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HANDS-ON PHOTOGRAPHY TRAINING
by ANDY LIM (WWW.SIMPLESLR.INFO)

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SimpleSLR Hands-On Photography Training
by Andy Lim

Welcome to SimpleSLR Hands-On Photography Training!

Thank you for purchasing this e-book. My name is Andy Lim, and I have been conducting short, single-session photography classes since 2006. This is the electronic version of my SimpleSLR PhotoClass. If you are have this e-book, it's almost like being there at my class, because the exercises that I take my class participants through have been distilled into this e-book.

Unlike a regular book, it's *designed to quickly get you up to speed* with basic photography principles, and provides a platform for you to experiment and refine your techniques. Learn to take better pictures in 4 hours with this e-book!

We start off with a section of "Photography Exercises" to familiarize you with the basic techniques of photography, using a show-and-tell approach. This breakthrough approach has been proven time and again to be effective in getting beginners to start experimenting intelligently with photography. My approach emphasizes deep understanding, and strives to make photography simple.

In the accompanying section called "Analyzing The Shot" I will take you through my thought process with the photographs that I have taken, describing how I arrived at the combination of settings I used for each shot, and further advice on how you can apply these techniques to your own photographs.

Lastly, I have taken great care in designing an e-book that is easy to use, elegantly crafted and most importantly effective in teaching you photography. You would have noticed that this e-book is horizontally laid-out, which maximizes your screen area for reading (instead of the portrait orientation that many e-books use). Paragraphs are narrower for easier reading, and diagrams/photos are used throughout to illustrate each point.

Andy Lim

HOW TO USE THIS E-BOOK

Hold your DSLR while reading this e-book. Exercises are highlighted in this color, so when you see a paragraph in this color, perform the exercise by following the instructions, at the end of which you will discover a technique. Try not to skip ahead when performing the exercises, as they are inter-related. After going through the exercises, move on to the section called "Analyzing The Shot" in order to see how those techniques are applied in real picture-taking situations.

Testimonials from Participants of SimpleSLR PhotoClass

Here are some actual comments from previous participants:

I would like to say a BIG thank you to you for your patience and the approach you use to conduct the class last Sunday which I found most appropriate for those who are new to DSLR cameras. I would not hesitate to recommend my friends to attend your class. I have been using my dslr camera for the past few months but do not know the right way to handle the camera at different situations.(by asking around did not help) I really learned a lot from you within this short time of a few hours as there were so many questions in my mind that I wanted to ask and you have answered them. Your photo class has been really a help to me. - *Mike*

It was extremely helpful and I would like to compliment you on your ability to share information and educate. - *Jana*

Thank you for your very informative class. I learned various techniques that would enable me to maximize the usability of my Nikon D90. I also find using aperture mode is kinda handy. Like you said, when we are traveling, we would normally prefer to absorb the moment personally and not only via the lens. So, i picked up something useful. - *Gina*

Was glad my friend introduced it. I learnt quite a few things, especially about certain techniques and tricks which we haven't been exposed to. I'd visited your website prior to that and found the contents very helpful, resourceful and encouraging (well, at least it inspires the thought that someday, maybe we could achieve that kind of images too ;)). It won't be the last time we're visiting your website. Your deep pool of knowledge and experience is pretty evident overall. Hope you keep sharing with others the passion! - *Joanna*

Thoroughly enjoyed the class yesterday. Highly recommended for beginners like myself. - *Khairul*

Attended this class conducted by Andy Lim today. He is very experienced and knowledgeable in photography. Very interactive session and get to learn something new! Thanks Andy! - *Kevin*

I would like to say a thank you note to you for the class. I think i have learnt a great deal and your enthusiasm helps. Keep up the good work. - *Samson*

Joined Andy Lim's SimpleSLR class, a very good class and lots to learn and understand - *Aeric*

Really useful and practical and you can be sure that I'll recommend it to all my friends interested in taking their photography skills to the next level. - *Nika*

Thank you for the class. It was very informative for me. - *Ming Ee*

CONTENTS

GETTING READY

PHOTOGRAPHY EXERCISES

ANALYZING THE SHOT

Getting Ready

LIGHT

Aperture

ISO

Shutter Speed

ISO

HIGHER ISO, MORE LIGHT
LOWER ISO, LESS LIGHT

Changing any element
in this triangle
will affect the exposure

APERTURE

SHUTTER
SPEED

SMALLER F-STOP, MORE LIGHT
BIGGER F-STOP, LESS LIGHT

SLOWER SHUTTER SPEED, MORE LIGHT
FASTER SHUTTER SPEED, LESS LIGHT

THE EXPOSURE TRIANGLE
ISO, APERTURE AND SHUTTER SPEED

Your DSLR has 2 basic controls that let you take pictures:

1. Exposure (controlling how bright or dark the picture turns out)

2. Focusing (controlling how sharply focused or out-of-focus the picture turns out)

I will start by explaining Exposure.
Imagine an Exposure Triangle which consists of ISO, Aperture and Shutter Speed.
The diagram on the left shows how light enters your DSLR through the lens.

ISO is the sensitivity setting on the camera sensor.
A higher ISO (eg. ISO1600) lets in more light, making brighter images.
A lower ISO (eg. ISO100) lets in less light, making darker images.

Shutter speed is the speed at which the
shutter curtain opens and closes.
A slower shutter speed (eg. 1/10) lets in more light.
A faster shutter speed (eg. 1/1000) lets in less light.
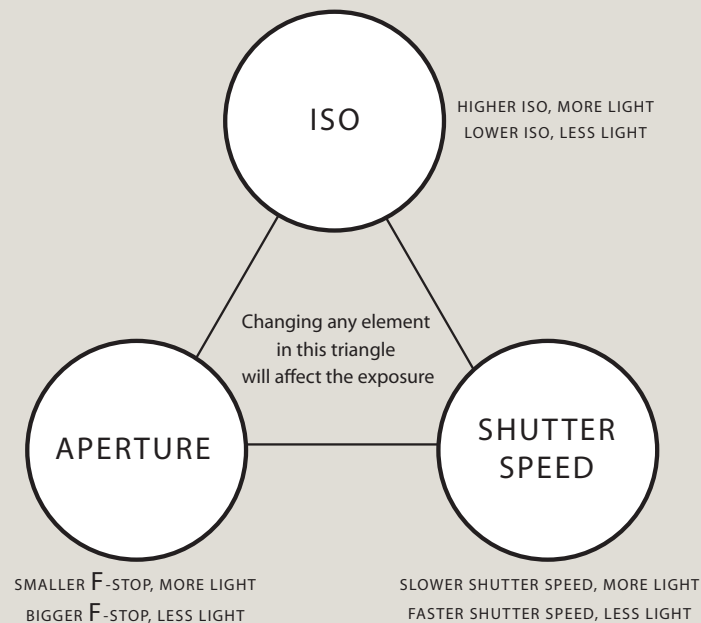
Aperture is the size of the hole in the lens.
A bigger aperture (eg. F2.8) lets in more light.
A smaller aperture (eg. F16) lets in less light.
Big F-stop, small aperture.
Small F-stop, big aperture.

