field whatever you are shooting except for macro shots. Macro photography is an art unto itself and requires a lot of patience, practice and precision.

NOTE: Once again, beware. Opposite to the above note, when using **small** apertures, you will invariably get **slower** shutter speeds meaning the use of a tripod is recommended for shutter speeds of **60th/sec** or slower.

Again, the depth of field at these aperture settings is affected by the lens that you use.

Wide Angle Lenses – For landscapes and architecture work, a wide angle lens used with small apertures is just about right. With a decent quality lens and a camera with a 1.3X crop factor or more, you should end up with some pretty sharp images with good DOF.

(Why does the crop factor help? Quite simple really, you are cropping out the edges of the frame which are normally subject to a bit of barrel distortion or poorer quality of focussing/DOF. Chopping it out at the point of exposure rather than later in an editing program is a bonus).

Telephoto Lenses – For sports and wildlife photography you really need a fast shutter speed of 250th/sec or 500th/sec minimum, and by closing down the aperture to F11 or F16, you are going to struggle in most situations.

The only way to get round this is to increase the ISO to 400/800/1000 to increase the sensitivity and allow a faster shutter speed to be used with the same apertures. The downside here is that you will start to see more grain or "noise" appear in your shots.

For portrait work, using these apertures on a telephoto lens of 150mm or more will still result in a nice "Bokeh" or background blur especially if you close in a bit on your subjects face.

For more information on Depth of Field use the following link;

Depth of Field at All Things Photography

6.

SHUTTER SPEEDS

The shutter speed is simply the length of time that the light hits the film or sensor allowing the image to be recorded. Each variation in speed (much the same as the aperture variations) is known as a stop.

You can get really creative with varying shutter speeds as we shall see in a moment but there is one important factor that you should always remember. AS mentioned in the Aperture chapter, whenever you adjust the shutter speed up or down, you must compensate in some other way, normally via the aperture but you **can** do it via the ISO setting or use of filters.

As you are letting in less light with a faster shutter speed, you need to compensate and allow **more** light in via a larger aperture (creating less depth of field) or a higher and more sensitive ISO setting, and vice versa.

Your style of photography and what you wish to photograph play the biggest determining factor in what shutter speeds you use. If you haven't read it already, the following page at **All Things Photography** explains a bit more:

http://www.all-things-photography.com/shutter-speeds.html

FAST SPEEDS

If you are a keen sports or wildlife photographer, you will inevitably be using a fast shutter speed much of the time, but what about those times when it just isn't possible?

For example, have you ever paid close attention to the crowd during a big football match at night? Have you seen the hundreds of flash guns going off from people in the crowd who are much too far away for the flash to actually do any good, thus making any fast shutter speeds redundant?

More often than not the images will be underexposed or have serious camera shake due to long exposures or slow shutter speeds, meaning blurred pictures.

The main reason for this is that they are probably using fully automatic cameras which recognise the failing light and try to compensate with a slower shutter speed and full power flash, albeit without success.

Or, what if you are trying to capture a wild animal, (again out of reach of the flash) in the early morning when the sun is barely up and the camera just won't allow a fast enough shutter speed?

The only way to get around this in most situations is to whack up the ISO on your camera (assuming you are using digital). The reason I say this because when using film, your only option is to either change film altogether for say 400 or 800 ISO, or to "push" the film you already have.

N.B. In the days before digital, "Pushing" a film was the term used when you underexposed an entire film in order to get a faster shutter speed. If the best exposure you could get was 30th/sec at F2.8, you could increase the ISO on the camera from 100 to 400 giving you 2 extra stops - 125th/sec at F2.8. However, the film would be underexposed and unless you told the lab to compensate, the images would be ruined.

What the lab would do is adjust the developing times to allow for the adjustment of ISO at the time of shooting meaning the images would be fine but a little "grainy", similar to digital "noise" nowadays, all very complicated and time consuming!

The beauty of digital SLR's is that you can adjust the ISO sensitivity for each individual shot without all the hassle of the above scenario.

So, when the light is bad and your aperture is already wide open, to get a faster shutter speed to capture the action, simply increase the ISO to compensate. Again, one stop alteration in ISO (say from 100 to 200), will give you one extra stop of speed (say from 60th/sec to 125th/sec). This will inevitably increase the noise in your shots but in most cases, this can be removed to an acceptable level using programs such as Neat Image.

SLOW SPEEDS

Slower shutter speeds are normally used and/or needed for landscape, architectural, night, still life or "special effect" photography.

Most of these subjects need good depth of field, and the only way to achieve this is to have smaller apertures of F16 or less. As discussed earlier, the "knock-on" effect of this is slower shutter speeds.

You will always see the top landscape photographers using a tripod, as the best light for landscape photography is early morning or early evening when the sun is less intense. A small aperture is needed to get the best depth of field meaning slow speeds, hence the need for a tripod.

The same goes for architectural photography, especially interior shots where you want to use the low but natural light to enhance the mood of a scene.

Have you ever wondered how to get shots like the lightening shot below?

I wanted to use a small aperture for two reasons. Firstly, I needed good depth of field to ensure that the lightening and buildings were sharp. Secondly, a small aperture would give me a longer exposure time in order to catch the lightening **and** to allow the low-light glow from the buildings to be recorded.

This image was taken with a 15 second exposure at F10 and ISO 125. It wasn't easy to get and it took about 30 shots to get one I really liked. During these electrical storms you need to set up your camera on a tripod, set the shutter speed and aperture to allow for a long exposure (depending on how frequent the lightening is), and use a cable or remote release if you have one.

For frequent lightening, you can aim in the general direction and take exposures of between 5 and 15 seconds until you get a shot you like. For more infrequent lightening, you may need exposures of 15 seconds to a **couple of minutes** as you cannot judge when it will strike and you don't want to miss one!

Don't be disappointed if you don't get it right straight away, just keep trying.

Now, look at the shot below of a family by a nice roaring fire.

You may be mistaken for thinking that this was taken with a studio set up with lighting all around, but in fact this was taken with just an SLR camera, tripod and single speedlight. I will let you into a secret on how to get this type of shot with just basic equipment and a good knowledge of shutter speeds.

Ok. A basic and direct flash shot would normally give harsh shadows against the back wall, a faster shutter speed (60^{th}/sec +) and smallish aperture, meaning that the fireplace and fire in the background would be extremely dark and not very inviting at all.

To get the shot as it is, with the family well lit, no harsh shadows and the fireplace with a cosy and "warm" feel to it, I set the shutter speed to a very slow $1/3^{rd}$/sec at F5.6 with an ISO of 200.

I also bounced the flash from the ceiling at an angle of 45º to "diffuse" the light, reducing shadows completely and just giving the subjects a nice even spread of light.

I had to ask the family to sit extremely still due to the slow shutter speed and took a bunch of shots and this one came out just right.

The bounced flash lit the foreground subjects with a nice, even light, and then the slow shutter speed allowed the background details of the fireplace, flames and fairy lights to "burn" onto the image once the subjects had been captured by the flash.

This just proves that you don't need to spend an awful lot on money to get yourself started in portrait or wedding photography, you just need the knowledge and experience together with a good portfolio of varied images.

N.B. Once you have a decent portfolio, you will find that this gets your work coming in on a gradual and accelerating basis. Once you have a diary filling with sittings, you can start to increase your "hardware" with some lenses or studio lighting equipment.

With practice, you will get to know instantly which shutter speeds are required for every occasion that presents itself. For the shots where you have a little more time to prepare, a good knowledge of how to use slow or fast shutter speeds to your advantage will add an infinite number of images or ideas for your portfolio or stock library.

7.

ISO SETTINGS

I.S.O. is the abbreviation for the **International Standards Organisation**, a governing body based in Europe that provides the standards for a wide variety of subjects.

For photographers the key standard is **Film Speed** ratings. In the past this was known as **ASA** or the American Standards Association and you could buy your films in ASA 50, 100, 200, 400, 800 and 1600. There were specialist films that would go higher or use infra-red although these were generally known as the standard speeds.

Most decent cameras now have interchangeable ISO settings which is especially useful for digital photography because, as discussed in the previous chapter, you can change the ISO setting for every shot you take without the need to change film.

So what ARE the settings and how do they affect your photos?

The standard ISO that most people use everyday, giving accurate colour rendition and "clean" noise-free images is 100 ISO.

If your camera is able to set a lower ISO of 50 or less, you will notice that the images become a little more saturated in their colours. You won't see **too** much difference in quality like you do with 50 ISO Slide film, but a slow film speed or ISO with digital photography has its benefits nonetheless.

50 ISO or less

There have been occasions when I have come across a particularly bright scene such as a sunny, white sandy beach or a sun kissed bleach-white property on a sunny day where I simply have too much light all around me.

I am already on the fastest shutter speed that the camera will allow and the smallest aperture that I wish to use (N.B. I never try to go smaller than F16 or F22 otherwise the image quality can start to deteriorate, or I may wish to create some depth of field with an aperture of say F5.6). By reducing the ISO to the lowest, I can maybe save a few shots whilst enhancing the colours.

Also when shooting images that I want to be rich in colour such as a beach scene with blue skies and deep blue water for a holiday magazine, I use the lowest ISO possible (normally 50) coupled with a **polarizer filter**.

You may also want to purposely slow down the shutter speed for some creative shots. If you read enough photography magazines you will have undoubtedly seen images of waterfalls with milky smooth water and pin sharp rocks and foliage?

The milky water is created by a very slow shutter speed (normally a matter of seconds), which can sometimes only be achieved with the help of the smallest aperture and lowest ISO setting.

The small aperture and low ISO block most of the light which means you need to compensate with a long shutter speed which in effect causes the flowing water to "blur" itself onto the sensor. Obviously when doing this kind of shot a tripod is essential.

Standard ISO – 100

As I mentioned earlier, this is the industry standard for most situations and subjects. Whether you shoot weddings, portraits, studio or commercial, 100 ISO will do just fine and create nice, clean colourful images across the board.

High ISO – 400 and above

Being quite a perfectionist myself, as I think most photographers are, I like to produce the cleanest and noise free images as possible. I also like bold, colourful images.

Unfortunately, there are some times when you just **have** to use higher ISO's in order to get the shots you need:

- **Weddings** – For many interior shots of the church and ceremony, I don't like to use flash as it causes unnecessary distractions from the service. Even with the aperture wide open you will struggle to get a fast enough shutter speed to freeze any movements especially when hand-held at ISO 100 or 200.

  Even using a tripod doesn't help if you have a slow shutter speed and the subject is moving, even the slightest amount. I have used ISO's as high as 800 and 1600 for the darkest of churches and have ended up with some great shots which, after using Neat Image, are quite acceptable and clean.

With the more modern and technological digital SLR's (for example in the Canon camp, EOS 1Ds MKIII, 60D and 5D Mark II), the sensor arrays are becoming that much better with larger pixels, the quality at high ISO's is quite superb.

- **Indoor sports** – For events such as show-jumping or similar, where the subject can be too far away for effective flash use and the light is too dim for hand held photography at low ISO's, you need to obtain as fast a shutter speed as possible to freeze the action.

  When you are at the widest aperture, your only other option is to whack up the ISO to 1600 or 2500. Get to a point where you have a shutter speed of 250th/sec or faster and "pan" with the action as much as possible.

Quality

The biggest problem when using high ISO's is the quality deterioration. If you have ever used high ISO film such as 800, the emulsion used on the film contained larger, more sensitive "grains" which were perfectly visible in your images thereby reducing quality.

Now, with digital cameras, the higher ISO's produce digital "noise" which is similar in appearance to grain and caused by increasing the pixels´ sensitivity. As I mentioned before, there are more and more programs becoming available which help to reduce this noise to an acceptable level such as Neat Image or Noise Ninja.

Noise or grain can also be your *friend* if you intend to get creative at some point. Many black and white images can have their mood greatly enhanced by adding grain or noise to them and most editing software even has the facility to **add** noise. So learn to control noise and either remove it or increase it depending on what effect you need.

The main thing to remember is that your camera has 3 main controls for adjusting the amount of light in your images:

- Shutter Speed
- Aperture
- ISO

Once you learn these in their entirety, what they do and the effects they achieve and when to use each one effectively, **then** you need to concentrate on your composition and subject matter!

8.

WHITE BALANCE

The easiest way to describe white balance is by way of **colour temperature** which in itself is a way of measuring the quality and intensity of a light source. This is based on the ratio of blue and red light hitting the sensor, with the green light being ignored.

You may sometimes see a red or yellow cast in your images when shooting indoors with natural light? This is caused by using the incorrect white balance.

The unit for measuring this ratio between red and blue is known as degree Kelvin or K. Therefore, a light scenario with a higher colour temperature such as bright, sunny blue skies has more "blue" lights and a higher Kelvin Value. Whereas a light with a much lower colour temperature such as a candle flame, has a lower Kelvin value with more "red" lights.

The following values are approximate but should give you an idea of how this is seen in most photographic situations.

Light Source	Colour temp in K
Clear Blue Sky	9,000 to 15,000
Overcast Sky	6,000 to 8,000
Noon Sun and Clear Sky	6,500
Sunlight Average	5,400 to 6,000
Electronic Flash	**5,400 to 6,000**
Household Lighting	2,500 to 3,000
200-watt Bulb	2,980
100-watt Bulb	2,900
75-watt Bulb	2,820
60-watt Bulb	2,800
40-watt Bulb	2,650
Candle Flame	1,200 to 1,500

The human eye is perfect at adjusting to these fluctuations and will see a piece of white paper, for example, ***as*** white whether you look at it outside in bright sunshine or inside by candlelight.

Your camera, on the other hand, will have more difficulty.

When using emulsion films, you have a choice of using daylight or tungsten sensitivity, but with digital, most adjustments need to be made "in-camera".

Most digital cameras have built-in sensors or "Auto White Balance" to measure the current colour temperature and then use an algorithm to process the image correctly.

The final result may very well be *close* to what we see with our eyes, but the algorithms being used may *not* be accurate enough to make every situation or image correct.

If you or the camera set the temperature or white balance incorrectly, you will notice some colour shift or "cast" in your pictures.

