

MICHAEL FREEMAN'S PHOTO SCHOOL COMPOSITION





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WITH DANIELA BOWKER

I L E X

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FOREWORD

About This Series



Photography is what I do and have done for most of my life, and like any professional, I work at it, trying to improve my skills and my ideas. I actually enjoy sharing all of this, because I love photography and want as many people as possible to do it—but do it well. This includes learning why good photographs work and where they fit in the history of the craft.

This series of books is inspired by the structure of a college course, and of the benefits of a collective learning environment. Here, we're setting out to teach the fundamentals of photography in a foundational course, before moving on to teach specialist areas—much as a student would study a set first-year course before moving on to studying elective subjects of their own choosing.

The goal of these books is not only to instruct and educate, but also to motivate and inspire. Toward that end, many of the topics will be punctuated

by a challenge to get out and shoot under a specific scenario, demonstrating and practicing the skills that were covered in the preceding sections. Further, we feature the work of several real-life photography students as they respond to these challenges themselves. As they discuss and I review their work, we hope to make the material all the more approachable and achievable.

For you, the reader, this series provides, I hope, a thorough education in photography, not just allowing you to shoot better pictures, but also to gain the same in-depth knowledge that degree students and professionals have, and all achieved through exercises that are at the same time fun and educational. That is why we've also built a website for this series, to which I encourage you to post your responses to the shooting challenges for feedback from your peers. You'll find the website at: www.mfphotoschool.com



Student Profiles

Gillian Bolsover

Gillian chose photography because she wanted to see the world. Not just the far-flung corners of the globe that, granted, she has made good inroads into seeing; but to investigate more deeply the world at her doorstep. The camera is the excuse that lets you into the lives of others. Gillian's camera has taken her backstage at Bonnaroo Music Festival, to Marine Corps boot camp, into the lives of illegal immigrants facing deportation, and through Shanghai's traditional lane house communities.

After studying photojournalism and political science at undergrad, Gillian spent several years working as a photographer and multimedia producer at a daily newspaper in the US, before leaving to make her way in the wide world. She currently works as a freelance writer, photographer, and multimedia producer in Shanghai, China. She loves her unique role of using her knowledge of Chinese language and culture to introduce the country to those who might not otherwise have a chance to experience and understand it.

You can see more of Gillian's work at www.bolsoverphotos.com



Sven Thierie

Sven Thierie is a graphic designer living in Leuven, Belgium. He studied graphic design at Provinciale Hogeschool Limburg in Hasselt (PHL), and went on to earn a masters in interactive design at Koninklijke Academie van Schone Kunsten in Ghent (KASK). He is passionate about his work in advertising, but his favorite

pastime has always been photography. During his many travels throughout Europe and North Africa, his camera is his "first mate," and an indispensable component of his travel experiences.

A passionate observer of culture, he says that "Living in the center of Europe is very inspirational, personally

and professionally, because of the huge numbers of cultures living and interacting so close to one another." In the future he wants to venture farther out into the world, with his camera in tow, of course.

You can see more of Sven's work on his website: www.sventhierie.be



Jennifer Laughlin

After taking a black-and-white photography class for fun, Jennifer Laughlin's interest in photography was stoked and she attended Randolph Community College in Asheboro, NC, graduating with a concentration in biocommunications photography. She has worked at the North Carolina Office of State Archaeology and TTW Photographic. Jennifer works with both film and digital equipment, using a Nikon D300 and a Mamiya C330 to capture her photos. Her specialty is macro-photography and she enjoys portraying the small details in her subjects. Jennifer currently resides in Charlotte, NC with her boyfriend, Chris Badger, and her two dogs, Buster and Griswald.

You can find her work at jenniferlaughlin.blogspot.com



Adam Graetz

Adam Graetz draws his inspiration largely from the urban and suburban scenery in which he grew up. A perfectionist with an affinity for symmetry and patterns, Adam received his first SLR in 2003 (a Nikon N6006) after his sister decided to drop a photography class, and was instantly hooked. Today, he shoots mostly digital with a Nikon D7000, but also shoots film with a Nikon FM-2, preferring Fuji Superia for color and Kodak Trichrome for B&W. There's also the occasional Holga shot mixed in, or a Mamiya 645 for medium format. Travel plays a significant role in his work, and he always keeps his camera at the ready while exploring new territory.

Having recently graduated from UNC-Chapel Hill, where he studied media production and international relations, Adam enjoys design, filmmaking, audio production, and just about any digital media project he can get his hands on. He has also been teaching Adobe Creative Suite and Final Cut Studio on an individual basis for the past four years.

“The idea of man vs nature often comes up in my work. Sometimes I juxtapose evidence of human civilization against naturally occurring elements; other times I seek to completely remove any signs of civilization in my photos, to make them completely natural.”



You can find out more about Adam at his website, www.adamgraetz.com and view his flickr photo gallery at www.flickr.com/photos/adamgee

Introduction

Like so many other creative pursuits, photography is the fusion of creative vision and technical skill in order to produce something beautiful. One without the other might produce a good photograph, but the chances of it being great aren't so high. Someone who understands precisely how their camera operates and knows the physics of a perfect exposure, but can't imagine how a scene will look in their mind's eye, or cannot spot the moment that will make a photograph, will struggle to produce a meaningful image. Likewise, it's all very well being able to envision the perfect photograph, but if your technical ability doesn't allow you to translate that to reality, then you still won't have an image.

Bringing together these two aspects of photography is, for many photographers, part of the medium's appeal. The

challenge to produce the perfect image is ongoing; it involves the constant search for the ideal subject and the perpetual acquisition and development of skills and knowledge. Photography is inspiring and demanding; it is fun and it can also be frustrating. It is definitely eye-opening.

Ask any photographer if they have ever taken a perfect photograph and the answer will likely be "no." The perfect sunset photograph is always just over the horizon. But we are always striving for it. What this means then is that the critical factor behind any photograph is always going to be the photographer; it won't be the camera. It's easy to get caught up in megapixels and sensor sizes and processor capacity, but they mean nothing without the person clicking the shutter. Seeing as you're reading this book, that means you. Your

photographs are the result of the application of your technical skill to your creative vision.

Although ideally you've recently acquired your first DSLR—maybe a 50mm prime lens, too—and are keen to make the most out of it, composition pertains to every photographer using any type of camera. Most of what's in this book will apply to you and your photography regardless of the camera in your hands. It won't matter if you're snapping something with the camera in your mobile phone because that's what you have to hand, or if you've progressed to the dizzying heights of a medium-format camera: The theories behind composition remain the same, and they are the foundation of taking stunning and meaningful photographs.



← Saffron skins

Beyond shapes, lines, and framing, composition is also about how you capture color and texture.

A photograph is your interpretation of an event or scene; it's your expression of a story. Consequently, the basis of a good photograph is its composition, or how you—the photographer—bring together everything that you are trying to say and relate it effectively as a whole. If a photograph is a narrative, then it relies on a strong composition to be conveyed.

Just like photography itself, composition is the synthesis of the technical and the creative. It's where geometry and artistry collide head on and in the resulting explosion they make something gorgeous. If you haven't studied math since high school and the idea of geometry strikes fear to your core, don't worry. When you look at it in the context of taking a photograph and can see how it helps to elevate your images from something ordinary to something special, it's not nearly that daunting.

This book has been designed as a progression: It starts when you consider what it is that you want to photograph and finishes with you tidying up your images using post-production, and yes, it takes in some geometry along the way. Each section builds on the theories, skills, and techniques that you learned in previous sections, and gives you the opportunity to put them into practice, too. Of course, if you just wanted to check on a theory or read up on a specific technique, there's nothing to stop you from doing that. All the same, the idea is to have you taking better-composed, beautiful photographs by the end of the book.



↑ An avian hourglass

It's not enough to simply record evidence of having seen something. You must keep an eye out for the other elements that, when framed and captured in a photograph, augment and enhance the scene.

© Daniela Bowker



Basics

In speaking about composition, it quickly becomes necessary to both establish a base of knowledge to refer to as we move up through higher level concepts, and also to challenge any preconceptions that may already exist about that knowledge. Some of what is covered in this chapter may at first seem self-evident, but it is important to keep an open mind and recognize whether certain essential concepts may have already been taken for granted without giving them due consideration.

Toward that end, the sections in this chapter cover a mixture of creative and technical issues: your subject, the orientation of your frame, and the depth of field of your image. In essence, composition is always going to be about your subject, where you position it, and what you do to make it the center of attention.

But you have to walk before you can run, and that means selecting your subject and then setting up your shot to make sure your subject works in the frame. Some of the other sections in the book will cover topics that might or might not be apposite to every picture that you take; these ones always are.

These are the fundamental principles that you should think about applying to your images every time that you click the shutter.

Pick your Subject

The fundamental "point-and-shoot" process of taking a picture is so direct and instantaneous that questioning yourself as to what the subject is or should be is, at first glance, superfluous. The subject of a portrait is the person in it, right? And the building is the subject of every architectural shot. This "whatever is in the middle of the frame is the subject" approach can be quite deceiving, however. For one, it can be

easy to get distracted by everything else occurring in and around the image, and for the subject to get lost. One of the most common photographic critiques is simply, "What am I supposed to be looking at?" What seems obvious to the photographer—who was there at the moment of capture and knows why the shot was taken in the first place—needs to be communicated elegantly and straightforwardly to the viewer, and the

mechanism for this communication is where composition comes into play. So your first question should always be "What am I photographing?" If you think of your photograph as a story or narrative, you'll be better able to determine what it is that's the focus of your image because you'll know exactly what it is that you're trying to express through it. It doesn't matter if the subject is vast and sweeping or intricate and detailed, there should be something in the photograph that is speaking to its audience.

The images below are very different subjects captured in different ways, but they both drive a narrative and have a sense of purpose. Remember: Without a firm idea of what it is that you want to capture, you won't be able to create a strong, purposeful, and meaningful photograph.



↑ Open road, open interpretation

Let's start with a vast, sweeping subject. Here, there are narrative themes of openness, possibility, but also of emptiness and being lost. It conveys a sense of isolation or maybe even loneliness. Anyone looking at the image can get a feeling of being the only person in the world, and that the road heads onward, unending and deserted.

→ Delicate close-up

An intricate and detailed picture might focus on the patina of some antique furniture, and through it convey the passage of time. When someone looks at the picture, they should be feeling the age of the furniture and wondering what it has been through to acquire those marks and scars.



© Daniela Bowker

Enhancing the Subject

When you've established your subject and what story you are telling through your photograph, you can then determine what is essential to your image, what is the background, and what is superfluous. By working out these key elements and how they interact—for example, how the background accentuates the subject—you will ensure that your photograph is saying just what you want it to say and everything will harmonize toward that end. You will be on your way to composing better images before you've even released the shutter.