The 3 elements of ISO, Aperture and Shutter Speed
work together to deliver the desired amount of light
to the sensor, which then records the image onto
your memory card.
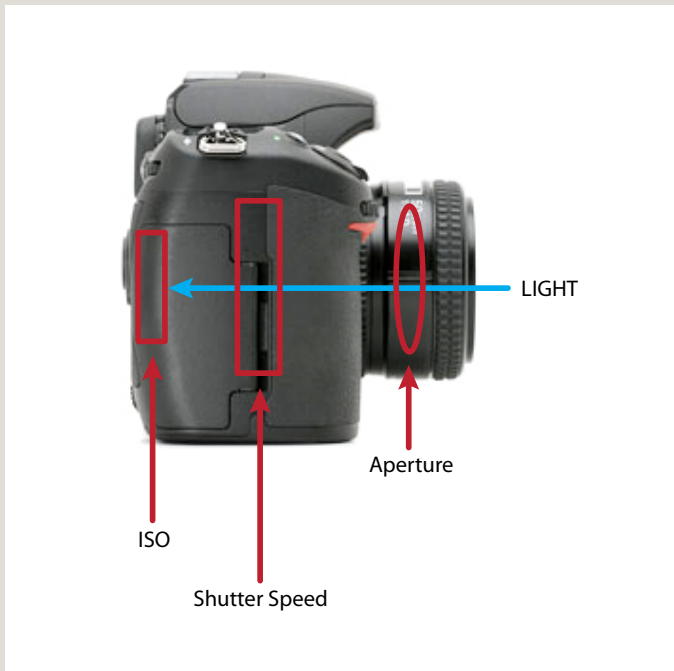
APERTURE		SHUTTER SPEED	
Smaller Aperture (Bigger F-stop)	F22	Less Light Enters Lens	1/250 Faster Shutter Speed
	F16		1/125
	F11		1/60
	F8		1/30
	F5.6		1/15
	F4		1/8
	F2.8		1/4
	F2		1/2
Bigger Aperture (Smaller F-stop)	F1.4	More Light Enters Lens	1"
			2"
			3" Slower Shutter Speed
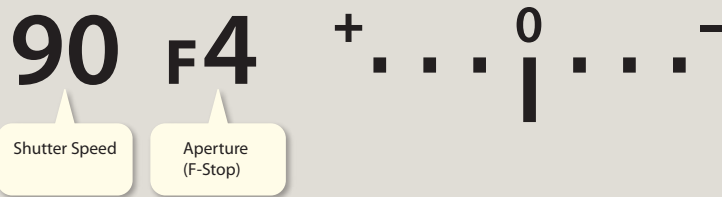
SIMPLE
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Exposure Meter

90 ꜰ4   ⁺ ˙ ˙ ˙ 0 ˙ ˙ ˙ ⁻

Shutter Speed

Aperture
(F-Stop)

Controls for Aperture and Shutter Speed

Front dial

Front dial

Rear dial

Rear dial

The Correct Exposure (Manual Mode)

Your DSLR has a built-in exposure meter which looks like the diagram on the left.
This exposure meter tells the camera (and you) whether the photo will be underexposed (too dark) or overexposed (too bright).

In Manual Exposure mode, you control all 3 elements of exposure (ISO, Aperture, Shutter Speed) by using the exposure meter as a guide.

Please note that this is NOT the same as Manual Focus, which is an aspect of Focusing (refer to previous page).

Your controls for aperture and shutter speed will depend on your DSLR brand and model.

Nikon: Aperture: Front dial
           Shutter Speed: Rear dial

Canon: Aperture: Rear dial
           Shutter Speed: Front dial

NOTE: On some DSLR models, there is only 1 control dial. For these DSLRs, turning the dial changes the shutter speed. To change the aperture, press and hold down the Exposure Compensation button (indicated by a ⊞ icon), then turn the dial.

Before we move to the exercises, we'll make just a few checks.
If you are using a Nikon DSLR, turn off Auto ISO (also known as ISO Sensitivity Auto Control).
Also, if your DSLR has Active D-Lighting, turn that off too.
This is so that you can reap the maximum benefit from this exercise without the camera intervening and affecting the results.

Photography Exercises

The Correct Exposure (Manual Mode)

90 F4

+ . . . **0** . . . −

Shutter Speed

Aperture (F-Stop)

STEP 1

Go to a room which has plenty of light. The ideal time for this is at mid-day when the outdoor light does not change much. At dawn or dusk the light levels change too rapidly to do this exercise properly.

Choose a subject to shoot, eg. a cup of coffee, and place it on a table.

Set your camera to these settings:
Exposure mode: Manual Exposure
Metering mode: Matrix Metering (if you are using Nikon) or Evaluative Metering (for Canon users)
ISO: 1600
Aperture: F5.6
Shutter Speed: This is the final element to set, so point the camera at your subject, look into your viewfinder to see the exposure meter, which looks like the diagram on the left.

NOTE: The shutter speed and aperture shown on the diagram will be different from yours.

+ . . . **0** . . . −

Underexposed (too dark)

Lightly press the shutter button halfway to activate the exposure meter, and to focus on your subject.

NOTE: If you have trouble focusing (lens is struggling to achieve focus), move slightly away from your subject. All lenses have a minimum focusing distance, allowing you to focus no closer than that.

+ . . . **0** . . . −

Correct Exposure

Pointer should be exactly in the middle

Turn your shutter speed dial so that the shutter speed changes, and aim to select a shutter speed that will get the pointer in the meter exactly in the middle of the exposure scale. When the pointer is exactly in the middle, press the shutter button to take the picture. Your photo should be correctly exposed.

You can stop here if you wish, as you have already got a correct exposure.
To learn about shifting your exposure (getting the same exposure with different combinations of ISO, Aperture and Shutter Speed) and to learn more about the relationships within the exposure triangle, proceed to Step 2.

+ . . . **0** . . . −

Overexposed (too bright)
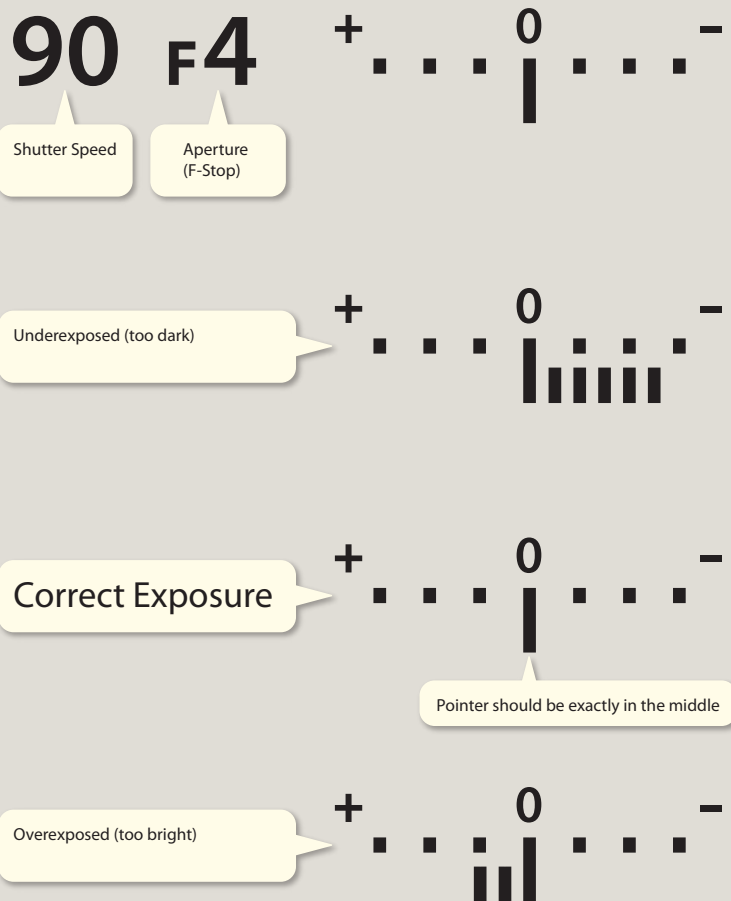
THE CORRECT EXPOSURE (MANUAL MODE)

STEP 2

Now that you have taken the 1st shot, you will proceed to the 2nd shot, shooting the same subject and keeping the same composition.

Without moving the shutter speed dial, move ONLY the aperture dial by 3 clicks towards a bigger number. This means that from F5.6 you will be moving to F8. The meter will tell you that the photo will be underexposed (too dark).
Go ahead and take the picture anyway. True enough, you will get a darker picture.

STEP 3

For the 3rd shot, do not touch the aperture dial. You will move ONLY the shutter speed dial, 3 clicks towards a smaller number. You will notice that the meter tells you that you're getting correct exposure again!
Go ahead and take the picture. The exposure of this 3rd shot will look like the 1st shot, while the 2nd shot looks darker.

STEP 4

For this final 4th shot, do not touch the aperture dial nor the shutter speed dial. But change the ISO setting to ISO200. The meter will tell you that it will be seriously underexposed (way too dark).
Go ahead and take the picture anyway. You will get a much darker picture.

This simple exercise demonstrates the relationships between ISO, Aperture and Shutter Speed.
A correct exposure is created when all 3 elements work together to capture just enough light.
1st shot had a correct exposure, with the guidance of the meter.
2nd shot took away 3 clicks of light (or 1 stop of light) by closing down the aperture with a bigger F-stop, therefore it appears darker.
3rd shot put back those missing 3 clicks of light by slowing down the shutter speed the exact same number of clicks it took to remove them.
4th shot used a much lower ISO setting, therefore absorbing much less light, hence a darker shot.