For example, if you are shooting indoors under normal household lights but set your white balance to that of outdoors, your camera will expect excessive blue light, less red and adjust accordingly. However, the light from most bulbs has a low colour temperature or "K" value thereby having more red light than blue.

The resulting image will have a reddish or yellow appearance which can be corrected by either going to manual (white balance) on your camera, and reducing the WB setting until correct or playing around with the colours in an editing program during post processing (more on that later).

Similarly, if you set the cameras white balance temperature low to around 2,500 and take a shot outdoors, the camera will expect more "red" light and adjust its algorithms accordingly. Of course, the actual scene has more blue light and less red and the result will be an image with a cool, blue look to it.

The beauty of digital photography means that you can…

- Take a test shot
- Check the white balance
- Adjust accordingly
- Take another shot
- Delete all tests
- Get the picture right

…which takes no time at all and costs nothing!

For most situations, your cameras Auto White Balance mode is good enough. Any minor fluctuations can be dealt with during post-processing although there may be times when you need to get out of your "comfort zone" and go manual.

9.

JPEG or RAW?

If you are new to digital photography and have a camera capable of shooting in either of these modes/qualities, you may well have come across the same scenario as myself.

When I first moved over to digital photography, I was so busy that I didn't have the time or inclination to really learn and understand RAW and what it meant. I knew that shooting RAW meant better quality and more possibilities but it all looked so complicated!

So I started off by shooting entirely large/fine JPEGS and although the images were good quality, easy to process and even good enough to be used for sizeable A1 displays, I always had this niggling feeling that I should learn how to shoot and process RAW files.

Before we go into all that, it is good to know what the basics, benefits and pitfalls of each are.

JPEG

JPEG (pronounced "Jaypeg") stands for the **Joint Photographic Experts Group** who are the people on a committee that wrote the standard.

Put simply, a JPEG is the term used for a standardised image compression mechanism commonly used for photographic images.

JPEG was initially designed to work on full colour or grey scale images of everyday, real scenes. It can also be used, but not so effectively, on simple drawings or cartoons.

JPEG is "lossy", which means that it loses a small amount of information when an image is stored this way. One downside is that the more you open and **re-save** a JPEG image, the more "information" is lost and its quality suffers, albeit on a small scale.

N.B. - By simply *viewing* a JPEG and closing it, no information is lost, with no loss of quality.

This is not such a problem as it would appear. The algorithms that make up a JPEG, exploit the known limitations of the human eye with regards to colour and light, meaning that we can't really notice any difference at all, unless you repeatedly open and re-save the files or the compression is set at its lowest quality and smallest file size.

A machine analysis may well spot these differences more easily than a human, which may present problems, but for 99% of photographers, JPEGS do just fine.

The beauty of the JPEG is that you can choose how big or small a file becomes, although with a quality/file size trade off. The bigger the file size, the better the quality and vice versa.

Smaller files are great for emailing and take up less storage space whilst larger files are perfect for printing.

I would always recommend that if shooting JPEGS, you always keep a "master" copy from which you save new files at varying sizes. For example if my master filename is LZ1G1444.jpg, I would re-save with a filename of LZ1G1444a.jpeg leaving the original intact.

RAW

RAW is also known as the "digital negative". Whereas JPEG is an abbreviation, the term RAW is just that…RAW as in unprocessed.

A RAW file contains all of the detail and information recorded at the time of shooting as it comes off the sensor, and before any in-camera processing is done meaning that you have all the information at hand when processing with compatible software later on.

A RAW file normally contains the colour information as a 10 or 12-bit-per-pixel RAW file whereas a JPEG or TIFF file stores at 24 bits, being three 8 bit channels (red, green and blue). This means that although it stores more information, a RAW file is half the size of a TIFF file.

N.B. A TIFF file is data stored in a "loss-less" format from either a saved RAW or JPEG image. Unlike the JPEG it won't lose any information when re-saved although it does take up more space.

The beauty of shooting RAW is that whatever adjustments made "in-camera" at the time of shooting such as white balance, sharpening, levels and colours, can be **undone** again during processing giving so much more flexibility than a JPEG.

Also, any blown out highlights or particularly dark areas can be adjusted with the details being drawn back from the original information stored at the time of shooting.

It is virtually impossible to get back blown out highlights from a JPEG, which is incidentally one of the main factors for my move up to RAW.

More and more digital cameras are now offering the capability of recording an image as RAW **plus** JPEG to your memory card at the time of shooting. This means that the majority of your images may be processed quicker as JPEG's, with the more difficult images with poorer dynamic range for example, being processed from the RAW files, albeit on a slower scale. A great compromise.

So, basically….

JPEG

Benefits;

- Highly compressed with great flexibility of quality, file size and storage space.
- Quick processing with most editing programs. Images come out "almost" ready.
- All "in-camera" adjustments save time doing it later in post-processing.
- Easy to share via email.
- Excellent print quality at high resolution.
- Most software these days recognises this format.

Downsides;

- Although not that important, the "lossy" aspect sticks in peoples minds.
- Any information lost at the time of shooting (blown highlights) is lost for good!

RAW

Benefits;

- No information is ever lost from this "digital negative" when saved as JPEGS or TIFF files meaning you can process, play and save to your hearts content.
- Much more information is recorded at the time of shooting meaning more chance of "saving" an image that was poorly exposed.
- Many more adjustments with more flexible options are available using RAW processing software.
- "Mistakes" made during the capture such as exposure or white balance, can normally be corrected during processing with little or no hassle.

Downsides;

- Slower, more complicated processing.
- Larger file sizes taking up more space.
- Needs specialist software.
- Can be a steep learning curve.

Once I had learned how to process RAW files, with practice it became almost as quick as JPEGS. Most RAW conversion software allows you to either batch process for similarly lit or exposed images, or you can "process as previous conversion" making it that much quicker.

I also felt safe in the knowledge that the information was always there, in a nice full, digital negative if I ever needed to re-process or process in a more creative way.

10.

Focussing

Just because a modern digital SLR camera and lens set up has a reliable and automated system, it doesn't by any means guarantee pin sharp shots every time. It is a trap fallen into by many new "SLR photographers" who can't understand why some shots are blurred, normally caused by camera shake or poor focussing.

No matter how far technology progresses, there will always be a huge element of skill, practice and knowledge required in all aspects of photography.

Effective focussing is just **one** of them and the following are some of the different areas involved:

- Focus Points – Which ones and how many to use.
- Focus Modes – One shot or servo?
- Autofocus or Manual?
- Pre-focussing.
- Panning.
- Depth of field.
- Lenses – Quality and types.
- The subject – Size and speed.

All of these subjects have a bearing on whether your shot is in focus or not so we shall cover them one at a time.

Focus Points

Most modern SLR cameras have an array of focus points ranging anywhere from 3 to 45 within the viewfinder. You can normally select either one specific point or all points at once for auto-focussing.

Whereas having 45 focus points can be advantageous and impressive, it can also have its downsides. So how and when do you use how many points?

Everyone has their personal preferences when selecting focus points on a digital SLR. I personally, normally only use the **centre** point no matter what I am shooting.

It takes skill and practice to do this effectively especially when you take into account other factors such as composition.

Single, Centre Auto Focus Point

Like I said, I generally use this single, central point for most of my photography work because **I** like to be in control and by using this effectively, most of my images are sharp at the point **I** want and not the camera!

If the subject that I am photographing, or the point I want in focus is off-centre, I aim the focus point directly **where** I want to be sharp without moving back or forward **at all**, partly depress the shutter button to hear the beep as it focuses, hold the shutter down to lock the focus in, then re-compose and take the shot.

If the lighting situation is so that by doing this I lock in the wrong exposure, I will first of all take a separate "exposure lock", (using the * button on most digital SLR's), and **then** do the above. That way I am more than confident that the image will be sharp and correctly exposed every time as long as I shoot before the timer on the exposure lock lapses.

Of course, I take a few just to be sure!

Let's say you want a dramatic, close up shot of a persons face and want to use very shallow depth of field for effect. You also want to keep **just** the closest eye tack sharp leaving the rest blurred. By using normal auto focus methods with all focus points, the camera would more than likely focus *anywhere* other than the closest eye, making the shot that more difficult to get.

Using my method above and locking the focus on the eye and re-composing, I can ensure the shot looks great with the exact point **I** want in focus.

This works well for most types of photography including architecture, portraits, weddings, still life, landscapes and commercial, but doesn't work too well for sports and nature photography. For that you are better off using all focus points (below).

Specific, Single, Off-Centre Auto Focus Point

If your camera has this function, then you are able to select just one of **any** of the focus points as reference. This only really works if you are taking many shots of the same subject in the same location within the frame and you don't want to keep moving the camera as in the example above.

For example, you are doing a commercial or stock shoot of some bottles or glasses of wine all in a row. You want them fading into the distance using shallow depth of field and want just the first glass, on the left of the frame in focus whilst the remaining bottles fade and blur into the background.

You would put the camera on a tripod and compose the shot just how you want it. Then you would select the focus point that lands on the nearest glass to make sure that every shot you take of this set up has the first glass on the left well in focus.

There are many other circumstances where this would come in handy, using any of the focus points, but hopefully this example has covered the basics.

All Focus Points

As we touched on briefly before, there are only a few situations where I personally would use **all** focus points, being mainly sports or nature photography with subjects that move independently and erratically.

These would be particularly useful for fast moving objects where it is virtually impossible to keep them over any single point. By selecting **all** points, the smart chip in the camera decides which point the moving subject is closest to and switches back and forth instantly to keep the subject well in focus.

This works particularly well in unison with **AI Servo** mode which we shall cover in a bit, but panning with and keeping the subject as still in the frame as possible also helps the camera keep track.

If you were to use all points with, say, portrait photography as discussed above, the camera may well select the wrong point of focus entirely leaving the all important eyes blurred.

This is where many "newbies" go wrong with their new digital SLR's. Through no fault of their own, they would be right in assuming that by putting a new camera on fully automatic mode including the focussing, this expensive, bang-up-to-date piece of equipment should know exactly what to do.

Unfortunately this isn't the case. As I said at the start of this chapter…

…***"No matter how far technology progresses, there will always be a huge element of skill, practice and knowledge required in all aspects of photography".***

Tip: When using an SLR to photograph constantly moving objects such as horses at a show jumping event, think about this.

The first shot you probably took of the horse was in the distance as it entered the arena, and the last shot ***could*** be as it went past you at close proximity.

Now you go to shoot the next horse entering in the distance as he jumps a fence but your lens was already focussed at the *closer* end of its range from the previous shot meaning you miss the *next* shot, because your lens takes time to refocus for the further distance (even half a second is a long time when shooting sports).

So, once the first horse has passed, pre-focus on the general area you wish to shoot next, before the next horse even comes into view. That way your lens will only have to make a speedy and small adjustment and not "search" for the correct focus, hopefully meaning you get the shot…sharp!

This tip applies for all photography with fast moving subjects. Think in advance about where your next shot will be, and set up the focus early giving your camera and lens less to do other than get it right first time.

Focus Modes – One Shot or Servo?

Many digital cameras, particularly SLR's, give you the choice of either AI Servo or One Shot focussing. Again, what you choose normally depends on your own style and what you are photographing.

One Shot

This is exactly what it says. The camera will focus correctly for one shot and then you would need to release the shutter button and press again for a new focus point on your subject.

AI Servo

This is a bit more interesting and great technology for sports or wildlife photography as the camera and lens will constantly work together and focus on and adjust for any moving subject within the frame.

e.g. Let's say you are on safari and a leopard is running towards you at great speed. If you are silly enough to stay and photograph this monumental (or just mental) occasion, and you have your focus mode set to One Shot, you wouldn't be able to make good use of your continuous mode of 5 or 8 frames per second as you would need to be repeatedly pressing and releasing the shutter button to refocus each shot.

If you didn't, the big cat would become more and more out of focus as it approached with the original point of focus nicely sharp all the way!

If you had the camera set to AI Servo on the other hand, you could just keep your finger pressed firmly on the shutter knowing that the AI Servo tracking focus is taking care of everything, right up to the point of your untimely death!

Most modern DSLR's also have sensors amongst the focus points that determine which part of the image is moving, meaning you can set the focus points to **ALL** and be quite certain that the camera will track your subject.

So for sports and wildlife photography, the best set up may well be to use all focus points with AI Servo focussing if your camera allows it, but again, it still takes a lot of practice to get it right.

Auto Focus or Manual?

For most of my work nowadays I make the most of the incredible advances in Canon's quiet and fast USM autofocus technology. I may be a bit biased here but I do also know that Nikon and Olympus, among others, have similar advancements in their own focussing systems.

Autofocus is so incredibly quick now, its speed has been said to be nearly as fast as the human eye, and is certainly faster than most of us could accurately focus manually! It is great for most subjects, especially as I said before, sports and nature photography.

There are of course, times when **manual** focus is not only very handy but also quite necessary:

- **Still life or studio work** – If I am doing a job that has no time constraints and the subject is very unlikely to move, I like to know that I can put the camera on a tripod and lock in the focus manually to give myself one less thing to think about.

I tend to leave the camera "beep" function on so that I still get assurance that the subject is in focus each time I take a shot. I can then place each object or subject on the same spot each time knowing the focus is taken care of taking into account the depth of field.

- **Macro photography** – With macro work, you have so little room for error it is sometimes best to rely on your own eyes rather than the cameras. For moving subjects such as insects, it may be worth using autofocus as your time is limited but for stationary objects, take your time and go manual.

Remember that with macro work, the depth of field is incredibly small even with small apertures and **especially** with telephoto lenses such as 100mm or 135mm. Focussing is critical and I would recommend a tripod and manual focus every time.

- **Sports Photography** – This goes slightly against what I have said in the past but there are certain situations, not just in sports photography, where fixing a focus point manually will have great benefits.

  For example, if you are doing a rather laborious job and you know that you will be in the same spot shooting subjects at the same distance for a period of time, fix the focus manually on the point of interest so that you can guarantee sharp pictures on every shot (as long as you use a fast enough shutter speed).