We can think about this in a bit more depth by going back to the example of the sweeping, lonely road on the opposite page. If the photograph had a train of cars heading along the road they would detract from the feeling of emptiness and change the overall narrative. You might even find that the cars then become the subject itself, rather than the road. But an isolated building or a solitary car might contribute to the sense of desolation. They're not exactly background imagery, but you might think of them as a "subplot," giving weight to what it is that you are trying to say. The key here is that whatever you place in an image should be contributing to the story and complementing the subject, not diminishing it. Sometimes it might mean hanging around for a bit to get the perfect shot, or changing where you stand to take your photograph; but it will be worth it.

Making something the subject of a photo isn't just about placing it in the center of the frame and clicking your shutter. There is an entire gamut of



techniques and tricks to draw the eye to the subject of an image, techniques that we'll explore throughout the course of this book; but the starting point is where to place your subject in the frame. While it might seem to make sense to place the subject of your photo slap-bang in the middle of the frame to ensure that it's the center of attention, this doesn't necessarily make for the best photo. First of all—and very bluntly—this sort of composition is boring if you use it repeatedly.

↑→ Two takes

What's the story here? The individual drops of water, clinging to an arch that forms a graphic image? Or a more literal presentation of forlorn furniture left out in the rain?



© Daniela Bowker

Filling the Frame

For the moment, let's disregard a vast number of other possible types of images and concentrate only on one: a single, obvious, self-apparent subject positioned directly in front of the camera. How to frame it? Already there are two choices: to close in tight so the photograph is dominated entirely by the subject; or to take a wider view that incorporates the surroundings. The first option gives you the opportunity to capture much more detail in the subject, and is easier to compose if the subject is large enough to fill up the frame. It is also better suited to subjects that are self-evidently interesting or unusual—such as a rare bird or an exquisite work of art. The second, wide-view option, on the other hand, invites a study of the relationship between the subject and its context, and so the surrounding environment must be relevant somehow. Perhaps the subject needs some other point of comparison so the viewer can judge

© Daniela Bowker



its relative size, or maybe there is other action occurring that contextualizes the subject's movement or expression. Neither of these approaches is superior to the other; it's about what you prefer aesthetically, what you want to communicate, and what best suits the circumstances. Don't be afraid to experiment and shift your precise focus, but do know exactly what it is that you want the picture to communicate.

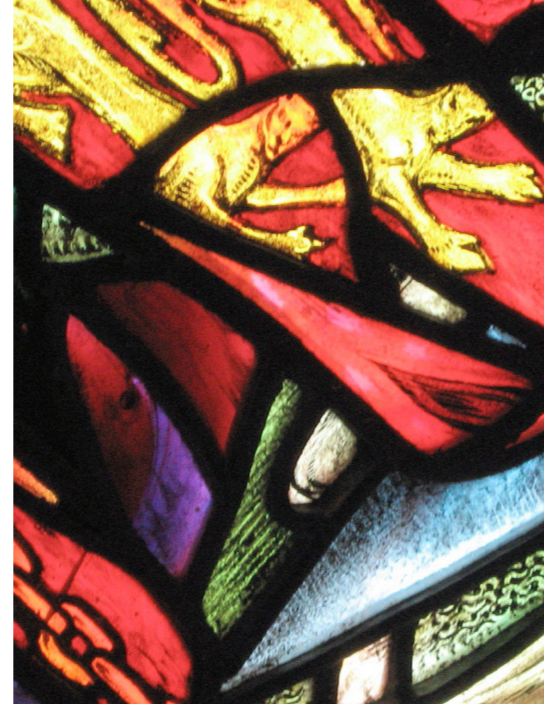
Keeping in mind the questions of how much of the frame to fill and with what is what differentiates the thoughtful photographer from the casual shooter. You should continually ask yourself these questions, and they will eventually become second nature as you learn to consider both your subject and its environment simultaneously, and decide how much of each to fit into frame. In any case, the bottom line is to maximize the amount of meaningful information in the shot—there

↔ Get closer

What's the subject? The flowers, of course. But while the image on the left shows the overall shape of the plant and includes a bit of its surroundings, that's not the original intent of the image, which was to isolate the fine detail within the buds and flowers—which is better illustrated by a tighter crop as shown right.



© Daniela Bowker



© Daniela Bowker

↑ Frame of reference

How big is this piece of stained glass? The close crop provides nothing to act as a reference, but the impact of the striking colors would be lost in an environmental photograph.

shouldn't be anything extraneous in the scene. Whatever you see in a picture should be accentuating the subject, not detracting from it.

Organizing the Frame

By introducing some tension into your image not only do you make it more aesthetically interesting, but you also create a relationship between your subject and background. Tension is something that will continue to come up throughout this book, but in this particular case, tension is what we mean by capturing the interaction between subject and background, which then introduces some direction or movement into your composition. This will draw your eye into the image so that it doesn't feel static.

Diagonals and strong divides that run through your photographs, together with your subjects' eye-lines (see page 45), can all contribute to tension. If you're aiming for an environmental photograph, the relationship between subject and background is all-important. The background provides context for the subject and they need



© Daniela Bowker

to work together in order to tell the story of the image.

If you've never tried off-center focusing with your camera, it isn't nearly as scary as it sounds. If you're using manual focus, focus first on the subject of your image and then recompose the frame to set the subject in relation to the background. When you use autofocus, first focus on your subject by half-pressing the shutter button, and then, while still keeping the shutter button half-pressed, recompose your frame as you see fit, finally fully pressing the shutter button once you have your desired composition. Your camera will remember where you focused as long as you keep the shutter button half-pressed, even if that subject isn't in the center of the frame anymore. (It is worth noting that many cameras, including most DSLRs, allow you to customize various buttons in order to facilitate this focus-and-recompose method in different ways.



For instance, sometimes you can press the AEL/AFL button to acquire focus, and half-pressing the shutter button has no immediate effect. Consult your particular camera's manual for details.)

↓ Find the story in the scene

Across these three photographs, we can see the way that getting closer to your subject changes the feel of the resulting image. Farthest away on the left, the scene feels busy and cluttered. The girl is probably the subject—or is it the other woman behind her? Zooming in tight on the little girl in the image on the far right makes the subject obvious—too much so; the photograph has lost its sense of environment and context. The middle photo is a happy medium—close enough to clearly indicate the subject, but still providing enough clues for the viewer to understand the surrounding scene in which the subject is set.



Use a Background for Context

Now it's your turn to have a go. For this challenge, you need to produce an image where the background is creating context for the subject. It can be any sort of photograph—a portrait, still life, landscape, anything that has a story to tell, and a background that

contributes to and supports that story. Remember, though, that the subject needs to be enhanced by the background, not overwhelmed by it. You may also want to place your subject off-center to give the photograph a feeling of life and energy.

→ Cartagenian context

From a slightly lower angle, the frame would have been completely filled by these children's faces, but by including the full extent of the group, along with the street receding into the distance, a simple group portrait is elevated to a photojournalistic slice of Colombian life.



© Daniela Bowker



Challenge Checklist

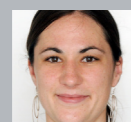
- Identify the message that you want your photograph to convey.
- Determine how best to use your background to accentuate your subject.
- Use the off-center focusing technique with both manual and autofocusing methods.

↑ Alley portrait

Portraits don't always have to have completely clean backgrounds; what's important is simply that nothing else be too distracting and take attention away from your subject. In this shot, a bit of graffiti—slightly out of focus by a shallow depth of field—makes the portrait more dynamic and edgy.



© Gillian Bolsover



Shanghai has a huge stray cat population and many people who, out of pity, perpetuate the problem by providing food for the cats. Others adopt strays that they find. This woman and her husband have 17 cats in their two-room apartment and spend most of their day caring for their animals.

Gillian Bolsover



A good, straightforward journalistic treatment, naturally lit, showing the clutter of the small apartment. As a picture editor I would have liked to see a few more of the 17 cats in order to make the entire point of the image.

Michael Freeman



© Sven Thierie



In the morning, before the city fully wakes up and comes to life, this market has quite a different feel to it—an odd tranquility. This dog was quite comfortable in the middle of the market, and including the uncluttered background preserves that sense of peacefulness I felt that morning.

Sven Thierie



Obviously there's a cuteness factor, and bit of humor too—as if the whole marketplace is this single dog's domain. Getting down to the dog's level opens up a wider perspective on the background, and gives context. I think I might have cropped from the bottom of the frame, as the space in front of the dog is not very useful.

Michael Freeman

Horizontals & Verticals

Human vision is binocular, meaning that we have two eyes that happen to be positioned adjacent to rather than on top of each other. As a consequence of this, our eyes are predisposed to scanning things along a horizontal plane rather than a vertical one. It's no surprise then that we're more inclined to capture horizontally oriented pictures. The vast majority of cameras have been designed around this fact, and thus have a default horizontal orientation. And as an extension of that camera design, simply rotating the camera into a vertical position is just uncomfortable enough that it's quite easy to eschew, particularly during casual shooting or when dealing with rapidly developing action.



But it isn't just a matter of laziness. Often the orientation is directly dictated by the subject—landscapes and portraits being such obvious examples that they have lent their names to the horizontal and vertical formats, respectively. In a typical landscape, the stretch of the horizon is such a powerful element that it begs to maintain as much length as possible. Plus, when surveying a scene, there is typically more to see and capture by scanning from left to right than from top to bottom (unless you're standing on top of a towering cliff with an unobscured view of the scene unfolding below). The horizontal orientation may be the default, but it is also the most natural and effective means of portraying the landscape subject.



Likewise, human subjects are taller than they are wide, and their figures are naturally suited to a vertical format. This isn't only a matter of fitting whole bodies or faces into frame—there's also the fact that the subject of their attention is often at arm or waist level, which can create an effective tension between the face's expression at the top and the action occurring at the bottom of the frame.