1st shot

2nd shot

3rd shot (should look like 1st shot)

4th shot

Handling Backlighting, Part 1 (Manual Mode)

Manual Exposure mode is the best mode to handle backlighting conditions, which is when there is a bright source of light behind your subject, causing the subject to appear dark in the picture.

STEP 1

Set your camera to Manual Exposure mode, ISO1600 and F5.6. Only the Shutter Speed remains a question mark. Do NOT turn on your flash. Your metering mode should be Matrix/Evaluative.
Find a room, ask your subject to stand against a wall. Point your camera at her, frame the shot so that you include her head to her waist. Choose a Shutter Speed, guided by the exposure meter, and take a picture. You should get a good shot with just the right exposure.

STEP 2

In that same room, now ask your subject to stand in front of a very bright open window. There needs to be plenty of light coming through that window. Point your camera at her, frame the shot so that you include her head to her waist. Choose a Shutter Speed, guided by the exposure meter, and take a picture. This is where the exposure meter will fail you, giving you an underexposed (dark) face.

NOTE: The exposure meter CANNOT tell between the subject and the bright background, so it tries to give you an exposure reading that attempts to balance both the subject and the background, which is not possible.

STEP 3

In order to get your subject properly exposed, you need to override the exposure meter's recommended shutter speed. Do this by slowing down the shutter speed by a few clicks.
3 clicks = 1 stop. 6 clicks = 2 stops. *

The exact number of clicks cannot be made into a formula, because it depends on the intensity of the bright light behind your subject. Experiment with several different shutter speeds to get just the right exposure on the subject's face. Eg. if your meter recommended 1/500, try 1/250 (if the light is not very bright) or 1/60 (if your light is extremely bright).

* This is assuming your DSLR is set to 1/3 EV steps. This is usually the default setting, but you can change it to 1/2 (which I use for faster adjustments). If you set it to 1/2 EV steps, every 2 clicks = 1 stop, and 4 clicks = 2 stops.

Step 1
(no backlighting)

Step 2
(backlighting fools the exposure meter, causing the subject's face to be dark)

Step 3
(subject's face is now properly exposed) but the details of the background are now lost.
See Part 2 for the solution.

Handling Backlighting, Part 2 (Manual Mode)

The earlier technique was good if you only wanted to take care of the subject, without placing any importance to the background, which would usually be so bright that the details are washed out.

This next technique is for situations when you want to expose BOTH the subject and the background properly. It involves using flash, which equalizes the amount of light on subject and background.

STEP 1

Set your camera to Manual Exposure mode, ISO400 and 1/200 Shutter Speed. Only the Aperture remains a question mark. Do not turn on your flash, yet.
Ask your subject to stand in front of a very bright open window. There needs to be plenty of light coming through that window. Try to find a window with a nice view of something outside, eg. your garden or the neighbour's house.

Point your camera at her, frame the shot so that you include her head to her waist, also making sure you can see the scene outside. Choose an Aperture (F-stop), guided by the exposure meter, and take a picture. This is where the exposure meter will fail you, giving you an underexposed (dark) face.

STEP 2

Take note of the exposure of the background, does it look alright? If you can already see the vibrant greens of the garden wall and the bright colors of the flowers, move on to Step 3.
Otherwise, if the outdoor scene is too bright, increase your F-stop (choose a smaller aperture).
If the outdoor scene is too dark, decrease your F-stop (choose a bigger aperture).
When you are finally happy with the exposure for the background, move to Step 3.
At this point, your subject's face will still be dark. That is because the light levels outside are much higher than the light levels indoors, which is what is illuminating your subject.

STEP 3

Turn on your flash now. This could be your built-in flash, or an external speedlight (a flash unit that is mounted on your DSLR hotshoe). Make sure the flash mode is set to TTL (it should be already in TTL mode when you bought it from the shop).

Take a picture. Both your subject and the background are now properly exposed.

Step 1
Backlighting fools the exposure meter, causing the subject's face to be dark. Background is also a bit too bright, with loss of details.

Step 2
Background details are perfect now, but before turning on your flash, the subject's face is still dark.

Step 3
Subject's face is now properly exposed by the flash, and background scene is properly exposed by your manual exposure settings.

Aperture Priority Mode

Aperture Priority mode simplifies picture taking by automating 1 element in the Exposure Triangle.
In this mode, you will control the ISO and Aperture, but your DSLR will choose a Shutter Speed, based on the exposure meter (which usually disappears from the viewfinder in this mode).
This means that if you change your ISO, your Shutter Speed will automatically change too. Likewise, if you change your Aperture, your Shutter Speed will also change.

TRY THIS

Set your camera to Aperture Priority Mode (Canon labels it as Av, while Nikon labels it as A).
Point your camera at a bright light, observe the Shutter Speed chosen by the camera. You will notice that the chosen Shutter Speed is a relatively high number.

Then point your camera at a dark corner (perhaps under a table) and observe the chosen Shutter Speed. You will notice that the Shutter Speed drops to a lower number. You might even hit as low as 1 second, which appears as 1". The Shutter Speed change is so sensitive that it is affected by even the slightest change in camera angle.

BACKLIGHTING FIX

Set your camera to Aperture Priority mode, ISO1600 and F5.6. The Shutter Speed will automatically be chosen by your camera, depending on where you point. Do not turn on your flash.
Find a room, ask your subject to stand against a wall. Point your camera at her, frame the shot so that you include her head to her waist. Take a picture. You should get a good shot with just the right exposure.

In that same room, now ask your subject to stand in front of a very bright open window. There needs to be plenty of light coming through that window. Point your camera at her, frame the shot so that you include her head to her waist. Take a picture. This is where the camera (guided by the exposure meter) will fail you, giving you an underexposed (dark) face.

Press and hold the Exposure Compensation button (⊞) then turn the rear dial until it indicates +1. Take a picture, it should brighten your subject's face a little. Use +2 or +3 if it needs more brightening. What the Exposure Compentation really did was to ask the camera to slow down the shutter speed, thereby letting in more light.

NOTE:
If your Canon DSLR has this type of power switch, set it to the 1st position (shown below) for exposure compensation to be controllable from the rear dial.
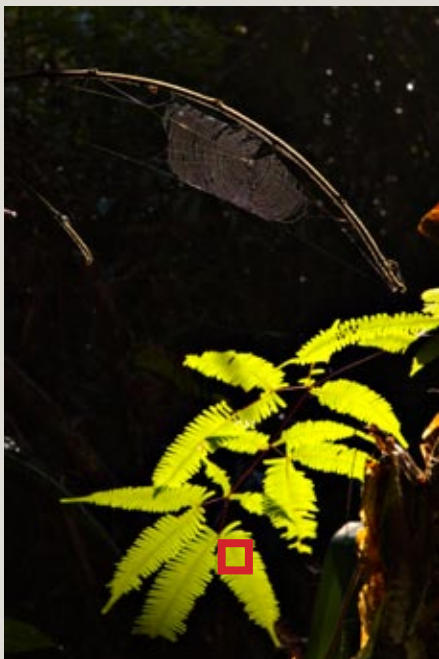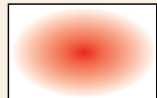
Spot Metering
with focus point on the leaves:
This tells the camera to measure only that tiny little area where the focus point is, ignoring anything outside this area. This results in a good exposure that draws the attention of the viewer to the leaves.
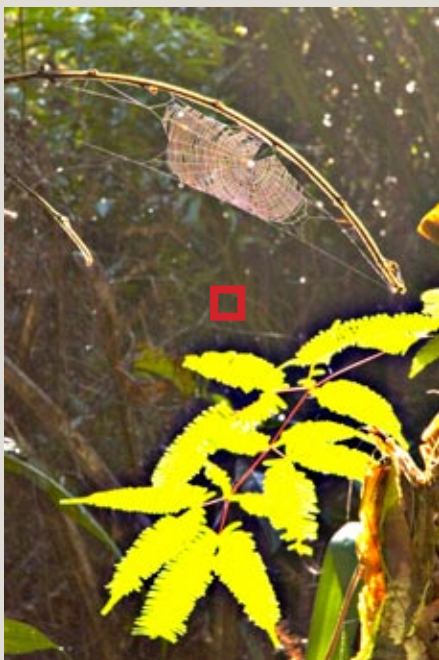
Spot Metering
with focus point on the background:
Because the camera measures only that tiny little area where the focus point is (which is pointing at the background) you will get a bad exposure. The overall scene will be brightened, because the background is a lot darker than the leaves. Texture details on the leaves are now lost.