  To use the same scenario as before, let's say you are shooting horses on a particular jump at an event. It is a prime position and a difficult jump and you intend to sell the shots to each person as it shows off their skill as a rider.

  Once you have found your best position, you could set up the camera on a tripod, manually focus on the jump you intend to shoot, use a small enough aperture with good depth of field to account for any minor fluctuations in movement by you or the rider as you shoot, and just fire away.

  By using **autofocus** in this scenario, it is just possible that the focus may stray to the background as you shoot and you miss the only shot of a rider making that jump…food for thought.

To get the old "Grey matter" working, think about your style of photography and where manual focus may help you.

Pre-focussing

This has pretty much been covered in the examples already given. By being a bit smart and thinking about what you are shooting, pre-focussing can save you a lot of time and missed shots.

It is mainly useful for sports where the action is fast and you need to give your lens' autofocus as much help as possible.

Try to "Pre-focus" on a fast corner of a Grand Prix track so your lens doesn't waste time searching for the right focus point. Pre-focus on the point of exit on a snow-boarder or skiers jump. Pre-focus on the point on a playground slide where you wish to photograph your child….I think you get the point!

As an experiment, spend an entire day out and about photographing, using nothing but manual focus and see how you get on. It will hone in your skills and when you get back to autofocus, you may have learned a thing or two.

Many modern lenses allow you to "finely adjust" manually even with the lens on autofocus so you can really work "with" your lens.

Panning

This is an age-old technique that I am sure many of you already know/use. For any moving subject it is important to "stay with" the subject whilst you are framing the shot before and after you shoot.

With slower shutter speeds, this technique can ensure that the subject stays sharp even if the background is blurred, an effect that is quite striking and effective for sports

A simple way to try this is to stand by the side of a road and pick out a car coming towards you;

- Set your cameras shutter speed to either 30^{th}/sec or 60^{th}/sec, basically slow enough to cause movement as you swing or pan the camera. The aperture and depth of field are somewhat irrelevant as the background will be blurred anyway.

- Make sure that you aren't **too** close to the road. One, for your own safety and secondly if you are too close, the car will become distorted, especially with wide angle lenses, although this may be the effect you like. A small telephoto like 85 or 100mm is good for this technique.

- Either, pre-select and manually focus on the point directly in front of you where you want to take the shot, this will "fix" the focus on that point, **or** set the autofocus to AI servo in order to "track" the moving car.

- Aim your camera at the car and stay with it with your finger lightly pressing the shutter button to either track the focus (in AI servo mode) or/and to get a constant exposure reading.

- At the point where it passes your pre-designated shooting area, fire away, whilst "panning" with the car all the time, and even use continuous mode if you have it to ensure one shot comes out well.

Depth of Field

Depth of field **(DOF)** is the term used to describe the amount of your image that is in focus. Landscapes, for example, where **everything** is in focus have good or deep DOF and a macro shot where only a **small** part of the image is in focus has poor or shallow DOF.

Depth of field is generally determined by the aperture setting with larger apertures of say F2.8 giving shallow depth (not much in focus) and small apertures of say F16 giving deep or good depth of field (most of the image in focus).
By closing the aperture to its smallest setting of say F32, you **won't** actually increase the depth of field. This is because some of the light rays passing through the aperture become diffracted at very small apertures causing poorer quality.

You can read more of this effect at the Michigan Tech website.

The **lens** that you use also plays a **massive** part in creating depth of field.

The effect with different lenses

Many people don't realise that the type of lens you use has a definite effect on the depth of field in your images. The why's and wherefores of how this works are for a more advanced book and aren't particularly important at this stage. What you do need to know however is the effect that each lens has.

- **Wide angle (10-24mm)** – Due to the amount of coverage that these lenses give, even with larger apertures of around F2.8, most of the image tends to be in focus. To create some depth of field using a wide angle lens you can simply bring the main subject closer to the lens.

  To illustrate this point we can use an awesome tool called a depth of field calculator over at dofmaster.com. Open it (by pressing CTRL and clicking on the link) and try these entries.

  1. Camera – Canon EOS 1D MKIV.
  2. Lens focal length – 16mm.
  3. Selected aperture – F2.8.
  4. Subject distance – 20 feet.

  You would think that with this aperture of F2.8, you would get a shallow depth of field, but by using the calculator you will notice that the results are quite amazing. The closest depth of field coverage is from a mere 2.05 feet in front of you to infinity (and beyond)!

  Now, the other extreme, just change the subject distance to 1 foot and notice the difference. The DOF is severely reduced to just 0.15 feet **in total**!

- **Telephoto (200-500mm)** – Because a telephoto lens is drawing the subject closer, the knock on effect is that the DOF greatly reduces as the lens gets larger.

  Again, using the calculator, try these entries;

  1. Camera - Canon EOS 1D MKIV.
  2. Lens focal length – 500mm.
  3. Selected aperture – F16.
  4. Subject distance – 50 feet.

  Here you would think that by using an aperture of F16, most of the image would be in focus. Wrong! The calculator shows us that the total distance in and around the subject which is in focus is just 2.17 feet.

So where the basic rule applies that a large aperture gives shallow depth of field and a small aperture gives great depth of field, always bear in mind what lens you are using and the effect it has.

Once you understand the basics of DOF, you can incorporate it in much of your photography whatever the subject. It should be always on your mind what apertures and lenses you are using and what effect they will have on the clarity of your photos.

Lenses – Quality and types

Quality - If you are using poor quality, cheap lenses, the chances are that you occasionally become a bit despondent with your photography. You may find that the sharpness is sporadic and generally poor and that you struggle in your editing program to get a decent image.

You may find that the edges are always blurred and mistakenly think that you used the wrong shutter speed or aperture.

You may have what is known as "purple fringing" and see a halo around your subject and again, mistakenly think that maybe you used the wrong white balance or some other incorrect setting.

The autofocus may be poor and might occasionally "back focus", meaning that it misses the subject entirely.

It all boils down to the quality of the lens and actual glass in particular as to the quality of your finished images. The camera is mostly irrelevant in taking great pictures, they just have more durability, functions and capabilities the more expensive and professional they get.

The biggest and most important piece of advice I can give to anyone if you are serious about photography, is to choose which manufacturer you think you will stick with (Canon, Nikon, Olympus etc), and build yourself an arsenal of decent quality lenses that cover a wide spectrum of focal lengths and have fast, accurate focussing systems.

Don't be swayed into spending too much on the camera in the beginning, spend your money wisely and invest in quality glass. Most modern, high quality lenses should last you a lifetime and with care, the quality should never deteriorate. You will find that you upgrade your camera, especially if digital, much more often.

As I mentioned earlier, most quality lenses allow you to manually "tweak" the focus even in autofocus mode.

Types – In order to cover the focal distance of **16mm to 200mm**, do you buy just 3 decent zoom lenses such as 16-35mm, 24-70mm and 70-200mm, or a multitude of quality fixed focal length lenses such as 15mm, 35mm, 50mm, 85mm, 100mm, 135mm and 200mm?

The choice is entirely down to what you shoot and I shall discuss the pros and cons of each of these in the next chapter but for now, one important factor to remember is that you will generally get sharper, better quality images from a quality fixed focal length lens.

Sure, most of the high quality and expensive zooms are exceptional but when you have used the best fixed lenses you will always see a difference. Personally, I have a selection of both.

11.

Lenses

All SLR users, film or digital, will usually fall into one of two camps when deciding which lenses to buy;

- Beginners or Amateurs on a limited budget (We all start somewhere)!
- Serious Amateurs, Professionals or people wanting to further their photography career.

Whatever budget you have, think about what you want to achieve both now and in the future, and get the best lens that you can afford long before looking at any other accessories like tripods, fancy filters or second cameras.

See your **camera** as a current working tool and the **lenses** as an investment. A decent, quality lens will last a lifetime if looked after. You will upgrade your camera many times over before needing to update your lens collection, assuming that you stay with the same brand of camera.

Give me a cheap, old and battered but still useable film SLR camera with a well looked after and top quality lens and the chances are I will produce as good an image as I would with my Canon 1D MKIV (within the confines of enlarging each image equally).

On the other hand, give me a Canon EOS 1Ds MKIII and a cheap, poor quality lens and I may as well use a disposable camera.

My point is that it is the **lens** that all your images pass through, the camera simply records that image. If the images get battered and distorted on their journey through the lens due to poor quality, you are fighting a losing battle from the minute you press the shutter.

If you haven't done so already, when buying a digital SLR, don't necessarily buy it with the kit lens, they can sometimes be sub-standard quality, even from my beloved Canon Corporation. Use the money to put towards a better lens; you will thank me for it one day!

Beginners/amateurs

Anyone interested in SLR photography has to start somewhere. Buying your first camera kit can be both exciting and overwhelming…where do you start? What manufacturer do you go with?

Choose wisely, as at the time of writing this, and with the massive advancement of digital photography, we are now seeing some of the older camera manufacturers pulling out of the digital SLR market altogether.

Read the photography forums, buy a few magazines. You will see that the industry leaders such as Canon, Nikon and Olympus have always maintained stability and kept up to date with technology. It is my reckoning that they will be around for a long time.

Do some research, choose your favourite (if you haven't already) and try to buy their own brand of lenses if your pocket allows it.

If your budget doesn't stretch to that, don't panic, there are a few good third party companies that produce extremely high quality lenses for a much lower price.

In my opinion, Sigma is one of the best and they make their lenses to fit most major brands of D/SLR. The past couple of years has seen their technology progress at a mighty rate and are fast becoming many peoples choice.

Their top-of-the-range lenses have HSM (Hyper Sonic Movement) technology which allows fast, accurate and silent focussing, with high quality glass elements. They also come in a variety of sizes and prices, although I would recommend that you stay away from their earlier models that were made before their advanced research and development really kicked in.

Tamron are also fast becoming a contender and produce very reasonable quality at excellent prices. If you get the opportunity, take your camera to the shop, try the lens out and take a few shots. Take them home and process to see if they fit the bill.

The photography forums at places like www.photo.net or www.fredmiranda.com can be a useful oasis of information. Check out their reviews too.

The whole point of my rambling about quality lenses, is that all too often people are put off by incorrectly thinking that it is their photography technique that is poor when it is actually just the lens.

The more you progress and the better you become, the more you will scrutinise and criticise the quality of your own work. Give yourself a head start from the off.

Serious amateurs/Pros etc.

As you probably know, anyone falling into this category or aspiring to, should never compromise the quality of paid work with poor equipment.

Designers, publishers, wedding couples and basically anyone paying you for your time are all looking for the best quality they can get, especially the higher paid jobs.

Weddings

An extremely important event for which you are 100% reliable for the quality you produce and are usually being paid well for. You need;

- "Fast" (F2.8) lenses that can cope with dark surroundings such as church interiors.
- Durable and solid lenses as they will all too often get a bit of a bashing.
- Quality as this is a one-time event…no compromise.
- A good focal range from wide angle to short/medium telephoto.
- One or two zoom lenses for speed in adjusting composition as the day unfolds.
- At least one "prime" lens for the important shots where you need the best possible quality.

Commercial

The chances are that commercial shots will be produced for anything from glossy magazines or brochures right up to 6 metre billboards, the quality must be spot on.

Any business that has taken the time and expense to produce quality goods and products will only want to portray them in their best light and that means quality images.

It isn't just the sharpness and clarity that a quality lens will enhance, it is also the colour rendition which may be critical to certain products, and that can also determined by the quality of your lens.

I would recommend high quality prime lenses for any commercial work. If this is where you want your photography career to head, go for primes rather than zoom lenses.

Stock Photography

You may well at some point wish to start uploading and selling your work on stock libraries. Even the smaller, yet fast-growing micro stock libraries are now asking for higher quality images.

The larger stock photography companies like Getty, Corbis and Alamy all need high resolution, high quality images with a minimum file size of 48-50MB. Files this big need to be clean and clear right up to the edges.

The reputation of **any** image library is entirely dependant on the quality of work they accept and showcase, and subsequently, any work that is not up to scratch will be refused.

Rejection of your hard work hurts so again, give yourself a head start with the best quality you can afford.

Types of Lenses

Prime Lenses

By far the highest quality producing lenses around, the **prime lens** is a fixed lens of any focal length from 6mm to 2000mm. The most popular primes are;

- 50mm for general, everyday shots and the occasional portrait.
- 85mm/135mm short telephoto. Perfect for portrait photography.
- 200mm, 400mm, 500mm and 600mm long telephoto. Mainly sports and nature photography.

So what makes them better?

There are two main factors to take into account when judging the quality or sharpness of an image, resolution and contrast.

A zoom lens naturally has more elements of glass than a prime thus making it more prone to the internal light scattering and bouncing from these elements before reaching your camera's sensor. This can have a direct effect on the contrast within the final image.

It may also cause a slight degradation of "Pizzazz" and clarity in your pictures even from the more expensive and professional zooms. Most quality prime lenses simply give better contrast resulting in a cleaner and crisper image.

Whether or not this *minor* difference is important to most photographers is a matter of personal taste. In my opinion, if you have the time and ability as well as a decent prime lens, use it where you can.

Pros and Cons of a Prime Lens – Pros

- Clarity and quality of the final image.
- Weight – Most primes are lighter due to having less glass elements.
- Closer focussing distance in most cases.
- Using primes narrows down your choice of shot making you think more about the light, mood and overall composition.

Pros and Cons of a Prime Lens – Cons

- *Can* be expensive for the highest quality prime lens.
- You may need many primes to cover the range of a good zoom lens.

Zoom Lenses

You will see many professional photographers using zoom lenses for one reason alone, convenience! Popular zoom lenses are;

- 16-35mm. Wide zoom. Good for interior/architecture and landscape.
- 24-70mm or 35-135. Medium zoom. Good for weddings, portraits, some sports and general "walk around" photography.
- 70-200, 100-400, 50-500. Long zoom. Good for sports and wildlife or even candid or portrait photography at weddings etc.

Sports, press and wedding photographers may all use a decent zoom lens as the nature of their profession means quick, on the spot thinking and just moments to get the shot. A quality zoom is invaluable for quick composition in such situations.