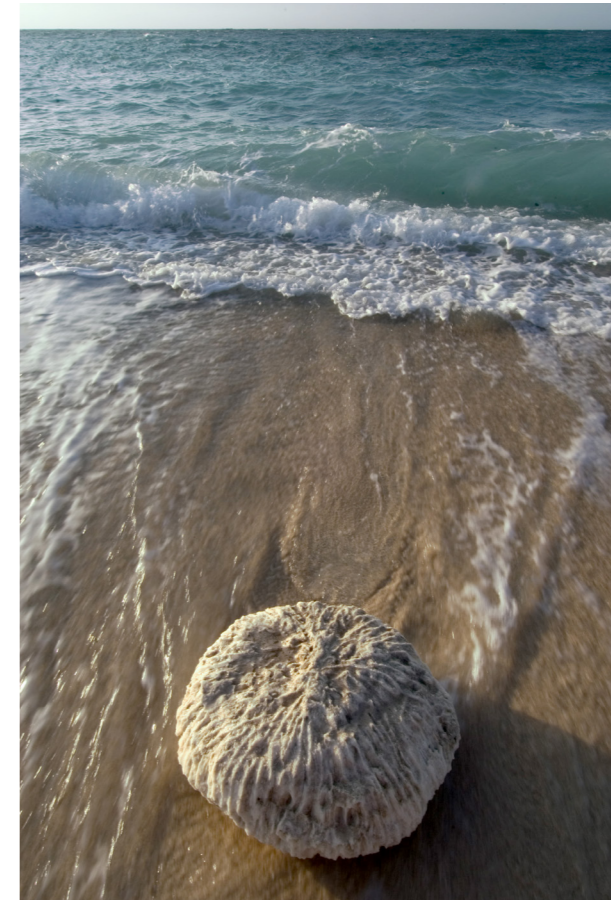
↔ Subject-dictated orientation

London County Hall is considerably wider than it is high, so the horizontal orientation was the best means of capturing this straightforward shot. Likewise, the vertical orientation was the best means of capturing the tension from top to bottom of the shot on the left, as this woman looks down attentively at her tea.

A Creative Choice

While much of the time it will feel obvious when you're taking a photograph whether you should be using portrait or landscape format, other times your subject will present you with a compositional dilemma. For instance: In a landscape with a clear mountain range extending horizontally, but with towering trees reaching up vertically in the foreground, which is the more dominant element? Or, to phrase it even better—which orientation best accommodates the elements you find to be important, and displays them for maximum effect?

Going beyond, your creative choices regarding orientation do not always need to take a problem-solving approach. It is well worth challenging your natural inclinations as to how a given shot should be framed simply for the sake of experimentation and exploration. This isn't to say you should start chopping off essential elements of your subject, and wasting vast swathes of the frame on useless empty space. Rather, you should allow yourself to take the time (as permitted) to fully consider all your options once you've recognized a subject as having potential for a good composition. Move around, rotate your camera, tilt it at a stronger angle or position yourself so the light or shadows are falling differently. Look for other elements that might make a vertical orientation purposeful in a landscape—they may be dominant (like a mountain) or subtle (like a lone bird occupying the corner of the frame against an otherwise empty sky). In any case, the point is to make sure you're not missing out on any novel or captivating compositions.



↔ Two takes

Of these two seascapes, the horizontal format is probably the more traditional approach, as the wide horizon is allowed to stretch across from left to right. While the subject is the same in both shots, the vertical shot resists a traditional approach and introduces a stronger graphic quality, with greater tension between the upper and lower parts of the frame. What is important to recognize here is that one is not particular or objectively better than the other, but rather that they appear quite distinct and have different effects as a result of their framing, regardless of their common subject.



Find the Best Orientation

↓ Industrial sunset

Sometimes it's obvious which orientation works and which doesn't. This shot would have had a massive amount of pure black at the bottom of the frame if it was framed vertically.

Your challenge for this section is to take a photograph using an orientation that is clearly suited to its subject. To keep it interesting, I'd encourage you to avoid subjects that naturally favor either portrait or landscape formats (i.e., literal portraits or landscapes). But of course, if you think that you have a composition that works on a creative level, go right ahead!

The key to success in this challenge is to identify the point of focus for each photograph. Remember: Your image tells a story and you need to know what it is. You might also want to think about off-center focusing, which we looked at in the previous section, to help create an interesting and balanced composition.



© Daniela Bowker



© Daniela Bowker



© Daniela Bowker

Challenge Checklist

- Take a picture where the subject clearly dictates the most appropriate orientation.
- Be sure to identify your point of focus.
- Consider your subject's placement and how it affects the balance of the image.

↔ **Consider the subject**
Ask yourself: What's the subject? In one of these shots, it's the full bench, and the jacket is just an accent. In the other, the jacket itself is the most important element.



© Sven Thierie



There was no shortage of stray animals on this trip to Morocco, and they found the most interesting places to curl up for a nap. My first impulse was to zoom in on the cat, but it was the sign on which he was sleeping that made the scene interesting.

Sven Thierie



Seems we're on an animal roll! This is a natural for a vertical, because while you could have gone in very close on the cat alone, the entire sign sets the travel context. The framing, too, is on the nail—close without being over-tight.

Michael Freeman



© Jennifer Laughlin



This lioness was lazy, and she would not get up and move any closer. So, instead of shooting a close portrait of her face, I approached it like a landscape shot. I tried to capture some of the surroundings while maintaining primary focus on the lioness. Shot with a 300mm telephoto lens.

Jennifer Laughlin



Again, a natural horizontal given the pose of the lioness. The only reason to stray from this would be if there was something highly relevant in the background above. Slightly uncomfortable crop on the left, but maybe something was in the way?

Michael Freeman

Select your Depth of Field



Aperture means gap, hole, or opening. The aperture of your lens is what lets light into the camera and onto the sensor and exposes it to produce an image. When it comes to exposure and judging how much light you want or need to create your image, aperture is very important. A wider (or larger) aperture allows more light to reach the sensor, which is pretty obvious. If you're shooting in dim or badly lit conditions, you'll need to let in as much light as possible, which means a large aperture. If it's bright, a smaller (or narrower) aperture will help to stop your images from being an overexposed white mass. Again, that's quite intuitive.

However, aperture also has another, slightly more creative and less technical application. Aperture controls the depth of field of your images. Or to put it another way, by adjusting your lens' aperture you can alter how much of your image is in focus, and how much of it is blurry background. If you use a large aperture, your depth of field will be shallow; you'll have a thin plane of sharp focus and lots of background blurriness. Conversely, by using a small

← More or less background

Same view point, same lens, but a different aperture for each: f1.8 at the top; f5.6 in the middle; and f14 on the bottom. As the aperture narrows, the lilies in the background come into sharper focus.



© Daniela Bowker

aperture you will give yourself a deeper depth of field with much more of the background in focus.

While all of this is quite straightforward, the way that we measure aperture isn't, at least not immediately. Aperture is measured in f-stops. An aperture of f1.4 is a large aperture, one that will let in lots of light and give you a shallow depth of field; f22, on the other hand, is a small aperture, which will let in less light but give you a greater depth of field. The numbering system might feel counter-intuitive, because the smaller number is the larger aperture. It makes sense once when you understand that f-stops correspond to fractions indicating how big the aperture is. An aperture of f2 is larger than an aperture of f8 because a half is larger than an eighth. Also, don't get confused and think that aperture numbers increase linearly—rather, they do so logarithmically, with bigger leaps between numbers the higher up you go. To illustrate, in whole-stop (1EV) increments, aperture numbers increase as follows: f1.4, f2, f2.8, f4, f5.6, f8, f11, f16, f22.

Setting the Aperture

There are two exposure modes on your camera that will allow you to control the aperture of your lens directly: fully Manual (which is indicated by M on the mode dial) or Aperture Priority (which is A or Av). Manual mode gives you full control over all of your camera's exposure settings and allows you to set the aperture and shutter speed independently as you see fit, with no automatic adjustments based on what the camera's metering system thinks will be an accurate exposure. Aperture Priority mode allows you to set the aperture alone, and the camera adjusts the shutter speed accordingly to give you a properly exposed image.

It's quite common to see professional photographers leaving their camera set to Aperture Priority, particularly outside of the studio, as it strikes a good balance between creative control and helpful automation. While shutter speed is still an important decision, in many cases there won't be as discernible a difference on the final image between, say, 1/250 second and 1/4000 second, as there will be between f1.4 and f5.6, so it makes more sense to concern yourself primarily with the aperture and simply check that the automatically set shutter speed is sufficiently high to freeze the action in the scene (if that is your intention).

Take a look at the picture of the beads. It was shot with an aperture of f1.8. There's a very small plane of focus on the lower left quarter, and as you move away from it things become progressively blurred. Finally, by using a much smaller aperture, you're able to ensure that most of your scene is in focus. Remember, though, that a



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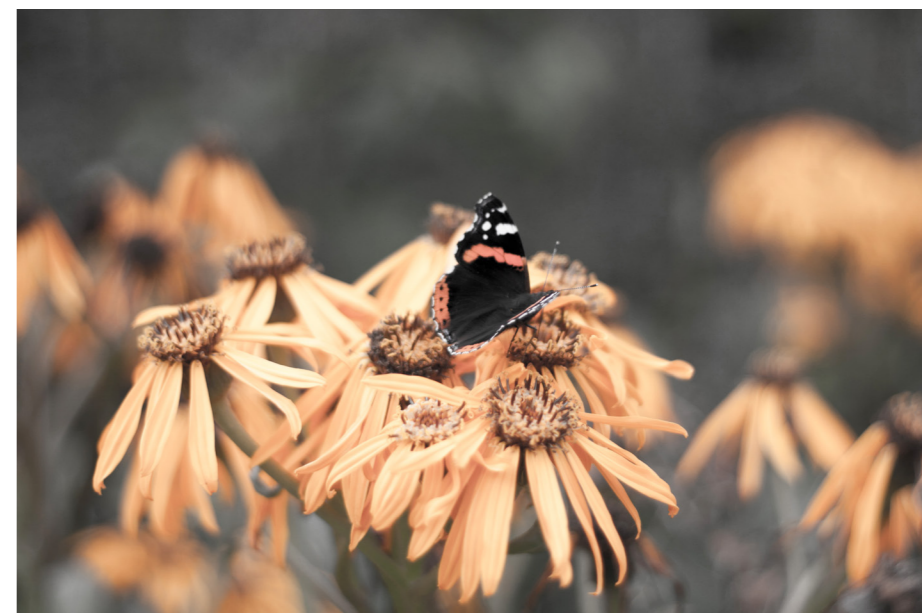
small aperture doesn't let in a great deal of light, so you'll need to be shooting in good light to pull it off hand-held at sufficiently fast shutter speeds, or use a tripod to keep camera shake to a minimum at longer ones.

↑ Fine textures

It's clear what was expected to be the center of attention in this image, and the blurred background accentuates it. (This picture is also a good example of off-center focusing, which we looked at on page 19.)

↓ Avoiding unpleasant backgrounds

Another immanently practical use of shallow depths of field is to remove an otherwise distracting or unpleasant background from prominence—in this case, dead flowers.



© Daniela Bowker

The Right Aperture for your Scene

↓ Focus your attention

A wide aperture ensured that the child in the background was not overly distracting from the main figure in this shot.

Sometimes a prominent background in your photograph gives it an interesting dynamic; it might provide a beautiful backdrop, or interact with the subject to give it context. In these instances, you'll want a relatively deep depth of field to your images, which you achieve using a small aperture. At other times, you might prefer a shallow depth of field. Perhaps the background is distracting or unpleasant, or you want to enhance your subject in a more creative way. By using a larger aperture, you create a shallow depth of field.