EXPOSURE CONTROL
EXPOSURE METERING MODES

There are 3 main exposure metering modes in a camera.

NIKON	CANON	WHAT'S IT FOR	COVERAGE
Matrix	Evaluative	Measures the entire scene. Good for most subjects.	
Spot	Partial/Spot	Measures a small part of the scene. For scenes with extremely differing levels of brightness (see example on left)	
Center-Weighted	Center-Weighted	Measures the center area of the scene. Typically used for portraits where the subject is in the middle.	

Be careful when using spot metering because your exposure can vary greatly. Because of this, spot metering is best used in Manual Exposure mode.

TRY THIS

NOTE: Your DSLR needs to be set to the following before performing this technique.

	NIKON		CANON	
Focus Point Selection:	Center point (use	to select)	Center point (use	to select)

Select Spot Metering on your camera. Set it to Manual Exposure mode, ISO1600, F5.6. Repeat the exercise on Page 8, using Spot Metering. This time, because you are using Spot Metering, you will get quite consistent exposures from Step 1 to 3.

Spot Metering works well here because you are measuring only your subject. Even though the background is much brighter, it does not affect the exposure because only a tiny spot on the subject is measured.

Focus, Lock, Recompose

Step 1

Cup is sharp because focus point is right on it.

Step 2

Cup is out of focus because focus point is NOT on it.

Step 3

Cup is sharp even though focus point is not on it, because we used the Focus, Lock and Recompose technique.

We now arrive at the 2nd control on a DSLR, which is Focusing.
Knowing the right focusing technique can make the difference between sharp pictures and out-of-focus pictures. There are 2 main focusing techniques. The 1st one is called Focus, Lock and Recompose.

NOTE: Your DSLR needs to be set to the following before performing this technique.

	NIKON	CANON
Focus Mode:	AF-S	One Shot
AF-Area Mode:	Single Point	
Focus Point Selection:	Center point (use ⬤ to select)	Center point (use ▦ to select)

STEP 1

Set your camera to Aperture Priority mode, ISO1600 and F5.6.
Find 2 cups and place them on the dining table, both cups about 2 feet away from you. Position the camera at table height, point your camera at the 1st cup, making sure the cup is right in the middle of the frame, and your Focus Point is aimed right at the cup. Press the shutter button halfway to focus, and then all the way to take the picture. Your cup should be sharply in focus.

STEP 2

Now we want both the cups to be in the picture. Aim the camera right in the middle of the 2 cups (with the Focus Point at the center) then focus and take the picture. You will end up with the 2 cups out of focus, while the background would be in focus! This is because your camera will focus on whatever the Focus Point is positioned on.

STEP 3

In order to get both the cups sharp, focus on the 1st cup, then hold the focus by keeping your finger depressed halfway on the shutter button, and move the camera sideways so that both cups are in view, then press all the way to take the picture. Now both cups will be in focus!
By pressing the shutter button halfway, you are locking the focus on the cup, and by moving the camera sideways you are recomposing the picture to include both cups. In this final shot, both cups are in focus because they are both at equal distances to you.

Select the Focus Point nearest to where you wish to focus. For human subjects, it is best to focus on the eyes.

For focus accuracy, focus on high contrast areas

Correct

Wrong

Use The Right Focus Point

The most accurate focus point on your DSLR is the center focus point, which was why I asked you to use it in the earlier exercise. Having said that, you can also use the other focus points if your camera is mounted on a tripod or you just don't want to recompose the shot.

Going back to the 2 cups we shot earlier, we will now select the LEFT Focus Point, or the Focus Point that falls directly on the LEFT cup. Look through the viewfinder to get this right.

NIKON   CANON

Focus Point Selection: Left point (use [image] to select)   Left point (use [image] to select)

STEP 1

Set your camera to Aperture Priority mode, ISO1600 and F5.6.
Position the camera at table height, point your camera at the 2 cups, making sure your selected LEFT Focus Point is aimed at the LEFT cup. Press the shutter button halfway to focus, and then all the way to take the picture. Both cups should be sharply in focus. There is no need to recompose the shot.

We can combine both focusing techniques as well. This is when the selected Focus Point does not fall EXACTLY where we want it to focus on. We can still perform the Focus, Lock, Recompose technique using any Focus Point. This allows us to focus on any part of the picture, with the nearest Focus Point selected so that when we do a Focus, Lock, Recompose, we only need to move the camera slightly.

This same technique can be used if you are shooting the many fleeting expressions of a baby, and you need the eyes to be in focus. Selecting the TOP Focus Point will allow you to focus on her eyes, and quickly take successive shots without needing to move the camera much.

NOTE: Your camera's autofocus works best when you focus on areas with high contrast. If you are focusing on a cup, try to focus on the rim of the cup, not on the featureless body of the cup.
Have you noticed that you cannot focus on a plain blue sky? Your lens will struggle to find a spot to lock focus on. The solution to this is to focus on the horizon, where there are distinct differences between the sky and land.

Aperture

Depth-of-field is the range that is sharply focused in a picture (indicated by orange area in diagram). It is usually referred to as shallow depth-of-field when the subject is sharp while the background and foreground are out of focus. Pictures that have the entire range sharp from foreground to background are referred to as having deep depth-of-field.

Your Aperture is the main factor that affects your depth of field.

STEP 1

Set your camera to Aperture Priority mode, ISO1600, F5.6. If you have a fast lens, set it to F2.8.
Set your lens focal length to about 50mm.
Go outdoors, ask your subject to stand at an open spot with plenty of space around her. Standing about 3 feet from her, take her picture at F5.6 (or F2.8 if you can use that aperture). Notice that her background is slightly out of focus.

STEP 2

Now set your Aperture to F11. Take another picture of your subject. Notice the background getting sharper.

STEP 3

Now set your Aperture to F22. Take another picture of your subject. The background is now even sharper than the F11 shot.

As you move from a small F-stop (F5.6, a big aperture) to a bigger F-stop (F22, a small aperture), your depth-of-field increases, making your background (as well as anything in front of your subject) sharper.

Typically, if you wanted a portrait of a person with an out-of-focus background, an Aperture of F2.8 will give you that shallow depth-of-field. If you are a landscape photographer who is shooting a beautiful scenic that requires everything to be in sharp focus, you would use an Aperture of F16 or F22 so that the sharpness extends from the flowers that are five feet in front of you, all the way to the sunset scene ten miles away.

Step 1
At F5.6
background is
out of focus

Step 2
At F11
background is
becoming sharper

Step 3
At F22
background is
now sharp

DISTANCE TO SUBJECT & LENS FOCAL LENGTH

APERTURE

| f2.8 | f4 | f5.6 | f8 | f11 | f16 | f22 |

DEPTH OF FIELD INCREASES →

SHALLOW DOF → DEEP DOF

BIG APERTURE → SMALL APERTURE

SHARP SUBJECT, BUT → ALL SHARP
BLURRED BACKGROUND & FOREGROUND

DISTANCE FROM CAMERA TO SUBJECT

DEPTH OF FIELD INCREASES →

CLOSER TO SUBJECT   FURTHER FROM SUBJECT

FOCAL LENGTH

DEPTH OF FIELD INCREASES →

200mm   18mm
TELEPHOTO   WIDE-ANGLE

There are 2 other factors controlling depth-of-field.

1. Distance from camera to subject
    The closer you are to your subject, the shallower the depth-of-field.
    The further you are to your subject, the deeper the depth-of-field.

2. Lens Focal Length
    The longer the focal length on your lens (telephoto), the shallower the depth-of-field.
    The shorter the focal length on your lens (wide angle), the deeper the depth-of-field.

STEP 1 (DISTANCE TO SUBJECT)

Set your camera to Aperture Priority mode, ISO200, F5.6. Set your lens focal length to about 50mm. Go outdoors, ask your subject to stand at an open spot with plenty of space around her. Standing about 3 feet from her, take her picture at F5.6. Notice that her background is slightly out of focus.

### STEP 2 (DISTANCE TO SUBJECT)

Without changing any settings, take a few steps back so that you are now about 10 feet from her. Take another picture of your subject. Notice that the background has become sharper. This shows that your depth-of-field increases when you are further away from the subject. On the other hand, when you move closer to the subject you get less depth-of-field (background becomes out of focus).