For any subject you photograph that doesn't give you time or the ability to move about and compose the shot carefully, a good quality zoom lens will do the job producing perfectly acceptable and sometimes extremely high quality images.

Take landscape photography and a situation where you want to isolate a certain feature of the scene but are unable to get any closer (and of course you can't afford or don't have a quality 200mm or 400mm prime lens), a zoom will suffice.

Also, nature photography where a fixed telephoto lens may get you too close or not close enough, and you are unable to move from the confinements of your transport, hide or viewing area. A zoom again is invaluable.

Pros and Cons of a Zoom Lens – Pros

- Convenience of quick and varied composition.
- Cost, as one lens will cover the range of a few primes.
- Excellent build quality, image quality and weatherproofing from the high end zooms.
- Less weight, as you only need one lens to carry for certain jobs or subjects.

Pros and Cons of a Zoom Lens – Cons

- Quality can suffer with more elements especially at the edges of the frame or the extreme ends of each focal length, i.e. the 16mm and 35mm setting on a "not so hot" 16-35mm zoom. Try and stay within these boundaries.
- Laziness – Rather than taking your time to move about and evaluate a shot carefully, it is sometimes all too easy to zoom in and out a bit and settle for that.
- Weight again. A quality zoom lens can weigh 2 or 3 times as much as its fixed telephoto counterpart due to the number of extra glass elements.
- The one touch zooms (with just one ring for focussing **and** zooming, "push-pull" and twist) can sometimes move or slide out of position when the camera is tilted up or downwards. Try to buy a "2-touch" zoom lens if you can, i.e. one with separate focussing and zooming rings.
- The aperture size changes as you change focal length with many zooms. For example, you may see the lens specs as this;

  70-200mm F3.5-F5.6

  This means that the maximum aperture at 70mm is F3.5 and the maximum at 200mm is F5.6.

  This is something to remember when using these lenses as your shutter speed will change as you zoom in or out to compensate for the change in aperture.

The more expensive zooms have a fixed aperture throughout the range so as you zoom in and out, the aperture will not fluctuate.

This gives you more peace of mind knowing that the aperture you set is the one you use after composing the shot.

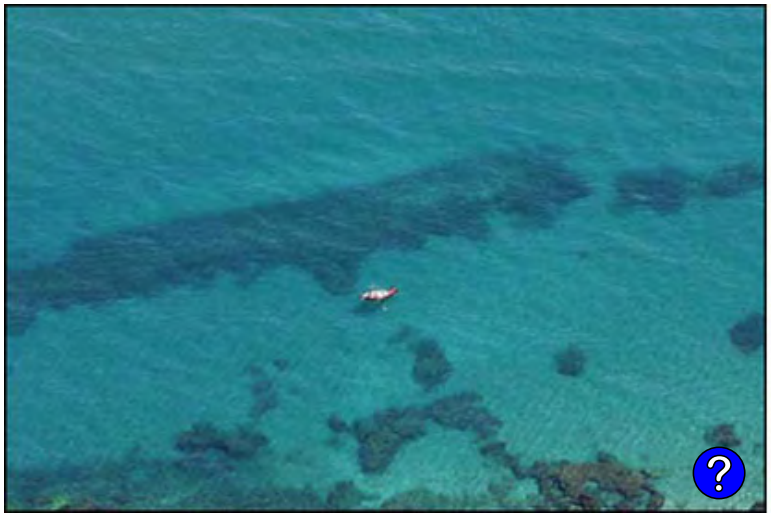
There may be other pros and cons for each that I haven't mentioned, but these are the more obvious. My personal (and expensive) recommendation if you are serious about photography, is to slowly **start** to build an arsenal of quality lenses including the following;

- Zooms – 16-35mm, 24-70mm and 70-200mm
- Primes – 15mm, 35mm, 50mm, 85mm, 135mm
- Converters – 1.4x and 2x

Over time, if you end up with these quality lenses or near equivalents in your kit, you pretty much have any scenario covered unless you become a serious nature or sports photographer in which case a £5,000, 600mm prime is in order!

As I have said before, concentrate on building up your lens collection rather than falling for all the camera upgrades that hit the market.

WIDE ANGLE LENS



TELEPHOTO LENS

ZOOM LENS

12.

Filters and Special Effects

Most of the time, if possible, **and** to keep the image as original as I can, I try not to use too many filters to enhance the image I am after. The beauty of software such as Photoshop is that you can sometimes add these filters and effects later whilst keeping the original file pure and untouched.

So my first piece of advice here is that you try to keep your shots as natural as you can straight from the camera or at the very least, take two shots – One with the filter and one without.

There are times however, that it is virtually impossible to get a certain shot without a little help.

Polarizer Filter

For example, there is no software currently available that can do the job of a good polarizer filter. I am thinking that this may **never** be the case due to what the filter actually does.

I would recommend that you spend a little more cash on this accessory and go for quality, get a good brand and make sure it is a circular polarizer. Why buy an expensive lens only to put an extra, cheap element of glass in front of it?

You cannot mimic the effect of removing reflections and glare in Photoshop although you *can* add colour saturation and depth, all of which is what this great little filter actually does.

The times to use a polarizer can be the following;

- Shooting through glass such as a car windscreen or house window.
- Photographing bodies of water. You can remove most of the reflected sky from the surface, and add the true colour of the lake, river or sea that you are shooting. With clear water you will add "depth" to the image as you bring forward any details such as stones on the bottom of a shallow river bed.
- Enhancing dark blue skies. Maybe for stock or travel photography or even property shots, it is nice to add richness to a beautiful sky. A polarizer is perfect for this as long as you are at the right angle from the sun (Approx. 90%).
- Photographing flowers. You can again, remove glare and enhance colour with the use of a polarizer.
- To simply allow less light in through the lens to create a slower shutter speed. For example when shooting "milky" waterfall scenes (see below).

Basically, if in doubt when using a filter to photograph something, stick it on your lens and see if it improves the shot.

The image below shows the extreme effects of using a polarizer filter:

ND (Neutral Density) or Grey Gradual Filter

Of the very few filters that I ever use, this is one of my favourites, after the polarizer. It is simply a sheet of clear plastic with a slow, gradual darkening from top to bottom as shown in the "metering" chapter of this book.

Cokin produce the best range of gradual filters in an array of colours; orange or red to enhance a sunset, green to enhance foliage or grey to add mood to a bland sky.

The ones I use are the neutral density or grey range. They darken areas of an image with affecting the colours too much.

When to use

Probably the only time I use this filter, and it is a lifesaver for some images, is when I am faced with a scene with strong dynamic range, e.g. when I have a dark landscape with a bright sky.

Your camera or meter will set exposure properties to cope with either/or, but generally not both. For example, you may end up with a well exposed landscape with overexposed and blown out skies or a well exposed and detailed sky with underexposed, dark landscape.

What the ND gradual filter does is to even out the lighting by just darkening the sky and leaving the landscape alone to produce a well balanced image…perfect.

Skylight/Ultra Violet Filter

From the minute I took up photography as a hobby, all the advice was to keep one of these filters on your lens at all times to protect it and to keep the UV light from having any impact on your images. Apart from maybe adding a little "warmth" to your images, there is not much else it will do.

Nowadays I don't use them at all as I personally want the keep quality of the lens I am using to its maximum. Although there *are* times when I will use one, such as if I am photographing particularly messy sports or during a windy day at the beach where a film of "grease" can build up on the front element.

It is worth having one for such occasions but not altogether necessary and if you do buy one, again make sure it is quality.

There are obviously many, many more filters out there, especially in the Cokin range but as I said before, technology and software has come such a long way that there is actually little need to use special effect filters anymore. Some are very "80´s" and dated now anyway.

One other old favourite of mine was the red or orange filter when shooting black and white film, they really added contrast and depth to the skies and clouds.

Special Effects

If you don't have it already, save up and get yourself a copy of Adobe Elements III, Photoshop 7, CS or CS2. Any version of these will suffice as I imagine there are very few photographers out there that even know Photoshop version 5 or 6 in their entirety!

If your budget is limited, there ***are*** excellent software programs such as ACDSee Pro Manager that do the job to start with, and even some of the freebies are good, but if you are serious about moving forward with your photography, you would do well to get one of the Adobe pro versions.

One of the main reasons I say this is that there are so many 3rd party "plug-ins" that you can get at a very reasonable price that give you all the effects you could ever want, and a number of automated "actions" that greatly assist in your workflow enabling you to spend more time shooting!

One particular plug in which is currently free is Virtual Photographer from **OptikVerve Labs.** This is an amazing piece of software that you simply add to your Adobe program files and it appears in your filters menu in Photoshop.

Some of the effects are great and better than the ones supplied in Photoshop itself.

For example, this shot of an old steam train railway platform in southern England is nice, but the use of the "ambience" filter really brings the colours and mood to life.

I must say though, that these effects are not to everyone's liking but that is the beauty of photography and art in general, it is all in the eye of the beholder. I sometimes think, "What if 10 photographers all took images of the same scene? How could I make ***mine*** different?"

There are many effects to choose from which can give everything from subtle changes and enhancements to full-on freaky and unique alterations.

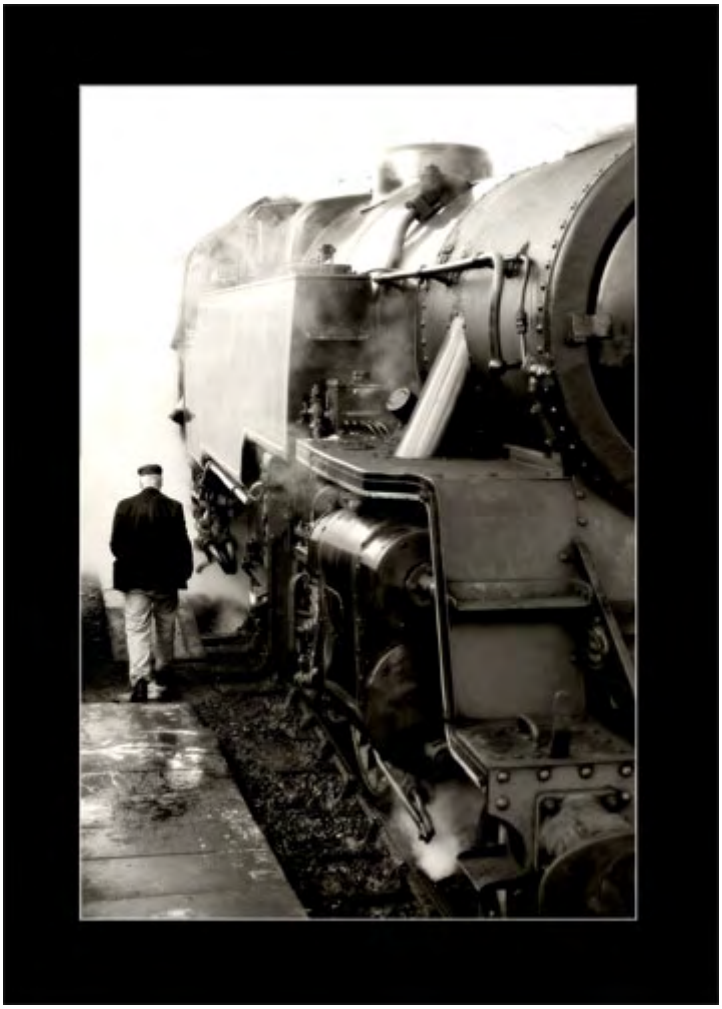
You do have a certain amount of control over the effects too, as not to overdo it.

Sepia Toning

Another great effect when shooting or converting to black and white is the sepia effect. The reason it is called toning is that when I started out, with a wet darkroom, the sepia toner liquid had to be added to certain stages when processing the prints.

It is all so easy now and can be done with the click of a button and if you don't like it, delete it!

Occasionally I may take an image which I like, but **don't** really like the colours. Converting to black and white can make a huge difference, and adding sepia can give it a real timeless classic look.



Motion Blur

The use of a slow shutter speed to add motion blur can turn what would otherwise be a snapshot taken by anyone, into a picture that you would be proud to hang on your wall.

A good, sturdy tripod is essential as well as a cable or remote release if you have it.

In the first example below, I used a polarizer filter, ISO 50 and an aperture of F22 to decrease the amount of light coming in, which gave me a slow shutter speed of 1.6 seconds to blur the action.

For the opposite in the second image, and to illustrate my point, in order to "freeze" the water more I had to use ISO 320 (which added grain or noise), a shutter speed of 250^{th}/sec and a large aperture of F2.8 which lost all of the depth of field from the first image.

The same principle can be used for many images such as sports, moving vehicles, fireworks at night and many more. As an experiment, why not spend a day or two practising with slow shutter speeds, the effect can really enhance what you are trying to "say" in a photograph.

Once again, it is always important to remember the causes and effects of any actions or changes you make to apertures, shutter speeds or ISO's. There has to be compensation elsewhere so be aware of what these changes are!

Isolation and superimposing

To finish this section with a bit of fun, you could (once you get to grips with editing), always try your hand at playing with the images. As well as impressing your family and killing the endless hours on a cold, rainy day, you may well end up with some images that are worthy of stock libraries or even win a competition or two!

Isolation is the method by which you remove the background from a chosen subject completely. The reason for wanting to do this could be;

- To use as stock photography where a designer can add wording for a front page magazine article, for example.
- To replicate the effect of shooting against a white background in a studio.
- To be able to replace the removed background with anything you like.
- Or just because you can!

Isolating a subject using the pen/paths tool can be a lengthy and complicated process. Rather than duplicate it all here, I have a page devoted to this at All Things Photography that illustrates this in more detail.

The example on the tutorial page actually played a large part in my receiving the title of "**International Commercial Photographer of the Year 2005**" with the SWPP and BPPA (Society of Wedding and Portrait Photographers and British Professional Photographers Association).

Once you have isolated the subject, it is up to you what you do with it. As you can see below, I have used my son playing on the piano to show what can be done.

13.