For this challenge, I want you to go to one extreme or the other—either completely isolate your subject against a blurry background with a shallow depth of field, or include lots of detail of distant backgrounds and far-away objects by using a deep depth of field. The key is to support your main subject, either way. Don't forget to use the other techniques that we've already looked at to bring out the best in your photograph: Identify your subject, place it carefully, and use an appropriate frame orientation.



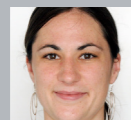
Challenge Checklist

- Ensure that your camera is set to Manual (M) or Aperture Priority (A or Av) exposure mode.
- Identify the largest and smallest apertures of your lenses.

↑ Sharp from near to far

This seascape, on the other hand, needed a narrow aperture to ensure everything from the nearby palm leaves to the distant horizon was in sharp focus, with a deep depth of field.

© Gillian Bolsover



It is often difficult to communicate via camera both the detail and scale of the awe-inspiring desert. I used footprints in the foreground and a tour group in the background to contextualize and communicate my experience of the desert.

Gillian Bolsover



Leaving the human subjects out of focus adds a dreamy touch to this desert shot. And getting the foreground in sharp focus captures nice detail in the patterns of the windswept dunes. It's also good that this is slightly unexpected, concentrating on being close to the sand itself.

Michael Freeman

© Jennifer Laughlin



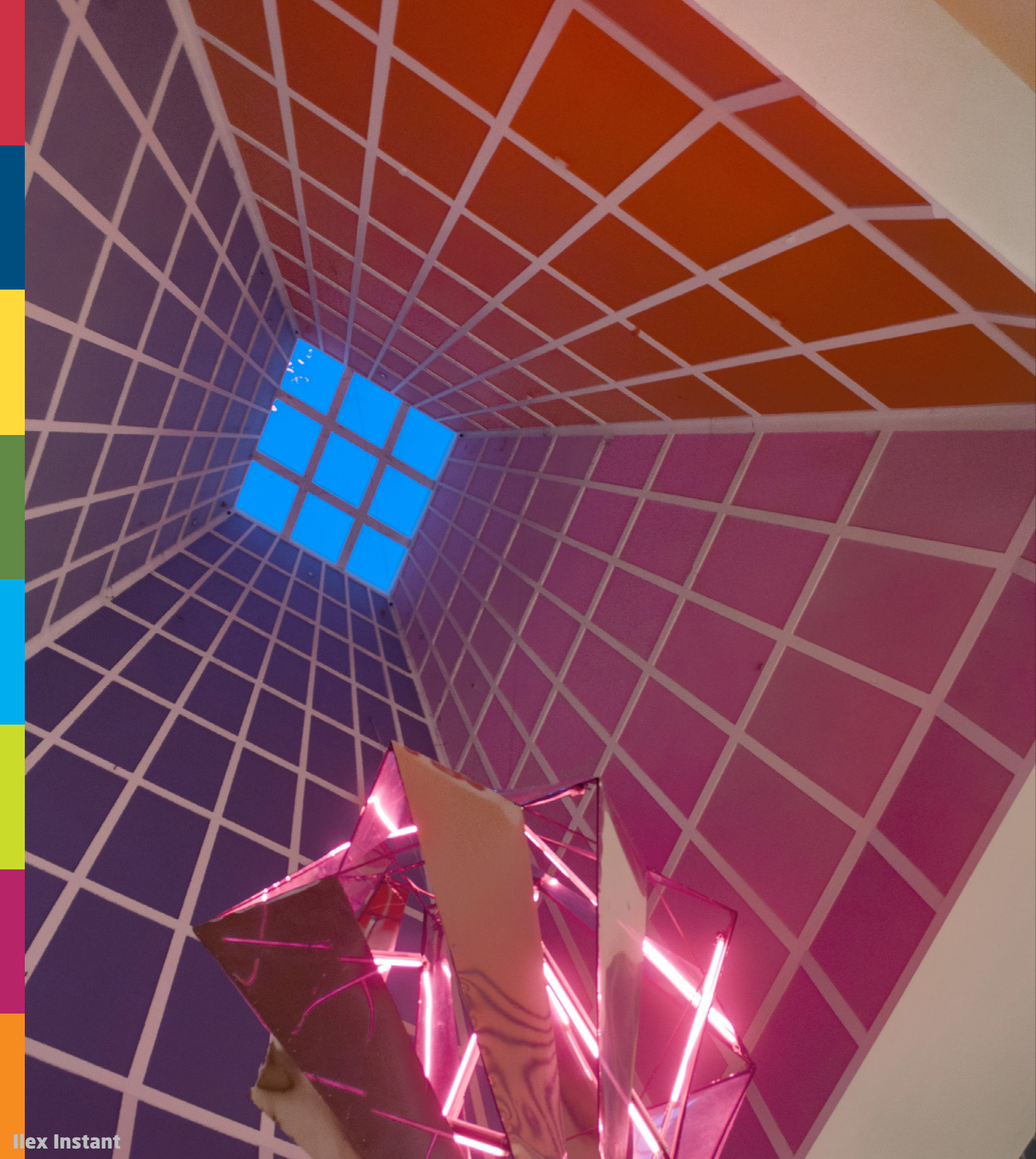
My objective in this shot was to get as shallow a depth of field as I possibly could. I used a 105mm macro lens with an extension tube. I wanted the light to be harsh and dramatic but still show all of the colors. The very simple setup was one hot light placed to the left of the subject.

Jennifer Laughlin



The acute angle to the subject gets the most out of the selective focus. Having the focused pin against a paler background helps the emphasis, although it might have worked better to fill the empty lower left corner with more out-of-focus pins.

Michael Freeman



Geometrics

The geometry of a photograph is simply its graphic appearance—the result of how lines and shapes interact, regardless of the actual subject. The lines and shapes may be obvious and sharp, or they may be the result of how we naturally interpret the picture.

The following sections will explore different ways of dividing your frame to give your photograph maximum impact. We will look at how lines bring emphasis to your subject, examine how shapes can bring order to a frame, and look in more detail at the concept of balance, which was something we touched on in the first chapter.

It is important at the outset to clarify that these are not ironclad rules that you need to incorporate into each and every photograph. No such rules exist. Rather, these are relatively simple principles that should inform the way you view a scene, and which you should incorporate into your compositions as you see fit.

Gradually, much of what is covered in the following pages will become a matter of intuition, and the most naturally dynamic compositions will reveal themselves all the more easily. But it pays to make the initial conscious effort to bring these important compositional aids into your photography.

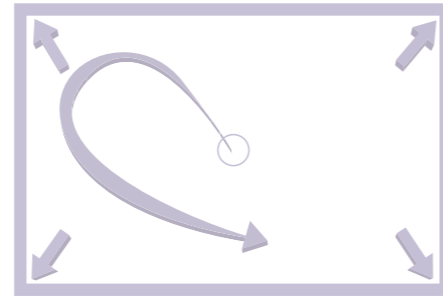
Subject Placement

In the previous chapter, we discussed the concepts of both off-center framing and the inclusion of environment and context in your frame. Combining these principles presents you with the question of subject placement: If dead-center is boring, flat and dull, then where else should the subject be?

The answer is not simply "anywhere else." The subject needs a dynamic and engaging position within the frame, but even more importantly, it needs a meaningful one. Position without purpose comes off as sloppy, or just confused and unfocused. If every shot in your portfolio has the subject far in the corner of the frame, the effect will be just as monotonous as if they were all centrally framed. Viewers will recognize and respond well to thought-out, well justified compositions, which can in fact give you much greater leeway for extreme or eccentric compositions than if you sought them out just for eccentricity's sake.

A number of factors will come into play as you choose where to position your subject. The subject's size is significant, insofar as larger subjects do not have nearly the room for dramatic off-center positioning as do smaller ones.

You should also keep an eye out for secondary points of interest nearby. Perhaps a flock of birds in the sky or a tall tree can be positioned on the opposite side or corner of the frame from the main subject, inviting some degree of tension between them. In some cases, this secondary point of interest need no even be visible in the frame at all. If your subject is in motion, or even simply staring off in a certain direction at something out of frame, you can compose them such that they are looking or moving across the frame, into open space. Besides giving meaning and purpose to that empty space, it is also generally more effective to have your subject moving or looking into the frame rather than out of it.



↑ Wandering eye

Confronted by a static rectangle, the eye doesn't just fixate in the middle—it tends to explore the edges and wrap around the space. Accordingly, a centrally placed subject won't hold the eye's attention completely; it will be more interesting if there are other elements to investigate.

↕ Head-on vs off-center

The photo on the left is a straightforward documentary shot—and quite uninspired. It feels static and obvious. But moving the boat to the bottom right of the frame invites the viewer to think about the open water stretching across the rest of the frame—all the way to the edges, which suggests it continues on interminably. Suddenly this lone dinghy has a story and a relationship to its surroundings, all by moving the camera slightly up and left.



© Daniela Bowker



Horizon Placement

The horizon endures as an inescapably significant element in a great many photographs, so it's worth considering its placement specifically. Just as you have a natural inclination to position your subject in the center of the frame, it is also all too easy to allow the horizon to cut directly across the middle of the image, splitting it into two obvious parts and diffusing the composition of any sense of movement or tension.

Having the horizon on the lower third will often feel more natural as it will give the image a sense of being grounded. However, you shouldn't feel that you can't place a horizon on the upper third. If the most significant element of your landscape is below the skyline then it makes sense for it to dominate the image by placing the horizon along the upper dividing line. Not only that, but you can create some dramatic pictures by placing the horizon higher in the composition. In a sense, there's nothing new here, just the same old rule: Composition depends on what you want your subject to be, and what you want the photograph to communicate.

→ Beware obvious bisections

If you look at this pair of pictures taken of Edinburgh's skyline just after a storm, you can see how the one that's been manipulated to have the horizon running across the middle of the image looks flatter and less inspiring than the picture where the horizon is lower in the frame. The latter is also more effective and showing off the eerie yellow sky with the buildings silhouetted against it.