STEP 3 (LENS FOCAL LENGTH)

Standing where you were, zoom out your lens to the 18mm setting (wide angle). Your camera should still be in Aperture Priority mode, ISO200, F5.6. Standing about 10 feet from her, take her picture. Notice that her background is quite sharp.

STEP 4 (LENS FOCAL LENGTH)

Without changing any settings, zoom your lens in to a 50mm setting (standard angle). Take another picture of your subject. Notice that the background has become slightly out of focus.
If your lens can go to the telephoto setting (higher than 50mm) zoom it further to the maximum zoom setting. Take another picture of your subject. Notice that the background blurs out even more.
This shows that your depth-of-field increases when you use a wide angle setting. On the other hand, when you use a telephoto setting you get less depth-of-field (background becomes out of focus).

SLR Hands-On Photography Training

walk at normal speed →

FRIEND B

FRIEND A

CAMERA

YOU
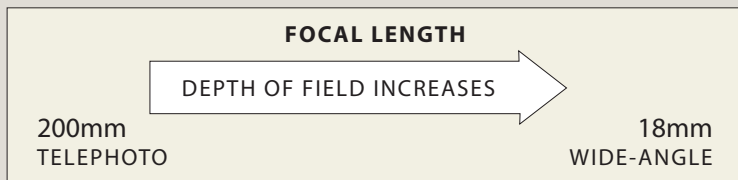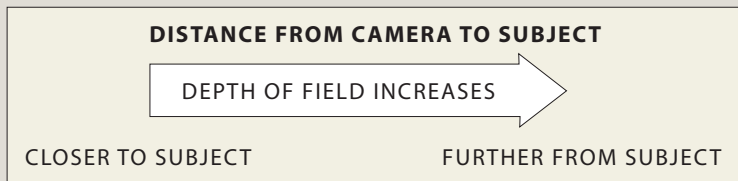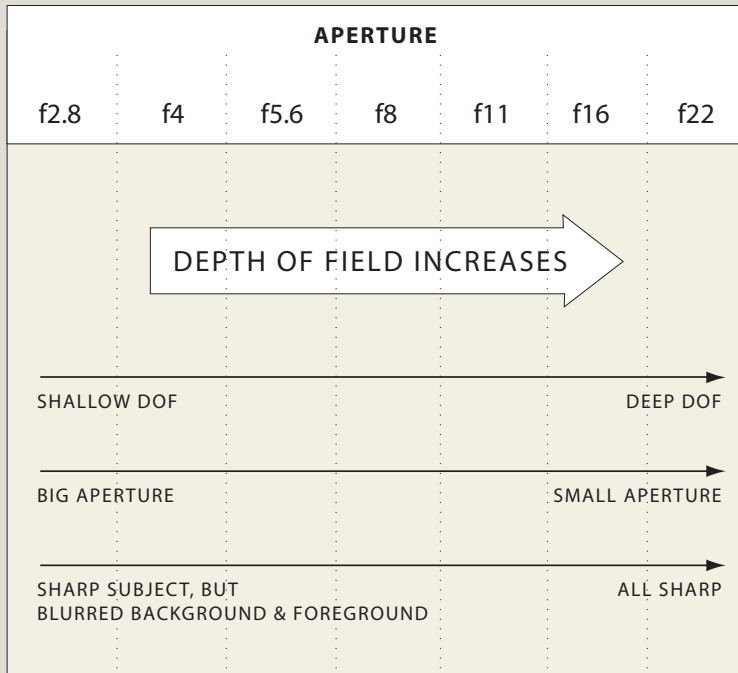
CONTROL SHUTTER SPEED USING APERTURE PRIORITY

Shutter Priority is the reverse of Aperture Priority, and is usually used when you need to use a specific shutter speed to freeze motion (using a high shutter speed) or to create motion blur (using a slow shutter speed). My preferred method though, is to use Aperture Priority mode to achieve the same control. This way, you avoid accidentally using too high a shutter speed in Shutter Priority, which will give you underexposed images.

STEP 1

Get indoors. Mount your DSLR on a tripod. You will need to get 2 friends to help you in this exercise. Set your camera to Aperture Priority mode, ISO1600 and F4. Get Friend A to stand still in front of your camera. On your cue, Friend B will walk behind Friend A from left to right (refer to diagram). Take a picture as Friend B walks behind Friend A (time it so that you can still see Friend B).

STEP 2

Repeat the exercise using F11. You will notice that Friend B begins to have motion blur.

STEP 3

Repeat the exercise using F22. You will notice that the motion blur increases on Friend B.

STEP 4

Check your LCD and compare the 3 shots. Turn on your LCD display so that you can see the Aperture and Shutter Speed used for each of the shots. You will notice that the 1st shot using F4 has the highest shutter speed, therefore Friend B looks sharp. His motion is frozen using a high shutter speed. The 2nd shot using F11 has a slower shutter speed, therefore Friend B starts to exhibit motion blur. The 3rd shot using F22 has the slowest shutter speed.

This exercise demonstrates that you can control your Shutter Speed with your choice of Aperture, in Aperture Priority Mode. If F4 does not give you a sufficiently high Shutter Speed to freeze motion, there are 2 options: Use an even bigger Aperture (eg. F2.8) or use a higher ISO setting. Again, your exposure controls are all within the Exposure Triangle (explained earlier).

WIDE ANGLE LENS VS TELEPHOTO LENS
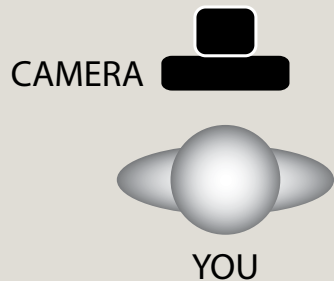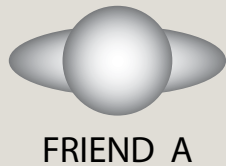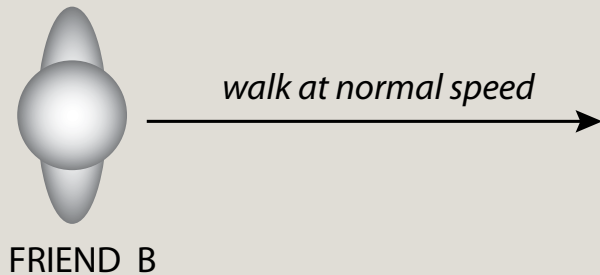
Step 1
Wide Angle Lens:
Palm fills the frame, head appears small.

Step 2
Telephoto Lens:
Palm is the same size, but head appears bigger now. A telephoto lens also improves facial features.

Using an ultra-wide lens (14mm) exaggerates the length of her train

Using a telephoto lens (200mm) brings the distant mountains closer

Using the right lens for the job can give you dramatically different results. Wide angle lenses exaggerate the size of objects closer to the lens, and makes objects further away appear smaller. Telephoto lenses will do the reverse, this is called 'perspective compression'.

STEP 1

Get a friend to stretch out her hand with her palm facing you. Focus on her face, but keep her palm in the picture. The tips of her fingers should touch the top edge of the picture, and the base of her palm should touch the bottom edge of the picture.
Set your camera in Aperture Priority Mode, ISO1600, at F5.6.
Zoom your lens out to the 18mm setting (this is wide-angle). Take a picture.

STEP 2

Repeat the exercise with your lens zoomed in to 50mm. The tips of her fingers should touch the top edge of the picture, and the base of her palm should touch the bottom edge of the picture. This means that you would need to take a few steps back.
With your lens at the 50mm setting, take a picture.

Compare the two shots. Your friend's head will appear smaller in the 18mm shot, even though both shots show her palm at the same size. If your lens has a telephoto setting (higher than 50mm) your friend's head may appear larger than her palm.

Let's look at 2 scenarios where we can apply this principle. If you were asked to take a picture which shows the long train of a bride's wedding gown, the right lens to use would be an ultra-wide lens. Any lens that has a focal length of less than 18mm is considered ultra-wide.

On the other hand, if we wanted to shoot a mountain range and make the peaks appear in a layered fashion (see picture on the left) we can use a telephoto lens. Short telephoto lenses (85mm and 105mm) are also popularly used in portrait photography due to their characteristics which make flattering portraits.

Using ultra-wide angle lenses for close-up portraits should be reserved only for special effects, when you intentionally want your subject to appear with a large nose (which is the closest thing to your lens).