Photographic Subjects

Landscapes - Sports - People - Commercial – Weddings - Still Life/Studio – Stock

Some people when starting out in photography have an idea or particular passion that they wish to follow. You may already be involved in the fashion or sports industry and may well wish to continue but to also incorporate your photography somehow.

For most of us, it is just the passion that drives us and the willingness to photograph anything and everything to try and emulate the beautiful images that we see everywhere. Or it may be to simply stamp our own individual photographic style on a particular subject.

With time you will find that 2 or 3 subjects start to take prominence as you may gain interest in that area anyway. Animal wildlife, for example, is a favourite for many people although it is actually a subject quite difficult to break into due to the time constraints, finances and travel factors involved.

Going through each subject in turn, I will give you my own personal take with any tips along the way. I will keep it to a minimum as in all fairness each subject requires its own separate book to really do it justice.

If I am able, I will link to any websites that are of particular use for each area.

Landscapes

Unless you are lucky enough to become world renowned and manage to sell many prints, landscape photography is more of an interest than a living for most people, although nice stock images can also sell well.

I personally love the subject as it gives me the opportunity to see so much more around me, not only that, when looking through a camera I tend to see things in more detail than before too.

There is a distinct art or knack to shooting good landscapes and it can be quite technical in its approach.

First of all, you need a half-decent camera and a variety of lenses along with a sturdy tripod. I personally still believe (at the time of writing) that medium/large format film is the best for high quality landscape photography as it captures so much detail and is more "forgiving" when it comes to dynamic range.

It is one of the few remaining areas of photography that most digital cameras can't quite match, unless you are using the 22mp (and higher) digital backs for medium format cameras.

Nonetheless, don't get me wrong, a 6MP Digital SLR or a quality, advanced point and shoot is quite capable of producing high quality landscape images worthy of a space on your wall.

So what is the best approach?

Interest

A good landscape photograph doesn't necessarily mean rows of green fields and colourful trees shot with a wide angle lens. A good landscape can be taken with a 500mm telephoto lens concentrating on a small part of any scene, what is important is that the scene must have a point of interest.

Whether it is an old wooden cart in the foreground of a field of wheat, or a steam train in the distance passing through the fields of beautiful countryside scene, an image needs something to hold the viewers attention.

Whenever you are out and about either walking or driving in your car, always remember to take your camera. Many times when out for a drive, I have turned a corner and come across a scene that is just crying out to be photographed.

Keep your eyes peeled for anything different; objects, colours, shapes and buildings. Look for, or concentrate on a theme such as water, winter, summer, fields, skies, sunsets, converging lines, nature, cityscapes and silhouettes.

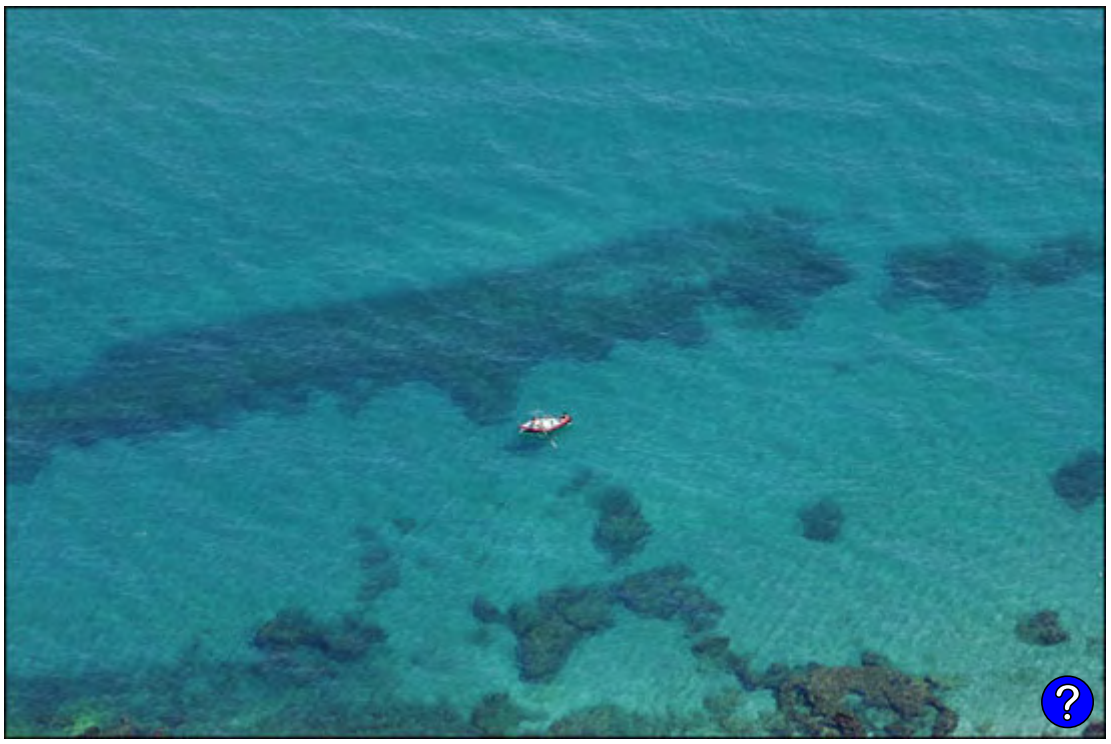
It is sometimes a good idea to leave the house with a particular theme in mind otherwise you tend to look for something that isn't there. The flip-side of this is that as I said before, you sometimes just happen across the most beautiful of scenes without trying.

TIP: Always keep your tripod in the car.

Angle

Don't just settle for the first viewpoint you come to, move around the point of interest looking for the angle that makes the most of the light. Alter the background by walking around the main subject. What can you add to the background that will accentuate the scene? Should you add or decrease the depth of field for effect?

Get down low on the ground and look up, does isolating the object against the sky help? Is there a highpoint from which you can approach the shot?



Try to find an angle that isn't too "complicated" or messy with too much *information*, sometimes a simplistic or minimalist approach works best.

It may even be worth your while to come back to the scene in the morning or evening to make use of the beautiful "warm" colours that these "golden hours" can give. See the next section for more on this.

TIP: Have a notepad with you to keep tags on what landscapes spring to mind when out and about.

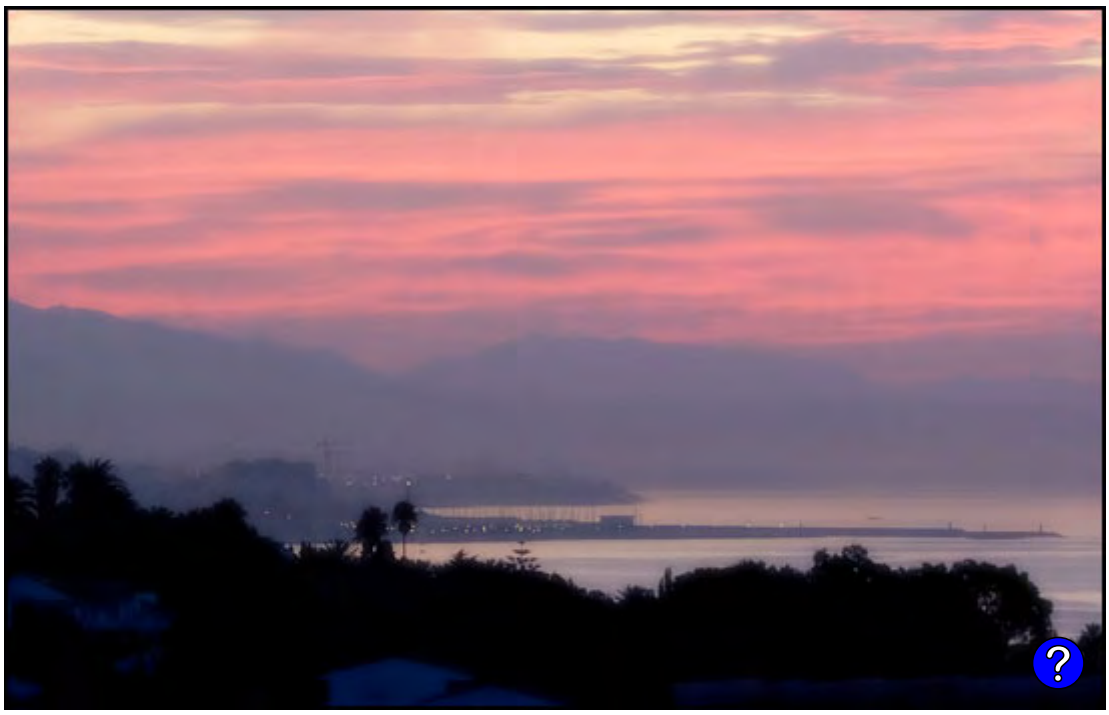
Time of Day

As I have just mentioned, the best time of day is early morning or early evening for most landscapes although night scenes can also be quite a challenge.

Morning

Get yourself up nice and early having prepared your kit the night before and leave the house with plenty of time to arrive at your predetermined scene before the sun rises. I know it is difficult but to be there before, during and after the light is at its best, gives you a greater chance of getting the shot.

What places near you are prone to a nice early morning mist or frost? Where does the sun rise and do you want to shoot ***into*** the rising sun or use its glow to illuminate the scene?



Preparation for a good landscape is important (as well as the occasional good fortune) as the best light only lasts for a short while. If you have an idea of times and viewpoints for the best shot, you are halfway there.

Daytime

Generally speaking, the midday sun is not the best time of day for landscapes, especially in the summer as the bright light tends to wash out most of the colours. It is a good time to shoot subjects that aren't dependant on huge colour rendition or hindered by overhead shadows.

Saying that, shooting during the day on an *overcast* day can pay dividends as the light is nicely diffused by the cloud cover. A good landscape doesn't always need the sun, far from it!

Evening

As with the morning, the evening is a great time for photography. Your time is limited so again, preparation is the key.

What time of year gives the best sunsets or "glow" as the daylight diminishes where you are? For me in Europe, February to April and September to November tend to be the best times. I have tried to catch them in the summer only to wait for hours to see the sun simply vanish with a quick, colourless "plop" behind the mountains.

Get yourself and your tripod set up well in time to catch the sunset. Work out what exposure and coverage you need as well as any foreground items of interest. As the sun sets, take a bunch of shots and simply pick the best one.

I have been known to take over 100 shots during a 5 minute sunset for a commercial job. It is important not to waste time processing or even keeping the unsuitable ones, just erase them.

Night time

The night time can bring a whole new style of images for your portfolio, this is the time to get creative. As the world around you lights up, look around for reflections and details that were not there before.

It is a good time to learn the effects of "painting with light" as you try out long exposures. Try capturing the head and tail-lights of moving cars at night or bright city scenes packed with different colours and details.

Check out the local beach if one is close. The use of very long exposures gives a real dreamy, milky look to the water and reflections and also works well with moving clouds lit by the city lights.

Sports

Once again, with the advance of digital photography, I see during my research on the web, many more decent sports photographers coming to the fore. To get consistently good sports shots means either having a quick eye and even quicker shutter finger, or taking a lot of images to get it right, and in the past that meant "burning" or wasting a lot of film.

Now with the costs greatly reduced, more and more people are trying their hand at sports photography whether it is at a local basketball match or a packed football stadium.

The main things to remember when shooting any sports are;

- **Speed** – Fast action means fast shutter speeds of 250th/sec and above.
- **Apertures** – To get fast shutter speeds you will on occasion, especially indoors, need a fast lens of F2.8, for example.
- **Camera** – Your camera must be fast enough to catch the action. Many "digicams" have what is known as shutter lag, which is a delay due to slow focussing and metering, this may mean missing the shot altogether.
- **Lenses** – A decent mid to long range zoom or telephoto lens is a must to bring the action closer.
- **Wits** – You need to stay alert as to what is happening. Try to pre-focus on a particular area where you think the action will happen. This will give your camera less work to do in ensuring sharp images.
- **Location** – Find a good angle that really captures the action as it happens. How close can you get? What is the background like? Can you get behind or beside the goal at a football match?
- **Focus Modes** – Learn to use AI focus (if you have it) along with the different focussing areas of your viewfinder. If not, again, pre-focus on a particular area of action and wait. Good focussing skills are essential for sports photography.
- **Composition** – Sometimes cropping right in close to get, say, the full, gnarled expressions of a rugby squad in a scrum or footballers face as his goal is disallowed.
- **Non-Action** - Look for something different, perhaps away from the action. Maybe a shot of the crowd as their home team scores a goal, wins a point or wins the match outright. Remember the famous shot of Gazza (Paul Gascoigne) having his "family jewels" attacked by Vinnie Jones? Definitely taken by a photographer with a keen eye!

- **Contact** - Have a list with email addresses of editors from local and international sports magazines/newspapers just in case you get that "one-off" shot that no-one else gets. Could be worth a bob or two!

People

This is a tricky subject for many people starting out in photography as it can be quite daunting. You almost feel as though you are imposing on people's privacy when photographing them but it is one area that you will inevitably come across the more you move forward.

Photography is such a great hobby or profession for the more introverted among us. It gives you the chance to aimlessly roam about in places that you wouldn't normally go alone, and you have an excuse!

Photography can be as social or as solitary as you like. If you take people out of the equation you are free to let yourself and your mind wander without a care in the world. It is a great way to take in the countryside or cities and towns with no-one to please but yourself.

When I was in my early teens I was fairly shy and photography gave me a creative outlet that didn't involve too much contact with other people. As I got older and enjoyed photography more and more, I slowly brought people "into the frame" and found a whole new world of creativity, if anything it made me more confident.

Nowadays, by shooting many families, kids and weddings, the people are the most important aspect of my work. I still find peace and solitude in my stock photography as it enables me to get some quality time alone and far from the madding crowd.

So what is the best way to approach people in order to capture the **real** them?

First of all you need confidence in yourself and your abilities. If you come across as anything else, the people you are photographing will sense this and the shoot could be a disaster.

Smile!

When you first meet your subjects, greet them with a hearty smile and/or firm handshake. A smile does wonders as an ice-breaker and is normally reciprocated with the same.

Spend time getting to know the people, genuinely ask them about themselves. What do they do? What do they like? Are they married? Do they have children? I usually make a point of meeting up a week or so before the shoot so that there is no ice to break on the day.