© Daniela Bowker

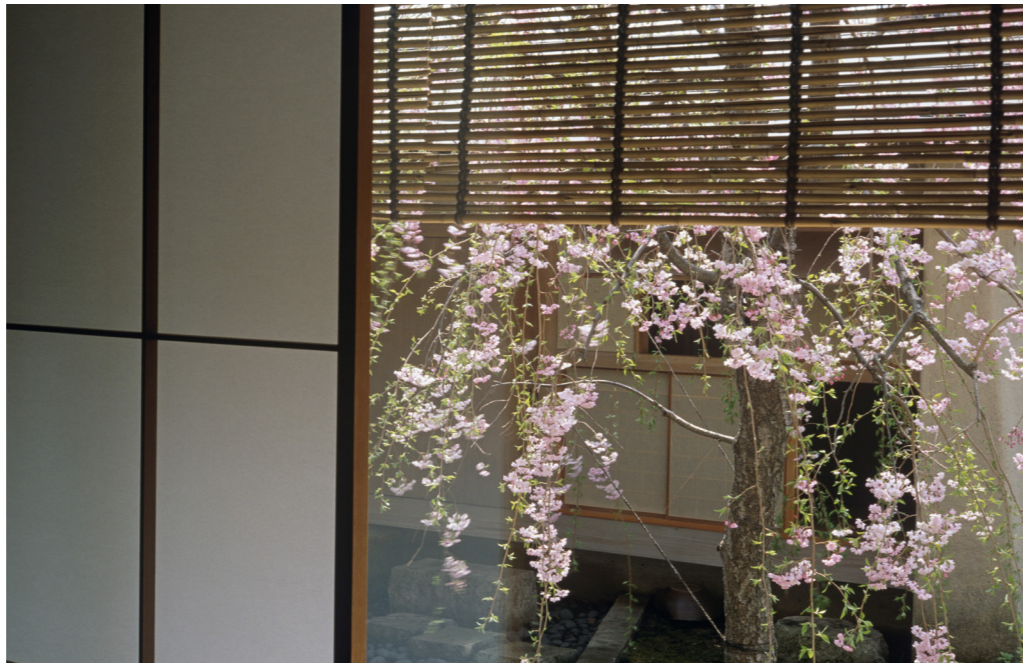
The Golden Ratio

While it may seem like you have some serious decisions to make regarding subject placement, you'll be glad to hear a variety of helpful guides have been invented throughout the ages to help you choose how to arrange and distribute elements throughout your frame.

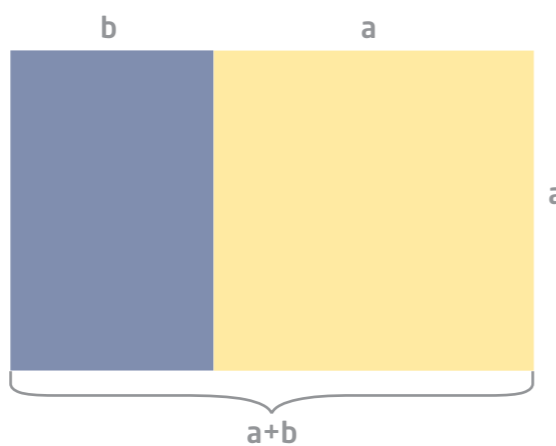
Perhaps most famous of these guides is the Golden Ratio, which you might hear referred to as the Golden Section, the Golden Mean, Phi, or Divine Proportion. It is similar to, but mathematically different from, the rule of thirds. It's something that appears in nature and has been hijacked for use by architects and artists for millennia (the Parthenon was built on the principles of the Golden Ratio), so photographers following suit shouldn't be a surprise.

The Golden Ratio is an irrational number equal to approximately 1.618, denoted by φ —the Greek letter Phi (hence the rule also being called "Phi"). If you divide a line unevenly into two sections—(a), a longer part, and (b), a shorter part—the ratio of those two sections will conform to the Golden Ratio if (a) divided by (b) is equal to the sum of (a) plus (b) divided by (a).

Of course, it's all very well knowing the math behind the Golden Ratio, but how does it apply to your photographs? If you subdivide your frame according to the Golden Ratio, similar to how you'd divide your frame if you were using the rule of thirds, with two a-length sections separated by a b-length section on each side, and place



key elements of the image along the dividing lines or where they intersect, you'll have a photograph that conforms to a principle that humans find naturally attractive.



↑ Proportional arrangement

This could easily have been a straight-on frame-within-frame composition, as the window composes the exterior well enough. But a slight shift in the composition to align the window with the golden rectangle gives the scene a more dynamic presentation.

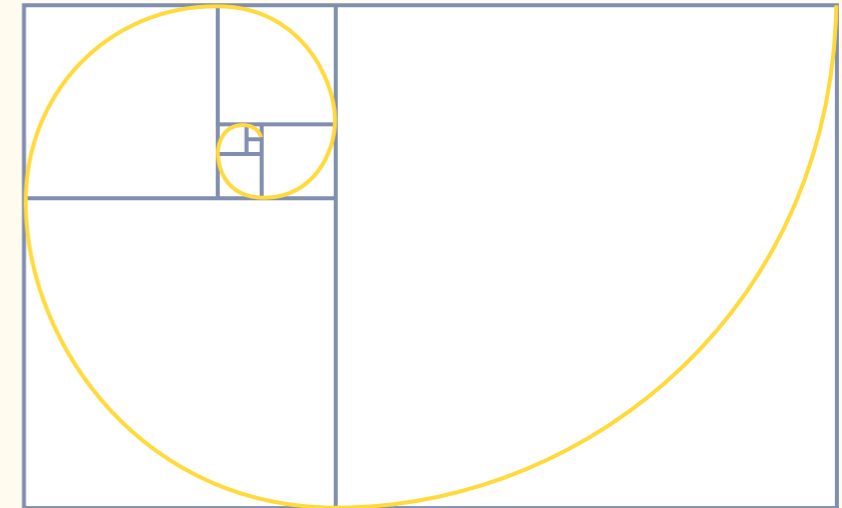
$$\frac{a}{b} = \frac{a+b}{a} = \varphi$$

← Classical elegance

The compositional guidelines of the rectangle function regardless of their specific orientation—you can flip it or rotate it to suit your subject.

The Golden Spiral

Another aesthetic principle that you can use to place your subjects is the Golden Spiral. It is based on the Fibonacci series of numbers, but is probably easiest to understand if you think of it as a series of joined-up quarter circles that have been drawn inside decreasingly smaller squares that have themselves been drawn inside a rectangle that conforms to the Golden Ratio. The center of the spiral is where your photograph's subject should be and if you allow the spiral to dictate the rest of your composition, you'll find that you have a strong image.



↑↓ Picture the spiral

It's a busy street scene, but your eye is drawn to the figure leaning against a pillar, watching the world go by.

There are many different ways of dividing up your frame so that your picture conforms to various sets of theories that we find proportionally comfortable. We've looked at a few here, but the unifying factor behind the effectiveness of all of them is that they are internally consistent. Where the key elements of the image are placed is proportionally the same, whatever the size or shape of the frame. And of course, they're not dead center.

Knowing how to compose your images according to these mathematical principles isn't something that you'll necessarily be able to do immediately by eye; but the more that you practice, the more natural it will feel. And if all else fails, there's editing software to help you crop later. We'll get to grips with that later in the book.



© Daniela Bowker

Using Lines to Pull Attention

Lines—horizontal, vertical, diagonal, curved, or imaginary—are an important tool in your compositional arsenal. We already touched on horizons when we looked at subject placement, and we covered lines that draw the eye across the image and give it a sense of movement in the section on organizing your frame. There are also lines that are referred to as “leading lines,” which act as pointers and direct the viewer’s eyes to the subject of the image. Different types of line have different properties that they will lend to your composition.

It’s worth remembering that a single line or a series of lines doesn’t necessarily have to be formed by solid objects running through the image. A series of points that the eye naturally links together can create the perception of a line, while light and shadow also produce beautiful and subtle lines in photographs. Similarly, even if you don’t set out to deliberately photograph an image composed of lines, you need to remember their potential impact on your composition, keeping in mind how they will influence viewers later on.

Horizontal lines tend to feel solid and stable, which is no surprise given their association with the ground and gravity. They’re also expansive, and will broaden the feeling of your scene as well as make it appear deeper. Where horizontal lines feel calming and restful, vertical lines are pretty much the opposite. They will elongate the frame and can give an impression of energy as they work against gravity; but they can also feel imposing and confrontational, especially if they run as a uniform series across the frame. Imagine the strength and power exhibited by a regiment of soldiers in battle lines, for example.

Whether your photograph features horizontal or vertical lines, it is important that they are aligned with the frame. A wonky line is instantly noticeable and will grate on you as you look at it. Of course, if you manage to take a slightly off-kilter photograph, it’s nothing that can’t be fixed in post-production. We’ll look at that toward the end of the book.



© Daniela Bowker

↕→ Straighter, stronger

The diagonal of this wine glass isn’t strong enough to be intentional, so it comes off as weak and sloppy. But by aligning the stem of the wine glass with the vertical side of the frame, the image suddenly becomes much more refined.



Whether your photograph features horizontal or vertical lines, it is important that they are aligned with the frame. A wonky line is instantly noticeable and will grate on you as you look at it. Of course, if you manage to take a slightly off-kilter photograph, it’s nothing that can’t be fixed in post-production. We’ll look at that toward the end of the book.

In the section on frame orientation, we looked at how the subject of your photograph normally dictates whether you shoot horizontally or vertically. As a general rule, scenes featuring horizontal lines should be framed horizontally to allow the lines to work with the longer side of the frame; likewise, photographs with strong vertical lines usually translate well in portrait compositions. This isn’t always the case, though. Sometimes, you can actually reinforce strong horizontal or vertical lines by using a portrait or landscape format, respectively. The picture of the remains of a colonnade on the Decumanus Maximus (the Roman equivalent of a Main Street) in Volubilis shows just that. The columns are incredibly strong vertical lines, but if I’d taken the photograph vertically it would have lost all of its impact. Its compositional strength comes from the repetition of the columns and this is reinforced by the landscape format.

Leading Lines

Lines can give your image an overall feeling or they can direct the eye across the photograph and out of the frame. However, they can also draw your eye toward your subject with an effect that’s verging on the hypnotic. A good leading line is just as effective as, and definitely more attractive than, a flashing neon sign screaming “The subject is here!”

Finding good leading lines isn’t as hard as you think it might be. People’s arms or legs can often be positioned to draw attention to their faces, and a flower has a perfect leading line in its own stem.



© Daniela Bowker



© Daniela Bowker

↑ Connect the columns (top)

The colonnade of the Decumanus Maximus at Volubilis: full of strong vertical lines and diagonal movement.

↑ Dovecote (bottom)

Even with the strong shaft of sunlight in the center of the image, the lines ensure that your eye is drawn immediately to the peak.

Diagonal, Curved, & Imaginary Lines



The colonnade photograph on the previous page is also a starting point for looking at diagonal lines. Your eye is immediately drawn to the foremost column on the right hand side, but it is then led downward and away to the left by the diagonal line of the colonnade. This is a good example of your eye being drawn out of the image, which contributes a feeling of movement and stops the image from coming across as dull—something that we touched on in the section that covered subject placement. If the colonnade had been perfectly aligned horizontally, the result would have been incredibly confrontational and felt static.

Whereas vertical or horizontal lines provide a sense of solidity or order, diagonal lines are far more dynamic because they aren't constrained by the image's frame. You can think of them as nonconformists, if you like. This means that they're great at giving a sense of implied movement and at accentuating actual movement in an image.