White Balance

White Balance (WB) is the setting on your camera that tells it how 'white' actually looks like. Our choice of White Balance should be based on what the primary source of light is. Looking at the diagram below, under Lighting Temperature (bottom row), if the light temperature is yellowish/orange, we should use a Tungsten WB (which is inherently a bluish setting) to match it, resulting in natural skin tones.

On the other hand, if the light temperature is bluish (usually outdoors at dawn, or after a heavy thunderstorm) we should use a Shade WB (which is inherently an orange setting) to match it, in order to produce nice looking skin tones.

Using the right White Balance will ensure that your pictures come out with the right color tones. This means not relying on Auto White Balance (or AWB) which sometimes results in inconsistent color especially if you are taking many pictures of the same subject using the same light source.

Using Daylight WB in a room with tungsten lights (picture looks too orange)

Using Tungsten WB in a room with tungsten lights (this is the correct WB to use)

Using Tungsten WB in a room lit with window light (picture looks too blue)

WHITE BALANCE SETTINGS					
Tungsten	Fluorescent	Daylight	Flash	Cloudy	Shade
BLUE		WHITE BALANCE TEMPERATURE →			ORANGE

← ORANGE		LIGHTING TEMPERATURE			BLUE
Indoor with yellowish lighting	Indoor with fluorescent lighting	Bright sunny outdoor	Medium sunny outdoor	Slightly overcast outdoor	Very overcast outdoor
PRIMARY LIGHT SOURCE					

Image noise is seen clearly only in large prints.

Camera shake happens when your shutter speed is too low for you to hold your camera steady.

ISO SETTINGS AND CAMERA SHAKE

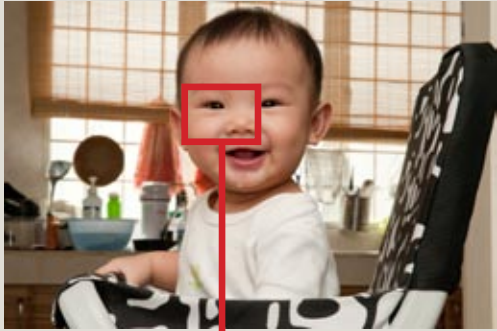ISO is the sensitivity setting on the camera sensor. Low ISO settings (eg. ISO100, ISO200) produce the best image quality. Use them whenever you have plenty of light, eg. outdoors in bright sunlight.
High ISO settings (eg. ISO1600, ISO3200) produce image noise, which decreases image quality. If you are making small prints, this is not a big problem. It only becomes an issue if you are making really large prints. On the other hand, image noise can give an artistic flavor to the picture, especially in black and white photography.

In the previous exercises, a high ISO was used, NOT because it produces the best image quality, but because we wanted to prevent camera shake. Camera shake is unwanted motion blur caused by using a shutter speed that is too low. Using a higher ISO allows us to use a higher shutter speed, enabling us to avoid camera shake.

TRY THIS

To get an idea of how camera shake affects your photos, repeat the exercise on Page 19, but this time WITHOUT using a tripod. You will find that the slower the shutter speed becomes, the harder it is to hold your camera steady and get a sharp photo.

How then will you be able to ensure that your shutter speed is high enough? A guide to choosing a suitable shutter speed is this formula:

$$\text{Minimum Shutter Speed} = \frac{1}{\text{Focal Length}}$$

Example: If your focal length is 18mm (ie. your lens zoom setting is at 18mm) your minimum shutter speed is 1/18. In practice we will not encounter such a shutter speed, so this means 1/20 or the next closest shutter speed.

Similarly, if your focal length is 50mm (ie. your lens zoom setting is at 50mm) your minimum shutter speed is 1/50. In practice, this means 1/60 or the next closest shutter speed.

The longer your lens, the higher your shutter speed needs to be, unless you own a stabilized lens. These lenses have a VR label (for Nikon) or the IS label (for Canon).

Your friend stands 6 feet away from you.

FRIEND   CAMERA   YOU

Focus on her by pressing
the shutter button halfway.

FRIEND   CAMERA   YOU

With your finger still pressed halfway on the button,
your friend walks slowly towards the camera.

FRIEND   *walk slowly* →   CAMERA   YOU

When she's 2 feet from you, take her photo by pressing all the way.

FRIEND   CAMERA   YOU

Choosing The Right Autofocus Modes

Your DSLR has two main autofocus modes:
1. AF-S (Nikon) or One Shot (Canon)
2. AF-C (Nikon) or AI Servo (Canon)
There is a 3rd one that is an auto-sensing mode that chooses one of the modes above, based on the scene. This 3rd mode is AF-A (Nikon) or AI Focus (Canon).

STEP 1

Set your camera to Aperture Priority mode, ISO1600 and F5.6. The Shutter Speed will automatically be chosen by your camera. Choose a 50mm focal length (zoom in your lens to 50mm).

NOTE: Your DSLR needs to be set to the following.

	NIKON	CANON
Focus Mode:	AF-S (Autofocus-Single)	One Shot
AF-Area Mode:	Single Point	
Focus Point Selection:	Center point (use [image] to select)	Center point (use [image] to select)

Point your camera at your friend, who is 6 feet away.
Focus on her by pressing the shutter button halfway.
With your finger still pressed halfway on the button, your friend walks slowly towards the camera.
As she walks towards you, ensure that your center focus point is on her.
When she's 2 feet from you, take her photo by pressing all the way.

In the resulting photo, your friend will be OUT OF FOCUS. This is because by keeping your finger pressed halfway on the button, you are locking the focus at 6 feet. Even after she has moved to 2 feet from you, the focus does not shift to 2 feet, that is why she is out of focus.
The moment you pressed the shutter button halfway to focus on her (6 feet away), you had already locked the focus at 6 feet, and the focus will remain at 6 feet as long as you keep your finger on the button. Because she is now at 2 feet, she is out of focus.

Focusing Technique (Moving Objects)
Choosing The Right Autofocus Modes

Your friend stands 6 feet away from you.

FRIEND   CAMERA   YOU

Focus on her by pressing
the shutter button halfway.

FRIEND   CAMERA   YOU

With your finger still pressed halfway on the button,
your friend walks slowly towards the camera.

FRIEND *walk slowly* →   CAMERA   YOU

When she's 2 feet from you, take her photo by pressing all the way.

FRIEND   CAMERA   YOU

STEP 2

This will be a repeat of the previous exercise, BUT with one crucial change (see the text in red):

NOTE: Your DSLR needs to be set to the following.

	NIKON	CANON
Focus Mode:	AF-C (Autofocus-Continuous)	AI Servo
AF-Area Mode:	Single Point	
Focus Point Selection:	Center point (use [image] to select)	Center point (use [image] to select)

Point your camera at your friend, who is 6 feet away.
Focus on her by pressing the shutter button halfway.
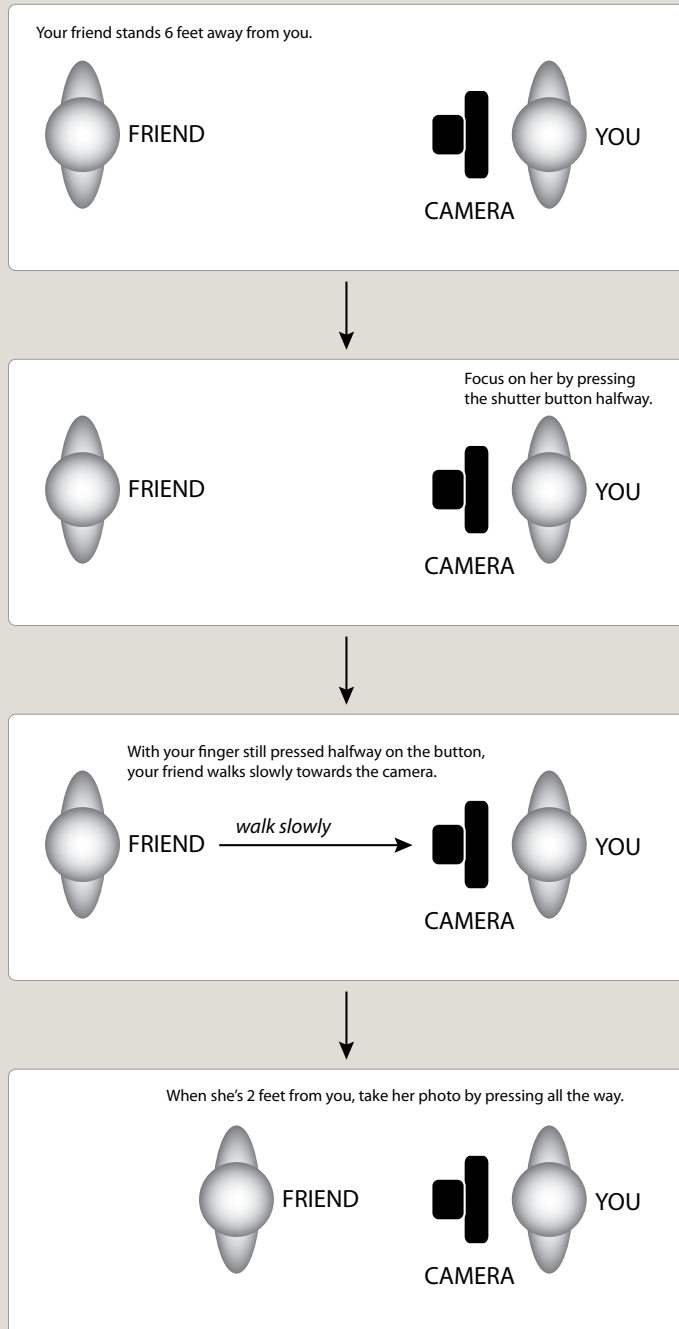With your finger still pressed halfway on the button, your friend walks slowly towards the camera.
As she walks towards you, ensure that your center focus point is on her.
When she's 2 feet from you, take her photo by pressing all the way.