Once you find some common ground and people relax a bit, the photography is so much easier and the result is more natural looking portraits. This is especially important at weddings.

Take Control

Always try to have an idea of what style of portraits or photography you will be doing. If you have a pre-arranged set of shots, locations and ideas, (either your own or the couple's/family's), it shows professionalism and you can work efficiently and with confidence. Have a plan and try to stick to it.

Don't be shy

Don't be afraid to get in close for some shots and remember to compliment your subject (as long as it is genuine and not an obvious lie). As the shoot goes and on it gets easier and you notice them relaxing more, try some different or unique ideas.

"Can you make me look thinner" or "Can you make me beautiful"?

I get asked this at practically every wedding meeting or portrait shoot that I have, sometimes by the men! It is normally a way of the client breaking the ice but is also a question they actually want answering. My immediate reply is one that normally breaks the ice straight away…

…"Someone has beaten me to it"! (Yes, corny I know, but it works)!

If the question does come up and you get talking, they may ask you to make some simple adjustments during post-processing such as removing spots or wrinkles.

It is up to you how far you go but I normally wait until they see the finished image before making any drastic alterations, it is easy to offend if you get it wrong.

Flatter them

People normally tell you when they think they have a "good side", listen and remember which side it is. Concentrate your efforts on making them look the best you can in **their** eyes.

Set up your lighting, if you are using it, to be soft, diffused and evenly spread. On most occasions with just 1-4 people, I either use;

- Natural light with/without reflector
- Bounced Flash
- One studio light with softbox

You can't beat natural light as long as it isn't direct sunlight, but the next best thing for me is a good softbox. You tend to find that the light is so well spread that any lines and wrinkles fade anyway.

Also, try to shoot slightly higher than your subject to reduce the chance of double chins but don't go too high otherwise you end up with wrinkled foreheads as they look up.

Look away

It isn't a hard and fast rule that people should always look directly into the camera, on the contrary, most good portraits have an "unaware of the camera" or "lost in thought" look to them. It is quite a trend now for portraits to be done at a favourite location, such as a beach, with the family just going about and doing their own thing.

Much like the reportage style of shooting a wedding.

Long gone are the days of the blue "cloud-like" backdrops with hands placed nicely on the knee and a nonchalant smile directly at the camera…**natural** is the way to go.

Commercial

Commercial work can be quite well paid so you really need to know what you are doing, coupled with the ability to deliver on time.

You need to be able to think on your feet and have an instant solution for any problems that arise. It is normally an area in which a photographer will specialise or only enter into after a few years experience under his/her belt.

Commercial photography could include anything such as:

1. Travel
2. Product
3. Fashion
4. Advertising

Each needs its own set of skills and experience as well as top notch equipment.

More often than not, your work will be spread across the pages of a quality glossy magazine or displayed larger than life on billboards all over town. It may be used for a special, one-off promotion so it needs to be the best it can.

Travel

As glamorous as it sounds, travel photography can also be hard work. A client may need a very specific kind of shot that is critical to their campaign; you may be under a strict deadline and also entirely dependant on the weather at the same time.

If you see travel photography as the be-all-and-end-all of your photographic life, you would do well to start creating a huge library of stock images everywhere you go. There may just come a time when you need to pull on your resources.

You may need to leave home at the drop of a hat to capture an event or occasion. You need to be able to think on your feet and make sure you get the shots required as you will normally be working at the clients' expense.

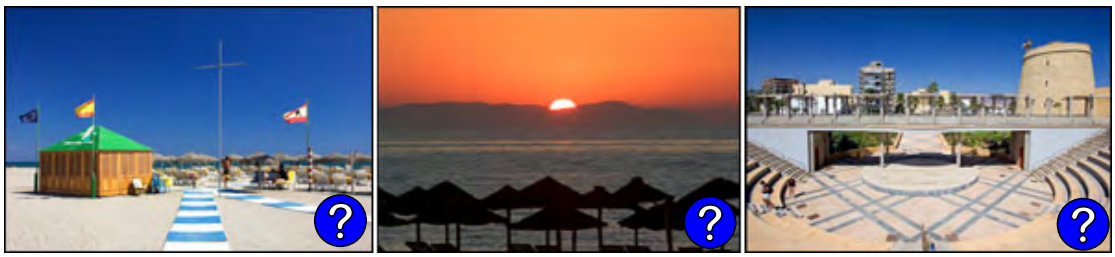
You may need to travel fairly light but at the same time have the correct equipment with you, and also be prepared to leave your creature comforts at home! Some 3rd world countries see your shiny, expensive camera gear as either insulting to their poverty or as a "quick buck" to be made. Be aware of your surroundings.

Not so long ago, I was asked at short notice, to drive 400km up the coast of Spain to shoot about 3 or 4 different locations, 2 golf courses, 2 ports, one new development, a local town and some landscape shots thrown in…I had less than 2 days to do it in.

The company only needed around 30 shots in total (for a huge billboard and glossy promotional brochures), and were constantly checking the weather reports to ensure we had a bright sunny day. The day in question was in doubt but we decided to risk it.

I arrived at midday and set to work only finishing when the sun had well and truly set. I was up again at 6.30am the next morning just in case there was a decent sunrise…there was, and by 4pm that day I had finished.

The client ended up with over 150 high-resolution beautiful, bright sunny images which included everything they needed. A bit of Photoshop work was needed on some here and there but generally it was a success.



The point is to always make the best effort you can. A client will use you time and time again if you not only deliver but **over-deliver**.

Travel photography can be tiring but also very rewarding, what better way to see the world than get paid for photographing it?

Product

There is usually little room for error with product photography as the product is normally taken close up or isolated against its background to show it off. The lighting has to be spot on with limited reflections with care as to what is actually reflected.

(On occasion I have had to enlarge a picture 200% to see my own reflection in a wine bottle for example. Nothing a little manoeuvring or Photoshop couldn't cure)!

The client will normally have an idea of what he wants but is usually open to creative suggestions as long as they stay within the theme.

You may well be asked to start from scratch with a product and come up with your own ideas, it all depends on the client and how big the job is.

If this is something you would like to get into, get practising with your studio photography with particular emphasis on your lighting techniques.

Fashion

Fashion photography is a truly sought after and glamorous area of photography that could take you to the dizzy heights of fame and fortune, although it doesn't necessarily have to be that difficult to break into.

Many magazine editors look to personal recommendations from existing employees for new photographers but one way to "fast-track" your career is to build a stunning portfolio of images that shows your unique, exciting and personal style of fashion photography.

A good web presence is also recommended but is generally seen as just a "calling card". People in the industry still like to see large colourful transparencies although a good selection (20-30) of beautifully printed, high quality 10" x 8"´s could suffice.

Your portfolio should tell a story of how you work, showing a range of themed images that relate to the job or contract that you are applying for but try to include one or two "off-the-thread" images that show you have some versatility.
Once your portfolio is ready, you need to get it in front of picture editors. To do this you need to do some research.

What is the editors' name? What does their magazine do? What is the circulation? Does your portfolio match their style/theme? If you have previously published work, send it in along with your prints (not originals), and be persistent!

Some editors receive dozens of portfolios every month from aspiring photographers wanting to break into the scene, don't give up or get disheartened if it takes a while!

TIP: It may be an idea to sign up with an agency that will take care of everything for you. Sometimes the cost is well worth it as they are in constant contact with clients and publications.

If you really want to be seen and are confident in your work and approach, have a gallery take your work on and display your finest work.

Advertising

The advertising world is ever-changing and you need to keep up with it, in fact you need to be ahead of the game in order to excel in this field.

For example, you are given a new **Apple iPod Nano** to photograph for its launch…where do you start?

Well, first of all, think of its size and how it could benefit Joe Public. Secondly, who is likely to buy it, who exactly **is** Joe Public? What are the current trends? Lastly, how could you reach that audience whilst showing off the benefits of owning an iPod Nano?

You need to illustrate its size, or lack of it, but at the same time giving the impression of style, verve, panache and power. People love trendy gadgets and this is no exception.

I'll tell you what, go to Apple's website and check it out for yourself. iPod Nano

All kept very simple. The first image (assuming it is still there as you read this) is of a close up of the iPod Nano with the thumb of someone holding it (to emphasise its size). One line next to it says it all… "**1000 songs. Impossibly small. iPod Nano**"

Other images on the site compare its size and width to that of a small pencil.

The point is that everything a potential shopper is likely to want to know is there, the photographer just needs to show it as it is with good lighting and composition.

As in other commercial jobs, the company paying you may already have an idea of what they want, you just need to bring that idea out in images. On the other hand, you may be required (depending in your experience/past record) to put your own ideas into practice.

I was asked once to take some models to a building site in Spain and think of a way to promote the "boom" of young families buying a second home in the sun. I took the shot below whilst lying on a dusty road of a building site and asked the "family" to point to, and pretend to hold an imaginary set of property plans.

I then added some plans of a new development in Photoshop and faded the layer back to show the family behind.

It wasn't something the company had asked for and I thought of it only when we arrived at the site, but the idea worked well and the company were more than happy with the shot.

If you have a creative flair and enjoy working with products and people on location or in the studio, advertising photography can be a real buzz. There is nothing better than building a portfolio of your work displayed in glossy magazines!

TIP: Brush up on or learn excellent studio/lighting skills. Flick through the more illustrious "glossies" to get some ideas, try and work out how the photographer got the shot and why he shot it in that particular way. Even try to imitate the images you see, it is all good practice.

Weddings

Well! Where do I start? If you visit many photography forums online you will see that one of the most asked questions is something like:

"I have been asked to photograph a friends wedding at the weekend, where do I start"?

That to me is a disaster waiting to happen! Firstly, even for a professional photographer, 2 or 3 days is no time at all to prepare for the job ahead. Secondly, the fact that the question is being asked means that the person is not ready, far from it.

This is a subject that I could write forever on but I will try and keep to the basics for now, again, it would require a whole new book to cover everything.

Before venturing into becoming a wedding photographer, there are a few things you need to ask yourself:

- Have you actually **been** to a few weddings, from a small registry office to a full scale grand affair? They can vary drastically from wedding to wedding.
- Can you work well under pressure?
- Do you know what is required of you? Before **and** after the wedding day?
- Do you have the right equipment?
- Do you get on with people in general? Can you keep your cool when they cannot?

I would say that of all of the avenues one could take in photography, weddings have without doubt, the most pressure.

Not so much because there are no second chances, not even because you may have to take control 150 people or more at some point. It is the fact that from the minute you arrive at the church or brides house in the morning, you don't stop until you have done everything that has been asked of you, in order and without missing anything out.

This can mean slogging away until the early hours of the morning. Wedding photography can be quite lucrative but many people don't understand why until they have actually photographed a full wedding.

For me personally I never intended to get heavily involved in wedding photography, but after you have done a few they can become quite enjoyable, the best advice I can give is to prepare well.

I attended my first wedding as an assistant to a pro when I was 16 years old. All very exciting stuff and I remember feeling like a spare part for a while. The photographer, my mentor for a year, was rushing here and there, throwing things at me, snatching them back, shouting at me, all until we had finally finished late that evening.

Great stuff.

A few years later I attended a weekend workshop held by another professional on the south coast of England, where we had hands on experience using a model "wedding couple" on location at a beautiful nearby church.

TIP: Highly recommended. Look for a pro near you that holds similar tutorials, you will learn a lot.

Then I shot my first wedding at about 21 or 22 years old, it was my sisters wedding but I still felt an incredible amount of pressure none-the-less.

Finally, three of us teamed up and started our wedding photography business in Surrey, England. I would take the photos, another would set up the shots, check the dress etc, and the other acted as a "director" of sorts.

It all worked well and took a lot of the pressure away but by having 3 of us operating, the profits were hardly enough to "give up the day job".

One thing I remember is that even though we were new, the work came flooding in, mostly from referrals due to our professionalism on the day, another big lesson learned.

I remember attending a **huge** wedding fair at a well known racecourse in Surrey in order to drum up new business. The minute we walked into the "arena" we were all staggered, overwhelmed and highly intimidated by the sheer number of professionals in attendance.

There were some stunning prints on display, some as big as the walls. Each table was set up beautifully with an array of albums, flowers, colours, drapes and even some models to help out.

Our first reaction was to "get out of dodge" but then we decided to just do it. All we had was an old wallpapering easel with a nice velvet cloth draped over it. Just two albums on display, one showing a full wedding from start to finish, the other with a selection of shots from a range of previous weddings, and a small bouquet of flowers.

As the doors opened and visitors started pouring in, one of us immediately stood right at the entrance, welcoming people with a big smile and ushering them in the direction of our small, friendly and humble stall.

We were inundated and received many enquiries, so much so that at the end, one of the other photographers asked how we did it; we appeared to be the busiest there!

Where is this going you may ask? Well, no matter what experience you have, no matter how small your portfolio, nine times out of ten, even today, a couple will book you based on your attitude, courtesy and professionalism.

They assume that because you are a photographer, you can do the job. What is more important to them, is **YOU**.

If you are likeable, calm, professional and confident, you will shine. You just need to be able to back it all up by producing the goods on the day and that takes practice.

Here is a quick run down of how I personally work.

1. I receive the enquiry via email or phone call and immediately reply to any queries or question about pricing etc, **without delay**. I normally send a current price list with a selection of various packages. Remember, at this point you are probably competing with a number of other photographers. Be professional, polite and prompt.

2. The initial enquiry is normally followed up with a meeting. This is more for the couple and/or their parents to suss you out as a person and have a browse through your portfolio. An online portfolio is great but make sure you have some hard copy examples to show, preferably in a fully finished album. Again, be polite and thorough, if they like you and your portfolio, you are almost there.

3. Once booked I stay in contact with the couple and one month before the day, meet up again to finalise everything. Times, names, places, "must have" shots etc. It is also an idea to collect payment in full at this stage. This is your livelihood and it is too short notice to fill the gap should they cancel last minute.