However, because they are such nonconformists, there are some points you should be aware of when you use diagonal lines. If you include too many conflicting diagonal lines in an image it can feel chaotic. Your subject can then get lost amid the chaos and your

← Follow the tracks

The human subjects are quite tiny, but their walking action is just recognizable enough to give meaning to the other, dominant elements in the frame: the levees stretching diagonally across the frame. These lines carry the movement of the human figures across the full expanse of the frame, while also providing valuable context as to their environment.

resulting image can feel weak. Diagonals also have a wonderful potential to introduce a sense of instability to an image, as their direction conflicts with the more natural stability of horizontal and vertical lines. While this can be highly effective in a photograph, it can also be disorientating and uncomfortable if left unchecked. In some cases, this could be just what you are looking for in your image; but at other times, it might work against your composition. So while diagonal lines are incredibly dynamic, always sound a note of caution when you include them in your images.

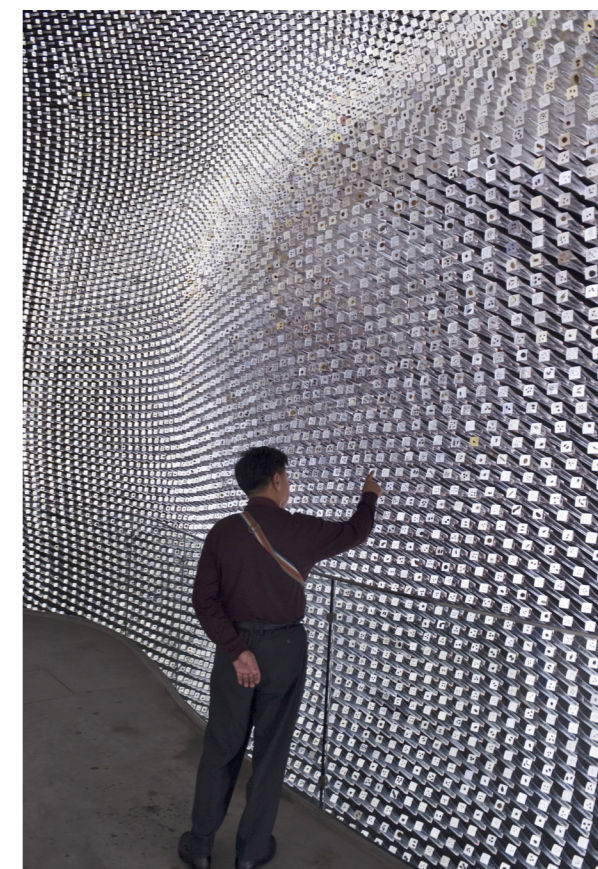
It's also worth remembering that parallel lines shot at eye-level and running off into the distance will appear to converge and therefore become diagonal lines. Of course this is the result of perspective, but it's another thing to think about introducing when diagonal lines into your photographs.

Implied or Imagined

So far, most of the examples of lines that we have looked at have been actual lines evident in the image. What we haven't considered yet are implied lines, or lines that we can somehow sense in the image even if they aren't there physically. One of the most obvious implied lines is an eye-line. We're curious by nature, so when we see a face in an image, we're likely to follow where it's looking. This may be a single subject looking out of frame, or a large group of people all oriented toward a common point, drawing the eye toward that apparently significant object or element. And it's not just human subjects—the way in which wildlife interacts with its environment can likewise lead a viewer's eye toward some other element in or out of frame. Eye-lines are powerful components of composition, as they work entirely by implication without having to make a definitive action or have a physical presence.

Curves

Whereas vertical and horizontal lines suggest stability and diagonal lines lend dynamism to an image, curved lines are far more sensual. They are smooth, inviting, and elegant. Just imagine the undulations of gently rolling hills or the silky curvature of a lover's neck. By using curved lines in your images, you'll lend them a softer, almost seductive appeal. They can also feel graceful and elegant, which you can use to play off otherwise stiff and rigid straight lines elsewhere in the frame.



↑ Real vs imaginary

The imaginary eye-line between the man's head and the book he's reading runs perpendicular to the diagonal shadows in the rest of the frame. The resulting tension adds an element of interest. In addition, the head, shoulder, forearm, and book make an implied curve that follows the frame edges.

← Undulation

Although curved lines occur everywhere in nature, they will invariably contrast with the unnaturally stiff and rectangular frame imposed on every scene by the camera. In this case, the abundance and exaggerated quality of the curving wall would almost have been too much if not for the human figure in the foreground, who grounds the undulated wall and gives it a sense of perspective and scale.

Lead with Lines

↓ Striped

The contrast between the twisting, organic branches and strong diagonals of the shadows makes the bonsai tree pop out from the wall.

In this section we've looked at how lines can reinforce composition, and also at how they can lead you to your image's subject or give a sense of movement to a photograph. Your challenge for this section is, therefore, to take a photograph that uses leading lines to draw your eye straight to your subject.

Of course, you shouldn't be using leading lines in isolation. You should be using all the other skills that we've covered in the book and practiced in challenges so far. Think about your point of focus and the narrative of the photograph. Where are you going to place your subject; how will you divide the frame; and what orientation will work best with your composition? What sort of aperture will you need to use to get the right effect for your shot?



© Daniela Bowker



Challenge Checklist

- Identify your point of focus.
- Use one or more lines to draw the eye to the subject.
- Ensure that the lines are working to emphasize the subject and not overwhelm it.

↑ Framing a triangle

Lines can also wrap around and give form to otherwise empty space, giving your eye something to follow and trace across the frame in the process.



© Adam Graetz



This is a familiar angle of view to any cyclist, but not something you'd normally think to take a shot of. I was about to pedal away when I noticed the parallel lines of my bike and the side of the street, and liked the feel of the composition.

Adam Graetz



Good observation and use of lines to guide the eye through the frame. My only quibble is that the parallel lines of the bike and street are neither quite aligned to the frame edges nor definitely diagonal. I would have gone for the latter, rotating the camera view counter-clockwise.

Michael Freeman



© Jennifer Laughlin



This photograph was taken with a Nikon D300. I held the flash to the side of the camera to illuminate the detail of the ribbon being threaded down the dress.

Jennifer Laughlin



I very much like this both for composition and lighting. The flow of the cross-ties (if that's what they're called) leads the eye down, aided by the edge of the dress, while the hands and ribbon halt the direction and concentrate the attention in the lower center.

Michael Freeman

Seeking a Balance

A fundamental part of composition, and something we'll be discussing at length and in many different ways, balance is arranging the elements of the frame such that tension is both created and resolved. Balance is not only about things being exactly the same in some scientific sense—that is veering into the idea of symmetry, discussed later on. You're not necessarily aiming for perfect and literal equality in every section of the frame; balance is much more suggestive than that, less exact and more implied.

One way of approaching balance is finding an image's "visual center of gravity" and proceeding to organize its compositional elements around that point. That visual center can be a mass of color, a high-contrast area, and arrangement of shapes with particular directions, the list goes on. What's important is that you compose your images so that the eye wants to move across all of the frame. Although it might be directed to the subject, no part of the image feels under-used or superfluous. Rather, everything is working in harmony to create a whole.

The vital element governing the sense of balance in an image is the interaction between the subject and the background. By creating a subtle tension between them, the scene will have a point of focus, a feeling of movement, and a sense of direction. Even if the subject comprises only a small portion of the overall image, by ensuring that there's a strong relationship between it and the background, the subject won't look overwhelmed and the composition won't be lopsided.



© Daniela Bowker

← Room for rain

This photograph was taken at an outdoor theater performance when it rained from beginning to end. The subject might be the actor's feet, but it's the puddles of water on the stage that make the image. Harmony is created between the puddles and the feet in order to communicate the feel of the scene.

In a portrait, if you choose a placement that puts the model far over to one side of the image and leaves the other side a blur of background, it could be easy for that photograph to become horribly unbalanced. The portrait can still work, however, if the model's eye-line or positioning directs you across the empty portion of the frame. The gaze or orientation creates a tension, which in turn creates a feeling of balance. Similarly, by not having such a blurred background and leaving some object to complement the model in the emptier side, the image will balance out.

If you're photographing in strong light, try using a shadow to give balance to the composition. A shadow that falls so that it replicates the shape of the subject can add an interesting dimension to your image. Alternately, shadows can be used to elongate or widen the subject, drawing the eye down or across the frame.

Don't feel as if you must balance your images only between left and right or horizontal and vertical. We've looked at how diagonal lines provide a strong sense of movement in a composition, and balance works just as effectively on a diagonal, too.

Balance can come in many different forms in an image. You might want to counterpoint contrasting colors, or position your skyline high up in the frame so that it feels as if it's cascading downward, for example. By being certain of the story that you're trying to tell, thinking carefully about your subject placement, and having a feel for movement and direction, you'll be able to find the right elements to create balanced and satisfying images.

→ Diagonal distribution

This window, with its decorative shutters, could have been captured head-on for a symmetrical, but static shot. Shifting the subject slightly down and to the left livened up the composition, but it would felt slightly lopsided were it not balanced out by the strip of highlights forming a triangle at the upper right.

↓ Not-so-empty space

In this clear and straightforward presentation of compositional balance, the elements at the top left and bottom right of the frame not only complement each other, but are also pulled together into harmony by the subtle diagonal lines in the blue background.



Symmetry



↑ Full steam ahead

A close crop coupled with bilateral symmetry (which itself is further emphasized by directional light casting the left side in shadow) makes this boat feel like it is about to splash right through the page.

↘ Church facade

The church is aligned symmetrically, but there was nothing to be done about the clouds.

↓ One or the other

Almost, but not quite there: The flames are aligned, but the holders aren't.



© Daniela Bowker

© Daniela Bowker



A particular kind of balance, symmetry takes the principles of balance that we discussed on the previous pages to the extreme. Whereas more dynamic sorts of balance are an art of creative positioning of abstract weights and shapes, symmetry is much more of an exact science, with all the demand for perfection that a scientific approach suggests. It's a powerful effect in its own right, one that flouts the off-center approach to create punchy, graphic images. Of course, it isn't always possible, as some subjects simply aren't symmetrical and can't be photographed as such. Man-made objects are often well suited for this compositional approach, as the design of their construction often embraces symmetry as a guiding principle. But keep an eye out for natural subjects that can be captured this way as well, as their organic structure makes the symmetry all the more impactful.

If you're aiming for a symmetrical image, in the vast majority of cases it's important that it's perfectly, literally symmetrical. The human eye has an incredible ability to recognize and finely evaluate geometric organizations, and if there is even a stray hair out of place in an otherwise perfect symmetry, that out-of-place element will gnaw at the viewer and steal the focus of the image. It will take time to align all the elements and place them properly in the frame—a tripod helps here, as does a spirit level. Keep a close eye on the edges of the frame, and make sure that lines and elements are falling evenly across opposing sides.