In the resulting photo, your friend will be IN FOCUS.
In this focus mode, by keeping your finger pressed halfway on the button, you are using the camera's focus tracking feature. This means that when she moves, the camera will track her distance from you, and focus on her, as long as your finger is pressed halfway on the shutter button and as long as you keep your focus point on her.
When she is at 6 feet, the camera will focus at 6 feet. But when she moves to 2 feet, the camera tracks her change in distance and now focuses at 2 feet. That is why she is now in focus.

NOTE: This technique can be used for fairly slow moving subjects. If the subject is moving very fast laterally (as opposed to moving towards you in this exercise) you will need to use a combination of more advanced techniques: pre-focus and panning.

Analyzing The Shot

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MOTION TRAILS AT TWILIGHT

When I travel, I sometimes use Aperture Priority when I want to get the shot quickly and move on.

I intentionally set the aperture to F11 (a small aperture which lets in very little light) which would force the shutter speed to go really slow (3 seconds). Such a slow shutter speed enabled the tail lights of the passing vehicles to create colorful streaks of light.If you look closely, the slow shutter speed also recorded the movement of the hanging objects, as it was a windy night.

For maximum image quality I set my ISO to 200, the lowest setting that my Nikon D70 would allow. At such a slow shutter speed, I needed a tripod. A carbon fiber tripod is expensive, but it's lightweight, perfect for travel.

I added a +1 exposure compensation because the bright light from the shops would fool my exposure meter into thinking it was very bright and give me a darker picture.

For better night photos, don't wait until the sky turns jet black. Instead, aim to capture the deep blue color just after sunset.

Mode:	Aperture Priority
ISO:	200
Aperture:	F11
Shutter Speed:	3 seconds (this is indicated by 3" on your camera)
Exposure Compensation:	+1
Camera/Lens:	Nikon D70 with Sigma 10-20mm lens
Time:	6.16pm

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Mode:	Aperture Priority
ISO:	200
Aperture:	F13
Shutter Speed:	1/180
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Sigma 10-20mm lens
Time:	12.00pm

MAXIMIZING DEPTH OF FIELD

In brightly lit scenes like this I will almost always use ISO 200, the lowest setting on my Nikon D70.

The aperture was set to F13 in Aperture Priority Mode, and the camera chose a shutter speed of 1/180. On hindsight, I could have chosen F16 for slightly better depth of field and let the shutter speed drop to 1/125 which would still be good enough as I was using an ultra-wide angle lens. But when you travel, it's ok to be a little relaxed when it comes to technical choices like these, because you also want to enjoy yourself!

The beauty of Aperture Priority is that it allows you to see the combination of aperture and shutter speed at a glance, letting you make the final decision quickly. My decision here was a balance between good depth of field (so that everything was sharp, from the boats to the clouds) and a shake-free picture.

Choosing too small an aperture (eg. F22) would cause the shutter speed to drop to 1/60 which is a borderline shutter speed, and I didn't want to press my luck because it was a windy day and I was a little tired from travelling for days. Using F22 also has the disadvantage of a soft photo due to diffraction blur. For most purposes keep to an F16 limit.

PRESERVING THE AMBIENCE

Manual Exposure was used here, mostly because I have gotten so used to it that it's now my primary mode.

For maximum image quality I set my ISO to 200, the lowest setting that my Nikon D700 would allow. I knew that my wife was standing close enough to the lights from the drinks stall, so even ISO 200 would give me enough light. Using available light is preferred because it preserves the ambience of the scene. Using flash would have brightened up the entire scene, losing all ambience. I chose drama over a perfectly lit scene.

I intentionally set the aperture to F5.6 because that would allow me to use a shutter speed of 1/60, which is a safe shutter speed to use without a tripod. The choice of F5.6 and not a smaller aperture (eg. F8 or F11) is because an ultra-wide angle lens already has plenty of depth of field (I was using a 14-24mm lens).

Again, I didn't wait until the sky turned black. Instead, the deep blue color just after sunset enabled the dark buildings to stand out.

I focused on my wife, using the center focus point, and recomposed to include the drinks stall, in order to tell a story. This subconsciously also used the rule of thirds.

Mode:	Manual Exposure
ISO:	200
Aperture:	F5.6
Shutter Speed:	1/60
Exposure Compensation:	None
Camera/Lens:	Nikon D700 with Nikon 14-24mm lens
Time:	6.16pm

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CHOOSING A COMPROMISE

I had no tripod with me, so in this scene, I increased my ISO setting to 400 because at ISO 200, my shutter speed would be too slow to use without causing camera shake.

The aperture was set to F6.7 in Aperture Priority Mode, and the camera chose a shutter speed of 1/45. If I wanted more depth of field, I would have needed to use F11 and my shutter speed would have dropped to 1/15 which is way too slow, and would have caused camera shake.

So I settled for a compromise between an acceptable depth of field (provided by F6.7) and an acceptably fast shutter speed of 1/45 which would not cause camera shake. Of course, at that shutter speed, I would need to hold my camera really steady.

The other path I could have taken was to increase my ISO to 800. This would have let me use F9.5 with a shutter speed of 1/45. Or increase to ISO 1600 and get F13. Neither of these options were good, because such high ISO settings on my crop-sensor Nikon D70 would produce unwanted image noise. Full frame cameras (eg. Nikon D700) have much better tolerance to image noise at high ISO settings. The lesson here is to work with the gear that you have.

Mode:	Aperture Priority
ISO:	400
Aperture:	F6.7
Shutter Speed:	1/45
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Nikon 18-70mm lens
Time:	5.32pm

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Mode:	Aperture Priority
ISO:	200
Aperture:	F9.5
Shutter Speed:	1/60
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Nikon 18-70mm lens
Time:	8.06am

GOLDEN HOUR

Early morning or late afternoon light is preferred for landscape photography, for the simple reason that the sun's light illuminates the landscape laterally, creating softer and warmer light. Shooting at this time also creates landscapes with more drama because it casts longer shadows. It sculpts trees and makes them appear more 3-dimensional.

This scene uses the symmetry created by opposing banks of trees. These trees create a dappled light effect on the road, caused by long shadows early in the morning.

During this golden hour, if there is a blue sky, you can preserve the color of the blue sky by shooting either with the sun behind you, or on either side.

Shooting with the sun in front of you may cause the blue sky to wash out into a light blue, or worse still, become white. This is because your camera's exposure meter is unable to balance the bright light coming from the sun with the landscape, often resulting in a dark landscape and a pale sky.

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Mode:	Manual Exposure
ISO:	200
Aperture:	F22
Shutter Speed:	1/250
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Nikon 18-70mm lens
Time:	4.26pm

SUNBURSTS AND SILHOUETTES

Sunburst or starburst effects are created with small apertures like F22 or F16. For added effect, try to partially hide the sunburst with a foreground object.