4. A week or two before the wedding, but on the same day, i.e., Saturday, I will do a complete dry run from the brides' house to reception at about the same time. This gives me an idea of traffic and lighting and a chance to time the travelling. Also check that your equipment is all there and working.

5. The day before I will charge all batteries, make sure all of my kit is ready and working again, and thoroughly clean everything. Check my list of names and "must have" shots and run through the day in my head. I will have all my clothes ready and all kit laid out ready to go. Also, fill the car with petrol the day before!

6. I won't go into detail of the wedding as each one is different suffice to say that you stay professional and polite at all times and try not to get in the way too much. Get all the shots you need (and then some more) and then say your goodbyes and leave. Try not to skimp and use an assistant, you won't regret it.

7. Security - Out of habit, I always load the images onto my PC that night, no matter what the time. It is all just too tempting to make sure that I have all the shots I need and that they are ok.

8. Storing – I keep the original files (RAW) on a hard drive and make a back up copy to DVD immediately. Then the TIFF or JPEG files created after processing are also saved to hard drive and DVD.

9. Processing – We all have our own way of processing files but an average workflow should include levels, curves, colour saturation, contrast and re-touching. How you present your final images is up to you.

   You may want to convert to black and white or sepia, you may add a border to some or use an effect to enhance an image. I normally give all images in both colour and black and white, that way you increase the reprint order rate.

10. Presentation to the client – Again, the way you present your work depends on which medium you use. Some post them online for all to see and order as well as producing low resolution proof images on a CD for the couple to browse.

    One of my wedding packages includes a proof album with 300 6" x 4" photos all numbered. This way the couple has a complete record of the day which they can flick through with ease, ordering is easier and it is an added bonus for your profits. I charge a lot less for these prints as I would for singles as this is quite a bulky order.

11. Follow up – Stay in touch with the couple right until they or their family have placed the last order. Make sure you deliver the prints, enlargements and canvasses (if you are lucky) on time, in perfect condition and well packaged.

12. Referrals – All the way through, try and leave your business card where appropriate, with the family, friends and place one in each order you process. If the couple are happy with your work, it will be well displayed for all to see and you should receive recommendations. It also doesn't hurt to ask once in a while.

All in all, wedding photography is hard work and a lengthy process. If you are serious about doing this full time, get your hands on the right equipment, learn as much as you can and give it 100%. Once you get busy it would be worthwhile just sticking to weddings, it is easy to take on other jobs but too many and your attention to detail may suffer.

For more on this, go to Wedding Photo Tips for Amateurs at All Things Photography.

Still Life/Studio

I love the studio environment. If you are not under pressure and have no time constraints, there is nothing better than having a play with your studio lighting set up to experiment with new and fresh ideas!

You don't need to rent or own a huge studio, just 2 or 3 lights, a decent sized room and a selection of backdrops will do just fine. My first "studio" was simply one bounced speedlight flash on the camera, one fill in slave unit and a white sheet or piece of white card placed on the sofa. As long as the lighting is uniform, evenly spread and complimentary, it doesn't matter what you use, to a degree.

Still life

This is a chance to really make your work shine whether for commercial use, personal use or stock photography. Each object that you photograph will benefit from a different r specific lighting and composition set up.

For example, when shooting flowers, try and isolate the subject with a background colour that compliments the shades of the petals. Black or white are usually quite acceptable but don't be afraid to experiment. Or simply go macro and fill the frame with the flower.

Shiny objects such as bottles, glasses, jewellery, or reflective fruit are really enhanced if placed on a reflective surface again, with the colour complimenting the object.

Make sure that you use the right aperture, one that has enough depth of field for the object but still creates the right amount of "Bokeh" or background blur. This is dependant on the distance between your subject and the camera, and the subject and background although entirely unnecessary if you are using just one colour or backdrop.

Use a fixed focal length lens of between 50mm and 200mm depending on the subject. Any wider and you start to get distortion on your lines, and longer and you **will** need a warehouse! 135mm is great if you have it.

As mentioned before, a fixed lens will normally produce crisper sharper images and better colour rendition too.

Lighting an object correctly takes practice. You need to position everything just right, set the power output on the units correctly and adjust your camera settings accordingly.

If you have the funds, get yourself a hand held light meter from a company like Sekonic and learn how to use it, although with digital cameras, you are able to shoot, look, adjust and shoot again in the same time it would take to use a meter, much like using a Polaroid camera!

Flowers again, could benefit from being backlit. The petals are so fine with minute detail; a head-on flash could blow them out. By firing the light "through" the flower, the fine details including the veins of the leaf are much more prominent.

Learn to study your subject, think which lighting would enhance it better and practice. Keep shadows to a minimum unless they are part of the final result you are after, keep them sharp, well exposed and well lit.

Stock

Stock photography is something that once it "clicks" you just can't stop. Once you get a few sales under your belt, you feel like your hard work finally has some worth and when the bug gets you, you will find that you start to see the world around you in just 2 ways, **saleable** or **not stock worthy**!

Everywhere I go I look for abstract lines, people doing everyday things, items of interest, items that are "in fashion" or newsworthy. If I travel further afield, I shoot places, landmarks, airports, stations, buildings and strange and unique architecture.

If I suddenly get a rush of inspiration I will set up the studio and fire away, getting as many angles to my idea as I can, thinking of what editors or designers are after and how they could use the image. It is all very exciting stuff in the world of stock photography.

I am not good enough!

That may well have been the case in the dark and murky past but as the world changes and moves on, more and more opportunities open up to us.

Years ago, stock photography was left to the professional photographers and agencies such as Corbis and Getty Images who supplied large corporations with only the highest quality and highest resolution images.

Now, with the explosion of digital photography and affordable, high resolution cameras, the world of stock photography has opened up to allow absolutely anyone in who has half an eye for a good picture. Even the digital artists and graphic designers can join in with vector images too.

I will come to the list of agencies worth submitting to (along with earning potential) later but for now, what **exactly** is required from **you** to produce stock worthy images?

Subject matters

Now, I don't want you to get all excited and simply go out and snap away at just anything. Most agencies worth using these days are fairly strict on submissions with regard to both quality and subject matter.

Take a look around you, look at magazines, posters, advertisements, leaflets, flyers, and books, the internet, billboards in fact everywhere you look you see images of some sort right?

I can guarantee that a huge percentage of those images came from a stock library, why? Because for many businesses, the cost of hiring or employing a photographer is simply not cost effective for the amount of images they use or need.

It is much simpler to browse through a stock library and choose the images that suit their requirements…simple! All **you** need to do is take the pictures that they are looking for!

Obviously a subject list could go on for ever so I will explain a little about what are generally accepted to be the most used images and topics.

Travel

If you are lucky enough to have a job that involves travelling abroad, or if you have the time and money to get out and about, or even if you just have a holiday or two each year, take your camera with you.

For one, taking stock photography whilst on holiday makes you get off your sun bed and actually take in some of the beautiful surroundings that you find yourself in. So many people make the effort to go abroad only to laze around the pool all day! Why not earn some cash to pay for the holiday? In fact, take a photo of your sun bed!

Look around at the architecture of where you are. Look at the people, how they dress and go about their daily lives. What is their transport like, their shops, their homes or their clothes? How can you capture the essence of the place with your camera?

Think about why those foreign images may be used and by whom. Holiday brochures and websites, travel books, geography illustrations, teaching aids, advertising,

Take two or three shots of the same subject only from different angles and time of day and make sure you have enough storage space with you. There is nothing wrong in getting ideas from existing images but try not to plagiarise or copy them exactly, make your own mark in the world of stock.

When you get home, weed out the best and **only** the best images. Agencies will refuse similar images so just upload or send in the absolute best, although two or three shots at differing angles in fine.

Technology

This has a never ending supply of ideas as technology itself is never ending and forever changing. iPods, mobile phones, MP3 players, portable DVD players, picture storage devices, laptops, notebooks, blue-tooth, hand-held gaming stations and all the other gadgets that have yet to be invented.

Who uses them? Where? Why? Picture a scenario where they could be dangerous for example. The image could be used for a safety leaflet or publication. How can they benefit us? How can your image really stand out amongst others? Get your thinking cap on, get a couple of teenage models and have a play.

Lifestyle

If you are old enough, think back over the last 20 years and see how our lives have changed. How do we do things differently now? How may we do things in the future? If you can predict how things will change and capture images to portray those changes, you keep yourself way ahead of the rest.

In general society, we now take more holidays, we have more money, we have more disposable income, 2nd properties, more holidays, more free time, health good and bad is a big issue these days, do we have better racial harmony or are we still in the dark ages, sexual equality and its progression in life and the workplace, the list goes on.

What about the less fortunate? It is important to illustrate these areas too, such as the ghettos, 3rd world poverty, the homeless, sickness, disease, famine, natural disasters, the climate, global warming. All of these issues require documented images for use in a huge array of publications.

Think about what is going on around you, what are the big issues? What images are needed to portray our modern, technological, fast-moving and sometimes unscrupulous society? Lifestyle photography is by far one of the most popular topics in stock libraries all over the world, get involved!

People

If you are able to and have the confidence, try and incorporate people in as many shots as you can, people are everything in advertising. Look for people that stand out from "normal" society; punks, disabled, extravagant, wild, young, colourful, eccentric and just plain different.

Active people, sports people, people at work, people at play, children, sad people, happy people, old, young, foreign, fat, thin, tall, short, **all** people!

Look for expressions, fashion, habits, feelings, emotions, hobbies, skills, distinguishing features and anything that stands out from the "norm".

Hire some models to create the scenarios that you have in mind, if you can't afford to pay them, offer a free portfolio of high resolution images, great for people starting out in the modelling game.

Whatever you do and wherever you go, take a bunch of model releases with you and fill them out correctly. Any image that has a recognisable person in should be accompanied by a signed model release.

Some agencies accept images without one but the image can only then be used in an editorial capacity, e.g. newsworthy or educational purposes, but an image with a release is much more likely to be purchased and for more money.

Obviously there are many more subjects, but if you stick to these for now, you won't go far wrong.

Quality

The quality and file sizes required differ from agency to agency. The smaller agencies generally accept images of 2MB and above which is around 1200 x 1800 pixels. The larger, more professional agencies prefer images to be 48MB and above, some **without** interpolation which is impossible to shoot with nothing but the best Digital SLR available or by shooting medium/large format slides and scanning them at the highest resolution.

Wherever you start, your images need to be clean, noise free, and without any distracting items that detract from the main subject. Some designers and editors like to have isolated subjects that have a pure white surround. This leaves them more scope to add their own look and feel or wording to the image for a magazine front cover for example.

The images also need to have good colour rendition and saturation, they need to be sharp but without in-camera or software induced sharpening, and above all, have a useful theme.

Where **you** fit in and how far you want to go is up to you.

Beginners

Even if you just have a decent 4 MP digital point and shoot with little or no accessories, you can "get on the stock ladder".

Over the past few years, we have seen a surge of new "microstock" sites emerge as big players in the field of stock photography. The term **micro** refers to the small file-sizes required which are mainly used by designers and web publishers that don't generally need huge files.

Many professional photographers say they are destroying the true stock industry while others argue that they are simply filling a niche gap for designers and businesses that can't afford the higher prices.

Whatever you or I think, one thing is for sure, they are here to stay and this has been proven by the purchase of one such agency by the world famous Getty Images. So do you get involved or stick to the larger agencies? I say, as a beginner, it is a great way to learn and get started in stock photography.

You will receive useful critiques and recommendations through either the sites´ reviewers or from the helpful community forums that are busy with photographers all in the same boat as you.

Have a look at the following sites and sign up, read the forums, and start submitting. They are all free and you can go at your own pace. Most accept files from a 4MP camera or above.

Microstock Agencies – (Press CTRL and left click on the name to visit websites).

1. **Shutterstock –** One of the most popular sites and definitely one of the better earners. Sign up, submit 10 of your absolute finest images for review and once accepted, off you go. Make sure the 10 images meet the criteria 100% before submitting, if not, you may have a 3 month wait to try again. Earn 20c per download, doesn't sound much but when you have 100+ a day it all adds up. Also your images get automatically uploaded to many other "sister" sites where you can earn up to $5 per download.

2. **Dreamstime** – A fast, up and coming site that has a great community and many regular buyers. They are sure to be one of the bigger players later so get all your work here too. Earn 50c per download. Not as busy as Shutterstock yet but getting there…fast.

3. **iStockphoto** – Probably the largest and oldest of the micro sites who were bought out by Getty Images in February 2006. Quite strict on submissions but the payments are up to $1 per regular download.

4. **Big Stock Photo** - Considered to be one of the "Big 5", Big Stock Photo is growing every day. Earn 50c per download.

5. **Crestock** – All set for a big launch in 2006, you will earn $2 per image downloaded.

Start with these and as you progress and become involved in the forum activity, you will no doubt learn of all the other agencies out there as well as some of the larger companies.

Intermediate/Advanced

As well as or instead of joining the above, you may look to use the larger agencies who normally ask for larger file sizes and pay a lot more in commission. Some of these you can opt for Royalty Free or Rights Managed. Each has its benefits and downsides, so what you choose is up to you.

Royalty Free (RF)

As with all the Microstock sites and most larger sites, your royalty free images may be used as many times by the buyer as he/she likes in a number of capacities. RF is a good way to sell your images although your exceptional photographs may sell for a lot more money using rights managed. The RF prices are based on files sizes and not the context in which the image will be used. No-one can purchase exclusive rights to a RF image.

Rights Managed

Rights-managed images generally sell for a lot more than RF and are governed by more complex contracts that define how the images may be used. Designers and editors who want to make sure a particular photo or design won't be used by a competitor, for example, will want to invest in a rights-managed image.

In a nutshell, a buyer pays a fee each time he uses the image and that fee is determined by its specific use, length of time used, exclusivity, file size and geographic location.

Agencies

1. **Alamy** – One of my personal favourites. Upload your images at 48MB or higher to earn anywhere from $60 to $300. You can opt for one of two memberships. One gives you 75% commission but you pay an image hosting fee, the other pays 65% but it is free to host. I chose the second and have had excellent results across the board over the past 6-8 months. My biggest sale to date is $404.