There is a particular beauty to something that is a perfect mirror-image; it can feel restful, ordered, and simple. This is, of course, in contrast to asymmetric images, which feel dynamic and complex, and sometimes even chaotic. And it's why symmetry should be used sparingly, as it grows boring and inert quickly.

Natural Reflections

Photographs that feature reflections are examples of symmetry that work especially well. This is true for several reasons. First, a perfect reflection in a lake is an awesome sight; it's the sort of picture that, if done well, can be breathtaking. Second, the line of symmetry in a reflection usually, but not always, runs along the horizontal plane. As we're naturally disposed to read images horizontally, we aren't immediately struck by the symmetry and we'll be inclined to look for the movement in the asymmetry of the left and right halves.

↑ Through the trees

Lake reflections are so idyllic as to often be a cliché—but that can be avoided by including additional elements, like this tree in the foreground.

In addition to lakes, there are quite a few other things that can be photographed symmetrically. Portraits can work a treat if composed symmetrically, and some architecture can make strikingly symmetrical images. Just remember: It has to be perfect, and you might need to employ the help of some photo editing software afterward to make it look as good as it should.

Strengthening with Triangles

We've already looked at how pinpointing your subject is essential to producing a strong composition, and how organizing your frame effectively is a vital part of achieving this. So far, we have concentrated on images that have one particular point of interest, for example a person, an insect, or the sunset. But not all of your pictures are going to be simple constructions of solitary portrait subjects or gorgeous vistas with an obvious point of focus.

When your subject is interacting with other elements of the scene, making sure that the various points of interest have a definite shape and are somehow ordered within the frame will prevent your photograph from descending into a disorganized and chaotic sprawl. One of the most simple and effective means of doing this is to use a triangle. Triangles also have the advantage of being simultaneously stable and

© Daniela Bowker



← Imaginary triangles

Constructing a triangle is simple: It requires only three points and three lines between them. They can be configured in almost any format and the lines don't even have to be tangible—they can be implied or imagined, like an eye-line. This makes them easy to introduce into your particular photographic compositions, and as a consequence bring order to your frame.

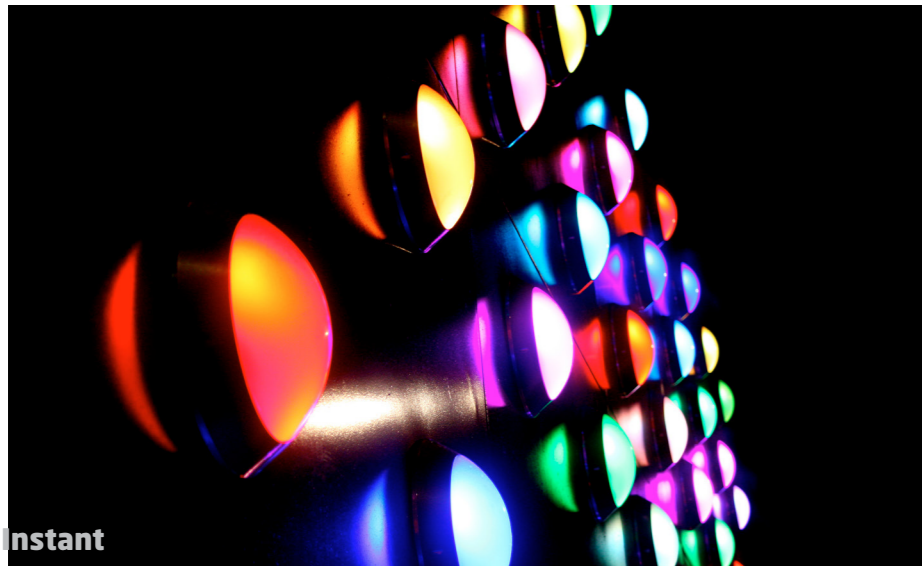
dynamic: Their edges can bring a sense of solidity to a composition, while the convergence of their points brings a natural sense of movement. Triangles also come with their own leading lines. And unlike circles or rectangles, which require exact ordering and straight lines, triangles are much easier to create out of constituent elements, and more forgiving in their configuration

(they achieve their strengthening effect regardless of their orientation, and their sides need not be of equal length).

If you are photographing three people, arrange them so their faces become the points of a triangle. This will give the image a sense of structure and also avoid the predictability of having three faces in a row. With more than three people in a composition, think about placing them so that they create either one large or several smaller triangles.

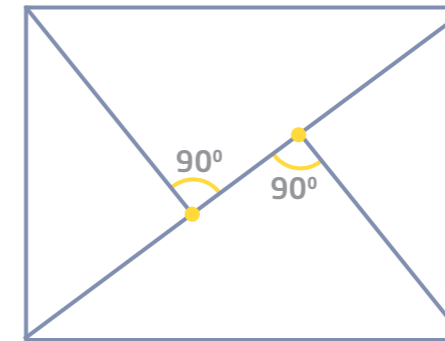
← Two lines plus a side make three

If properly composed, a subject can use one of the edges of the frame as part of its triangular organization. This image has two obvious lines: one rising up toward the center top, and one falling down toward the bottom right. The eye completes the triangle using the bottom of the photograph, and the result is a self-contained, stable structure, with a strong sense of movement emphasized by angle at which it was shot.



Giving a Sense of Movement

A tall building photographed from below will give the impression of creating a triangle—it's a natural result of perspective as the vertical lines converge (see page 115 for more details). This sort of pyramid structure is very stable, and because it encourages the eye to move along the building, from bottom to top, it's also dynamic and offers a different perspective on an otherwise rigid structure. An inverted triangle won't have the same sense of stability as a pyramidal one, but it does still have a strong sense of direction and movement. By using its intrinsic leading lines, it will serve to direct focus toward something that is small or doesn't necessarily catch the eye immediately.



← Off-kilter composition

The portrait works because each element of the subject's face falls along the lines and points of interest according to the Golden Triangle.

Dividing the Frame

As well as arranging three subject points into a triangle, you can also divide your frame into triangles to give it a sense of order. If your composition involves multiple objects—for example a bouquet or bed of flowers—this technique can work to encourage the eye to look toward the point of focus. You can also use triangles to bring a sense of balance to an image by emphasizing contrasts within it. Your triangles can consist of different colors, textures, shades of light, or any other distinguishing characteristic. This can work very well in bringing order to an otherwise busy and cluttered scene. Dividing the frame in this way is simpler than you may think. Remember you need only three lines to build a triangle, and one or two of those lines can be the edges of your frame.



The Golden Triangle

There is also a more rigid division of the frame into triangles that is based on the law of the Golden Ratio, which we looked at earlier. This is, perhaps unsurprisingly, called the Golden Triangle. The theory behind it divides the frame into two right-angled triangles along the frame's diagonal. These two triangles are then subdivided again, by lines running from the other

corners and each intersecting with the original diagonal line at right angles. Where the lines intersect, you have your points of interest.

If you're thinking of creating a triangularly oriented composition, then the Golden Triangle is something to bear in mind to help give it a sense of balance and a point of focus. And it is certainly something to be added to your collection of triangular shots.

© Daniela Bowker

Balance your Composition

↓ Balance by density

This composition makes use of the openness of the bottom-right exterior, complemented by the vase on the tabletop with its opening diagonal lines, to contrast the density of the rapidly repeating woodwork occupying the upper left of the frame.

Now that we have examined balance and the various methods of achieving it, this should be something that you think about every time that you raise your camera to your eye. You might even find that it's the balance in a scene that inspires you to take the picture in the first place. Pay close attention to the relationship between your main subject and other elements.

For this challenge, you need to produce a balanced image where the subject is positioned high in a corner, or far over to one side of the frame. There is a wide range of options open to you to help you create a balanced image, but whatever you choose, remember that the success of your image is going to be dependent on no part of your frame feeling redundant.

→ Balance by shadow

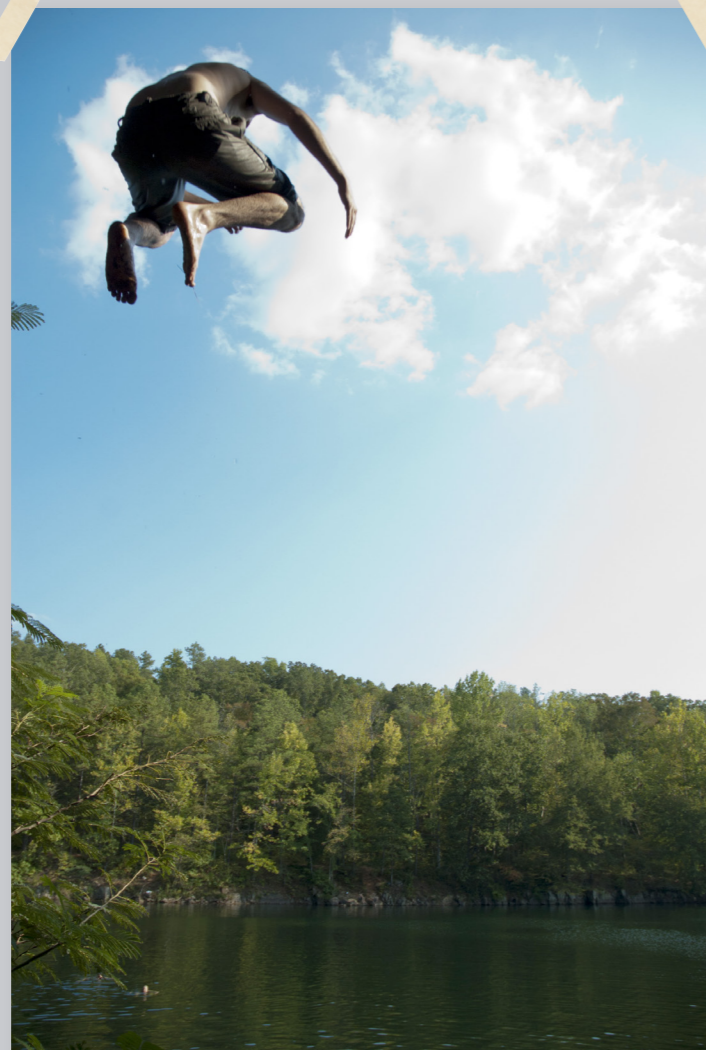
Careful shadow placement immediately makes a clear balance between the upper and lower regions of this minimalist shot. But at the bottom of the frame, just the tip of the doorway is all it takes to anchor the full frame and balance out the other windows farther above.



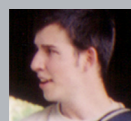
Challenge Checklist

- The subject of your image should be in an off-center or unusual place.
- Ensure that the image is properly balanced.
- Consider using triangles, symmetry, or some other compositional tool.