In this scene, I used the temple roof both as a foreground mask for the sunburst, as well as to create an interesting silhouette with its ornate carvings. Silhouettes are best done using interesting shapes.

Using Manual Exposure is ideal for this type of shot because it lets you adjust your shutter speed based on how dark you wish the sky to be. Firstly, choose an aperture of F22 because you want to darken the scene enough to create a silhouette. Your ISO setting should be at the lowest that the camera allows. Looking at the exposure meter, select a shutter speed that gives you a -1 and take your first shot. This means that if your exposure meter recommends a shutter speed of 1/125, set your shutter speed to 1/250.

Tip: you can create more saturated colors by intentionally under-exposing certain scenes. This is especially true for skies.

Check your LCD to see if the sky is dark enough. If the sky is not dark enough, use an even higher shutter speed, say 1/500.

1

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SUNRISE / SUNSET

My sunrise and sunset photographs usually do not feature the sun prominently in the frame. And if they do, the sun is usually hidden behind a cloud, with its rays peeking out. I usually prefer that the subject is something which is illuminated by the rising or setting sun, and not the sun itself.

If you follow my style of shooting sunsets, you will rarely need to use exposure compensation. Any exposure compensation will be used for creating richer hues (by intentionally under-exposing), rather than correcting exposure errors.

When the sun is clearly visible in the frame, your scene will have extremely high contrast which a single shot will not be able to capture. One solution for this is HDR (high dynamic range) photography. Another solution is to do exposure blending. Both techniques require taking several frames of the same scene, and then merging them on the computer.
(none of the shots here use these methods)

1	
Mode:	Manual Exposure
ISO:	200
Aperture:	F6.7
Shutter Speed:	1/90
Exposure Compensation:	None
Camera/Lens:	Nikon D300 with Sigma 17-70mm lens
Time:	5.59am

2	
Mode:	Aperture Priority
ISO:	200
Aperture:	F13
Shutter Speed:	1/45
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Sigma 10-20mm lens
Time:	6.03pm

3	
Mode:	Manual Exposure
ISO:	200
Aperture:	F8
Shutter Speed:	1/90
Exposure Compensation:	None
Camera/Lens:	Nikon D300 with Sigma 17-70mm lens
Time:	5.55am

4	
Mode:	Manual Exposure
ISO:	200
Aperture:	F16
Shutter Speed:	1/250
Exposure Compensation:	None
Camera/Lens:	Nikon D3S with Nikon 70-200mm lens
Time:	4.53pm

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Mode:	Aperture Priority
ISO:	200
Aperture:	F1.8
Shutter Speed:	1/750
Exposure Compensation:	None
Camera/Lens:	Nikon D300 with Nikon 85mm lens
Time:	12.11pm

MID-DAY PORTRAITS

If you are taking pictures of people at mid-day in a garden/forest area, try to find an area where there is open shade and make sure that the entire person is in the shaded area. This prevents uneven patches of light from appearing on their faces or bodies, caused by sunlight coming from directly above at noon, filtered by forest cover.

By shooting in the shade, you will get a more even light distribution. Your portrait subjects will also appreciate that they don't have to squint their eyes.

Shooting in open sunlight at mid-day may cause harsh, unflattering shadows in the eye sockets, generally unsuitable for portraits! Using a reflector panel will let you bounce some light back into those shadows, creating a much more pleasing portrait.

This scene was shot at F1.8, a large aperture which gives an extremely shallow depth of field. In order to make sure that everybody is in sharp focus, every person in the picture will need to be the same distance from you. Otherwise, using a smaller aperture of F2.8 or F4 will greatly increase your chances of getting everybody in focus.

Mode:	Manual Exposure
ISO:	100
Aperture:	F16
Shutter Speed:	30 seconds
Exposure Compensation:	None
Camera/Lens:	Nikon D200 with Sigma 17-70mm lens
Time:	10.35pm

FIREWORKS

Firstly you need a sturdy tripod. This is because in most photos of fireworks, you will be using a very slow shutter speed, in the region of 10 to 30 seconds. This long exposure is needed, and you won't run the risk of overexposure, because we will be using a black card to block light from entering the camera sensor, removing it only to let the sensor record the fireworks.

Mount your camera on the tripod, get a black non-reflective card ready, and set your camera using the exposure settings listed at the bottom-left. A remote release (a wireless or wired control that lets you press the shutter without touching the camera) is good to have, but if you don't have one, you can use the self-timer. The idea is to press the shutter without moving the camera even the tiniest bit at the moment the shutter opens.

Press the shutter button. If there are no fireworks at that moment (or if there is only smoke from the previous burst), block the lens with your black card, taking care not to touch the lens at all. The moment the fireworks appear, remove the black card. This can take several cycles, until your shutter finally closes.

Using this method, what the camera records is only the fireworks. The black card lets you selectively record only what you want.

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BACKLIT SUNBURST

You don't need to always fear backlighting. In this shot, backlighting is used to my advantage, and is used to create a sunburst through a small hole in the leaf. The small aperture of F13 creates the multi-point shape of the sunburst. If I had used a big aperture (say F2.8) I would get a round flare effect in the sunburst.

Even at F13, the depth of field appears to be shallow, as the background appears out of focus. This is because of the 2nd factor affecting depth of field, which is distance-to-subject. Because I was focusing really close to the leaf, I managed to get a shallow depth of field.

Another effect created by the backlighting is the rim light that you see on the branch.

Experiment with varying amounts of light filtering through the hole to get the optimum sunburst shape.

Mode:	Aperture Priority
ISO:	800
Aperture:	F13
Shutter Speed:	1/60
Exposure Compensation:	None
Camera/Lens:	Nikon D300 with Sigma 17-70mm lens
Time:	11.06am

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BACK LIGHTING VS SIDE LIGHTING

Depending on the subject, and the resulting composition, I will choose between backlighting and side lighting. Rarely frontal lighting. This is because more dramatic results can be achieved with the earlier lighting angles.

If I wanted to highlight the texture of the bark, and if I wanted deep saturated blue skies, I would go for side lighting (right photo). This means positioning myself where the sun lights the subject from the side. Side lighting emphasizes the contours and textures of an object. Because our lens does not capture the light source directly, we also get deeper colors in the sky.

On the other hand, if I think the subject would make a good silhouette, and there is good symmetry in the resulting composition, I would go for backlighting. Skies would wash out, but that's ok because the strength of the photo is in the main subject and its composition (left photo). In this shot I used the tree trunk to block out the sun entirely.

Mode:	Aperture Priority
ISO:	200
Aperture:	F8
Shutter Speed:	1/125
Exposure Compensation:	None
Camera/Lens:	Nikon D300 with Sigma 17-70mm lens
Time:	10.58am

Mode:	Aperture Priority
ISO:	200
Aperture:	F16
Shutter Speed:	1/90
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Nikon 18-70mm lens
Time:	9.37am

LEADING LINES

Slowing down to observe and appreciate the details will enable you to put together an interesting composition. I could have easily chosen to take a photo of the pier alone. But I used the tree as a foreground element to frame the shot, and the converging branches to lead the eyes of the viewer to the end of the pier.

At mid-day, the overhead sunlight created deep shadows in the tree branches, but that was fine because that actually focuses our attention on the brighter parts of the picture.

Mode:	Aperture Priority
ISO:	200
Aperture:	F16
Shutter Speed:	1/30
Exposure Compensation:	None
Camera/Lens:	Nikon D70 with Nikon 18-70mm lens
Time:	11.23am

About the Author

Andy Lim got started in photography after leaving design college in 1992, and has given several public talks on the subject of photography. He has a gallery of travel and landscape photography, which showcases his work, some of which have been published worldwide.

Andy conducts photography classes for beginners to advanced. SimpleSLR PhotoClasses are hands-on digital photography classes for small groups. PhotoClasses have been running since 2006, and are short, affordable, single 4-hour sessions, designed for busy people who may not be able to commit a long stretch of weekends at one go. In a SimpleSLR PhotoClass, Andy Lim gives instructions on what camera settings to use in specific situations, and provides guidance on framing and composition, using real-world examples. Participants perform photography exercises which will help them achieve a deep understanding simply because they did it themselves, instead of just being shown what they should do.

He also writes useful and practical digital photography tips on his GoodPhotography.info website.

Andy Lim is a professional wedding photographer. His brand, Emotion in Pictures, attracts clients worldwide with its unique flavor of wedding and portrait photography.

Follow Andy Lim on Facebook and Twitter!

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