   Even if you have just a 6 or 8MP DSLR like the Nikon D70 or Canon EOS 20D, you can upsize the images using a fantastic program called Genuine Fractals (Photoshop CS, CS2 Adobe Elements 3 or 4) or Genuine Fractals Print Pro (Photoshop CS, CS2 Elements 3), a plug in for Photoshop software. This allows you to greatly upsize your images with minimal loss of quality.

2. **Image Vortex** – You set your own price anywhere from $20 to $300 depending on what you think it is worth and you will receive 70% of the sale. You may receive offers from buys too, which you can accept or decline.

3. **Photographers Direct** – Receive 80% of the sale of your images. You receive requests direct from the buyers including their budget and requirements. You then upload your images to match the request and if you are successful, you then deal with the buyer directly to agree a price. Photographers Direct then take 20% for the introduction. Can't say fairer than that!

These should keep you going for now but why not also try a search on Google or Yahoo for other agencies. In order to start producing a reasonable monthly income, I suggest you get your skates on and start snapping away. A portfolio of around 1000 or more images spread over a few agencies could give you a very healthy income or you may wish to go "exclusive" with just one agent.

14.

Visualising the Shot

What do I mean by "visualising the shot"? Well, something you can teach yourself to do automatically when out shooting is to imaging how you want the shot to look in your head. Try and picture the type of shot you want, i.e. Colour? Heavily saturated colour? Black and white? Moody? Stock-worthy? Print-worthy? Isolated? Award-winning or just a nice landscape for your portfolio?

Try to see ***past*** what you are looking at and imagine the image processed, cropped, finished and coming out of your printer.

It is like anything in life, do it enough and once you perfect it, it becomes second nature. Here is quite a radical comparison:

In my skydiving (freefall) days when I was learning to qualify, one of the most difficult things to do was to perfect a 360º turn effortlessly. I only needed to make the slightest movement and the force of the 120mph wind would throw me unstable at any given opportunity. With practice and persistence, it gradually got easier until I didn't even think about it anymore.

It is hard to describe but it got to the point where I would simply *think* about turning and it would just happen, my body automatically knew what to do through repetition.

It is the same with photography. You arrive at a scene and automatically pick out and focus on a section and viewpoint that would make a good shot, most people simply record the entire scene from where they stand!

The more you read and study other peoples work, especially the award-winning stuff, the more that any particular styles and techniques will stay with you. Gradually it sinks in and then you start to pretty much see a good shot in any situation. This is especially useful for stock photography.

You may look at a scene and in a split second, think for example;

"Get low to isolate the subject against the sky, go portrait mode to fit front cover of magazine or article, leave space at top for title wording, process picture and remove background entirely, saturate for nice colour rendition, send to stock agency and hopefully someone will buy my hard work"!

Or

"Right, zoom in and isolate that object, underexpose slightly to account for the bright sky, set aperture wide to blow out the background and get a nice blur or "Bokeh" to enhance the subject, get the image home, convert to black and white, "burn" or darken the sky a little to add mood ".

If you can get to a point with your photography where you really can visualise the image before you take it, (obviously not all the time as all those voices in your head would drive you crazy), then you will find that you improve a lot and also have fewer shots to delete.

15.

Lighting. Natural, Flash or Studio?

As with the previous section, knowing immediately which light sources are available to you, how they work, how to use them to your advantage and which would suit the image best is an acquired skill.

The ability to make an instant decision to use flash or not during a wedding shoot is of paramount importance. The correct lighting could make or break an all important shot. If in doubt, and if you have time, do both, with and without flash.

Natural – Natural plus fill in flash – Flash – Ambient – Studio/Softbox

Natural

Probably the most flattering form of lighting, perhaps because this is the way we see most things and most people everyday.

I always try, when I am able, to make the most of any natural light whether it is outdoors, indoors or just a shaft of light coming in through a window, even if I have to bounce it using a reflector.

Window Light

If shooting portraits of people or wedding portraits or church scenes etc, try using any available daylight, even if it means moving people to another room in their house. Diffused window light, not direct beams of sunlight, can create a real sense of calm and mood to an image.

If the daylight can't quite reach the subject, use a reflector or two to bounce and throw the light like in this example.

Outdoors

The *worst* type of natural light for portraiture is direct sunlight. It can cause heavy lines and shadows as well as squinting and is very unflattering. If you have no choice, spin the subject around with the sunlight behind and fire away whilst exposing for the face.

Overcast days are perfect, especially for weddings (although not for the couple) as many of your shots will be outdoors. The light is nicely even and diffused and is most flattering for everyone, much like using a great big softbox.

Natural Plus Fill-in Flash

When shooting using available light, you only have so much control and there are times when you need to help out a little.

For example, if you simply **have** to shoot in direct sunlight, especially at weddings or events where many shots are outdoors, try "pinging" in a little fill in flash and keep the sun behind the subject.

If time is not on your side as in the scenario above, set your camera to aperture priority mode and speedlight to E-TTL or equivalent (fully auto/dedicated). Then quickly take and lock a meter reading from behind your subject by aiming your camera there, half pressing the shutter and pressing "exposure lock" or "*".

Then re-frame the shot and fire. The background should be well exposed as that is where you metered for and the subject should be lit correctly from the burst of flash as in the examples above. Practice, practice, practice.

Flash/Speedlights

Personally, I only use direct flash if absolutely necessary (other than fill in). If I am indoors and the ceiling is low enough and fairly bright, I will always bounce the flash to diffuse the flashlight.

Direct flash indoors is horrible and tends to wash out the colours and leave nasty shadows behind your subject.

If you are using direct flash, to lose the shadows try and manoeuvre your subject so that they are a healthy distance away from any walls etc, and open up the aperture to blur the remaining background.

The options open to you to diffuse flash light are;

- Bounce the flash from a ceiling or wall. Remember that by bouncing the light, you are effectively doubling the distance the light travels thereby the increasing the risk of underexposing the subject.

  To counteract this you can, if your camera is able, increase the FEC (or flash exposure compensation) by 2 or 3 stops until it looks correct. This **adds** power to the flash output to allow for the extra distance. If you don't have that option, just increase the exposure using **exposure compensation** (open aperture or slow the shutter speed) and see if that helps.

Basically, this is an area you would do well to practice until you feel confident in any situation. Correct use of bounced flash can be very flattering, I use it all the time.

- Attach a "mini softbox" to your speedlight. If you are creative, you can build your own (or see Fred Miranda's version) or simply buy one from companies such as Lumiquest or Stofen.

Ambient

What is ambient light and how does it affect your photography?

Ambient light is the general "man-made" background light shining all around us. It softens any contrasts between brightly lit "task" areas and their surroundings. Fluorescent, halogen or incandescent recessed lights for example, usually found in the ceiling, cast light directly downward and outward.
Wall sconces and halogen "torchiere" floor lamps shine their ambient light upwards at the ceiling, which then reflects the light throughout the room. Table lamps with differing colours of translucent lampshades cast soft light in a room.

With each or these kinds of ambient lighting comes a problem for the digital photographer as they tend to leave a harsh colour cast in your images, usually yellow or red.

You can adjust for this at the time of shooting by switching to manual white balance and adjusting accordingly (see chapter 8) and/or adjusting the colour tones in post-processing later on.

Try combining ambient lighting with bounced or diffused flash, you will still need to adjust the white balance or colours but you will have much more evenly spread light than if you were to turn out the lights and use just the speedlight.

Studio/Softbox

If you intend to get serious with portrait, stock/close-up/macro/product or interior photography, for example, an investment in some good studio lights is highly recommended.

The next thing is to learn how to use them;

- How to change the power output for different scenarios.
- Where to place them in different situations. I.e. portraits, interior etc.
- When to use both or just one.
- When to use the softbox
- When to use accessories such as "barn doors" or "snoots" etc.

All of this takes time and practice but here are some tips for now;

Interior Photography

Images of property interiors need to be well lit and natural looking in order to show off the rooms at their absolute best, especially for real estate. It is sometimes an idea to turn on the ambient lighting to create a feeling of warmth and homeliness.

Use both lights on full power if shooting large rooms and place both lights behind you, evenly spaced and as far back as possible. Use white, translucent umbrellas for good diffusion, and fire the light ***through*** them rather than the traditional "reflected from the inside of a silver brolly".

Think about what the light will do. It will hit the inside of the brolly and explode out bouncing off the walls and ceiling creating a nice even spread rather than a simple flash burst causing unsightly shadows. You just need to set the cameras exposure to account for this.

If shooting a small room, extend the light or softbox right up to the ceiling, aim it directly upwards and fire that way. This will enable the light to hit the ceiling on full power, break itself up and fall nicely and diffused on the room and all the items in it. Just make sure you don't get the ceiling in your shot as it will obviously be completely over-exposed.

In both cases, you could use a light meter if you have one, or if using digital, start at say 60^{th}/sec at F8 and adjust accordingly until you get it right.

You can also learn to set the lights correctly in order to light the room perfectly whilst keeping the outside views attractive and well exposed. You can read more of this in my other book here.

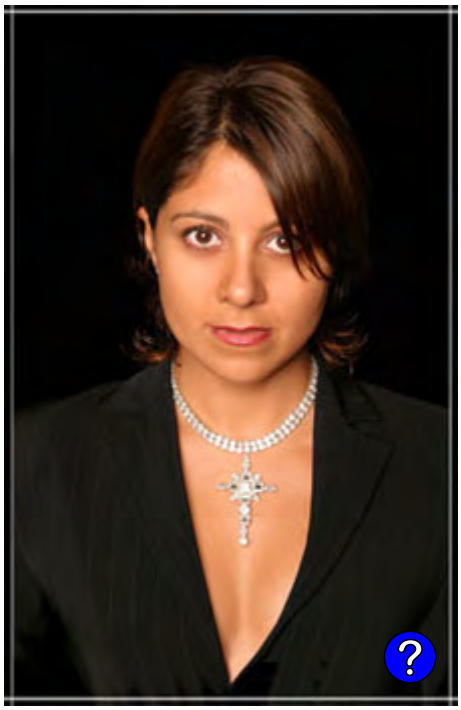
Portraits

When I did my years apprenticeship at 16, I remember some of the lighting set ups we used back then for shooting models were fairly simple. Some methods are a bit dated now but still work for many shots.

The most standard and widespread set up, was to have each studio light either side of the subject and slightly in front with one light on full power with the second on half power.

This lit one side of the face and "filled in" the other to create a certain mood whilst flattering the features and background.

Portrait photography is quite unique to each photographer who generally invents their own techniques and styles over time.



One method **I** personally enjoy is to simply use one large softbox aimed at the subject or group (above). This tends to light evenly and uniformly and leaves no unsightly shadows on the face or background.

Portraiture is an area where you have no hard and fast rules and you can really experiment with lighting techniques to suit the subject.

For example a nice, standard family portrait requires nice, even lighting. Whereas on the other hand you may have seen shots of miners, manual workers, elderly folk or even famous people where the light is harsh, one-sided and actually accentuates the lines in the face especially when converted to black and white.

This method can be used to portray a long life of hard graft or even extreme poverty and is normally used for lifestyle, travel or portfolio work.

Practice all kinds of techniques with your lights and learn how simple adjustments and set ups can greatly affect the mood of a shot. Study images of people you see and try to work out how the shot was taken. One tip is to look closely at the eyes to find the lighting set up.

Product/Still Life

Here again, you need evenly spread and flattering light. The importance is in the product itself and not the mood or background, although in some instances, the light may enhance the specific product.

For smaller products, a light tent is a useful piece of kit and again, you can either make your own or buy one ready made from Amazon (This is **not** an affiliate link).

For the following shot, I used one softbox aimed directly at the product and one studio light from the side to help light the background.

As lighting is the most important aspect of **any** photography, learn how light *works*. Learn how different lighting set ups can affect the same image dramatically if just moved or adjusted slightly.

Learn how moving around an object or subject outside can change the mood of a shot lit by daylight. Understand how all of your artificial lighting works and when best to use it for different types of photography.

16.

Your Future?

Hopefully by now after reading this book, you will have a better understanding of the incredible depth that there is to photography. Not *just* in the amount of learning that is involved but the sheer scope and possibilities that await you!

Your own skills as they emerge will tend to steer you in a certain direction career wise, whilst your ***passion*** for photography may take you elsewhere.

Try to focus on what you want to achieve in terms of your career (if that is what you want) or just that of your own personal satisfaction.

Work

Would you like to make a career out of photography? Do you know which avenue you would like to take?

If so, study as much as you can in that area. Look at how current photographers work in that field, look at that industry. How can you get your foot in the door? Do you have a portfolio of your absolute best work or can you start to get one together?

I was approached recently by a man wanting to change careers altogether and (with the blessing of his family) pursue his love of this hobby with a career in wedding and portrait photography. He asked if there was anything I could do to help him on his way before they move back to the UK this year.

He happened to catch me at a quiet time of the year for weddings (February) and I agreed to meet up with him for a chat and hopefully give some advice. He may even assist me at my next wedding which is the best way to start out.

Write to a few professional photographers near you and ask the same question. You may receive a few blanks but then you may just get someone at the right time.

Read more and more, take pictures, look at other peoples work for inspiration, learn Photoshop and generally immerse yourself in the world of photography. There is a lot of competition out there for you to contend with but persistence, dedication and determination will always pay off.

Take your camera ***everywhere*** with you. For one, people around you will start to take you more seriously and may well start recommending you to their friends, secondly, you will undoubtedly come across situations where you can increase your portfolio.

Fun

You may just be reading this book with the intention of simply improving your skills as a casual, hobbyist or part-time photographer. Even so, you will always find areas in which you can improve, especially as technology keeps throwing new and exciting "spanners" in the works.

You may find that as you progress and improve, that you think "Hey! Why ***shouldn't*** I make more of a career from this"?

You may want to exhibit your work in a gallery or a local restaurant. Both are great ways to expose (or show off) your work to the public and you may well even sell a few.

If you have got the bug bad enough for you to buy and read this book, you are well on the way and photography will probably stay with you for most of your life…enjoy it!

Good luck and all the best,

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