© Adam Graetz



Timing was everything with this, of course. The shutter speed was fast enough to freeze the subject not only against the sky and clouds, but also in an interesting pose—I don't think people usually think about how they look when they're jumping off a high cliff into the water.

Adam Graetz

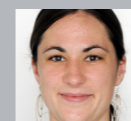


Quite a dynamic shot, and immediately engaging. The open sky is a great backdrop for the leaping figure, and the tension between the upper and lower parts of the frame is what draws attention so effectively. And as you say, timing is all—great position of the figure, and the back perfectly fitting the cloud.

Michael Freeman



© Gillian Bolsover



I composed this photo for the action I hoped would happen, the boy reaching out toward the pigeon. If you only compose for what you see, you will miss the moment. You have to think ahead and predict what might happen.

Gillian Bolsover



Excellent anticipation, and the composition works well dynamically, taking the eye across the frame from left to right, then flying out to the sky at the decisive moment. To this end, in the processing I would suggest opening up on the figure at far left, to help the eye travel across the full frame.

Michael Freeman



Color, Pattern, Space, & Light

Photography gives you the opportunity to achieve some of the most breathtaking images using combinations of light, shadow, color, and shape. In many respects, these elements are curious beasts, because they're intangible: We can chase shadows all we want, but we can't touch them. However, if you know about the impact that light can have on your composition, or how angles can change the feel of a scene, or the mood that color is able to impart, a whole new creative world is opened up to you. Suddenly, you'll be able to create images that before you could only imagine.

As you read through all the techniques, guiding principles, and creative approaches it may seem like it's too much to keep in your head all at once—and indeed, it's unlikely that you'll be able to evaluate each and every scene from all possible compositional angles as it presents itself to you. But don't get overwhelmed. Work through the principles expounded upon in each section, experiment as you see fit, and let it all sink into your unconscious. That's where your creative impulses originate, anyway. Gradually, you will feel innately compelled toward a certain kind of organization, or a particular lighting style for a given subject—it will all become second nature. In the meantime: Read, explore, and shoot!

Color

It should come as no surprise that colors elicit certain emotions. Red, being the strongest and densest, feels energetic, hot, and vital. Yellow, the brightest of all, feels cheerful and vigorous. Blue is of course quiet, contemplative, and subdued. Green, so abundant in nature, suggests growth and youth. Violet is quite rare in nature, and so has a mysterious and superstitious quality to it. Orange, which coats every landscape during sunrise and sunset, is festive and inviting. While these emotive responses are useful in working color into your compositions, it is also important to pair them with precise descriptive language for how color is constructed.

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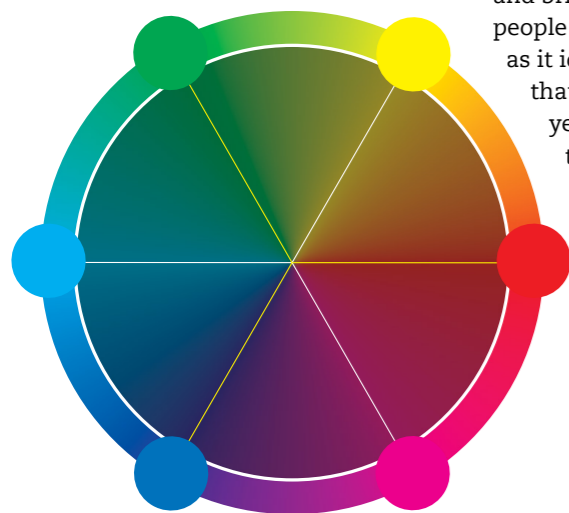


© Daniela Bowker



Two takes on nature

These images are both nature subjects, but with their different color palettes, they create two completely different feelings.



The Construction of Color

Digital photography gives us exact terminology for both describing and manipulating color: hue, saturation, and brightness. Hue is what most people mean when they say "color," as it identifies the specific wavelength that corresponds to, say, blue, yellow, or green. Saturation is the strength, purity, or intensity of a particular hue (or lack thereof—as a completely

Endless possibilities

This particular representation of the color wheel illustrates the almost infinite number of hues that exist under the broad categories of blue, green, yellow, orange, red, and purple.

desaturated color appears as a shade of gray). Brightness is simply how dark or light the hue appears. Of these three terms, you can see that hue is the most significant, with saturation and brightness being constituent parts. Hue can also be measured in 360 degrees as it moves around the color wheel, shown left. At any point, the color 180-degrees opposite on the color wheel is that hue's complementary color, which gives a naturally pleasing contrast that enhances the quality of both colors and creates harmony in the image. This is yet another role of balance in composition, which we began to discuss in the last chapter, except rather than discussing lines and weight, we now also have to consider the way in which color can create—or disrupt—harmony in your photography.

Color Relationships

While single colors can have an overwhelming effect, multiple colors can work together to contrast or harmonize and create a sense of balance in a photograph. Just as a large object at one end of the frame can create tension with a smaller one at the opposite end, complementary colors both create and resolve tension in a photograph, and can bring disparate elements together in a meaningful and satisfying way. Of course, it isn't all plain sailing; colors can work against each other

and make an image look boring or chaotic. If the subject isn't placed carefully, too many different colors in one scene can detract from it. If you have two competing and non-complementary colors in the frame, the eye won't necessarily know where to look (tension is created but left unresolved). Then again, if you don't use a big enough range of colors, there's a possibility that the photograph will come across as flat and uninteresting (though, as you'll see, there is a place for subdued color palettes, depending on your particular subject and the mood you want to convey.)

You have to ensure that there is enough variety to create something that's stimulating. Sometimes this is a subtle art—whereas orange will always play strongly off blue, and red off green, you can also use gradations of a single hue to introduce variety into your shots. As you study and learn to appreciate the nuances of color, you will gradually recognize that large swathes of uniform color are, in fact, quite rare. Usually you will find understated colors delicately playing off each other in the details.

Subtle shades

How many different shades and tones of red can you name in this image? When you take a photograph that makes use of analogous colors you want it to be a challenge to name all the different tones, shades, and tints of a color that are flooding through it.



© Daniela Bowker

Nature's palette

Absent fine detail, this image relies heavily on the rich color of the adobe church, which complements the dark blue sky in such a way as to both accent the shape and contours of the church's structure, and pull the lower and upper elements together into harmony.

Accentuating Color

Saturated colors are stronger than muted ones, both literally in the intensity at which their hues are displayed, and also figuratively in the impression they give to the viewer. We naturally respond more to bold, punchy colors, as they attract the eye and speak loudly. But this absolutely should not

mean you need to ramp up the global saturation in all your images. Doing so spoils the effect and your other compositional choices can get lost in the noise. It is much more effective to choose specific colors and increase their saturation selectively, so they can play off softer tones in the frame.

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When and What to Saturate

There will be times when color is the dominant element in your image, and you will need to bring out that color to its fullest possible effect. Sunsets are a classic example: The fact that the sun is on the horizon is not what is particularly thrilling; it happens every single day. What is exceptional about a sunset scene is the radiant skies that take on vivid tones and transforms what was, just a few hours ago, a solid blue sky into a whole canvas of warm, glowing tones. In such situations, you have a lot of leeway in the amount you can boost the saturation.

But not every scene relies so much on color to communicate its themes. In fact, while we expect to see a variety of colors everywhere in our day-to-day life, the natural world offers far fewer bold colors than we may realize. Just try going out on a nature walk and capturing all six strong colors (as described on page 62). If you come across some exotic flowers, you might luck out, but otherwise you're likely to find lots of soft greens and browns, some pastels and slate blues, and plenty of grays. This natural color palette is not necessarily something you should fight against. If you want to communicate the peaceful, pristine



© Daniela Bowker

↑ Bold attraction

Your eye is drawn immediately to the bolder, red-orange pollen rather than the plain white petals of these crocii.

← Emerging from shadow

It's not just complementary colors that accentuate each other; black and white can intensify or mute other shades, too. By placing a color on a black background, you'll embolden it; and white will make it seem slightly more dull and subdued.

conditions of a babbling brook or a rolling countryside, adding color isn't going to suddenly achieve that for you. Rather, you will need to lean on your other compositional tools and techniques. If, on the other hand, you want to communicate the dynamism and hectic commercialism of a metropolis, vivid colors will be just the ticket, and you will have no trouble finding examples of them in man-made environments. Yet again, it is simply a matter of recognizing the right tools for the job, and implementing them in such a way as to both achieve your creative vision, and adequately (if not accurately) represent your subject.

Color Intensity and Light

If you're shooting in low-light situations, it's important to remember that colors from the blue and green family will appear brighter to your eye than reds and yellows. This is known as the Purkinje Shift, and is a result of the transition from using mostly cone-based color-sensitive vision during the day to rod-based light-sensitive vision at night. Cones detect yellow light better; rods pick up blue light more effectively, hence the eye finding blues and greens brighter at twilight. Of course, our cameras don't have rods and cones, which means that they'll detect the colors differently than our eyes. What you see at the time might not be quite the same as what your photograph shows later.

Multiple Colors

Just because too many colors can make an image chaotic, it doesn't mean that you can't use them. Flooding a picture with a host of different colors can be extremely effective. A lot of it depends on how it is done. You might find that in this situation it's the range of color itself that is the subject of the photograph.

From Black and White to Color, and Back Again

The first photographic images were all black and white. It was Eastman Kodak who introduced color photography to the masses when they released the now-discontinued Kodachrome film in 1935, which soon became the photographers' film of choice for its vibrant colors. Still, it took until the



© Daniela Bowker

← The rainbow approach

If the intention had been to accurately represent the shape of a pinwheel, or to take a still life in a toy store, the abundance of colors seen here would have been inappropriate. As it is, the colors themselves are of primary importance, and are bright and diverse enough to speak for themselves.

↓ With and without

The color version is warm and inviting, but there's a timeless elegance about the black-and-white version that elevates a snapshot to something more.



© Daniela Bowker

Compose with Color

↓ Dominant reds

Letting one color consume the frame will give your photo a punch.

Color has the most dramatic potential for your images. It can change the entire mood of a photograph; it can bring life to an image; it can accentuate the subject in a way that simple placement can't; it can even form the subject of a photograph itself. So for this challenge, you need to go and experiment with capturing color.

Make color the most significant aspect of your photograph—superseding the particular shapes and lines of the subject. Of course those elements will still be there, but what's important here is that you get a feel for the primary impact that color can have on your images.



→ Up, up, and away

On the other hand, including multiple colors gives the eye some contrast and invites comparison among different parts of the frame.



Challenge Checklist

- Train your eye to see color first and foremost, and compose around either one color, or the interplay of several.
- Identify the contrasting and analogous colors in your scenes.
- Use color to bring balance to your photographs.



© Sven Thierie



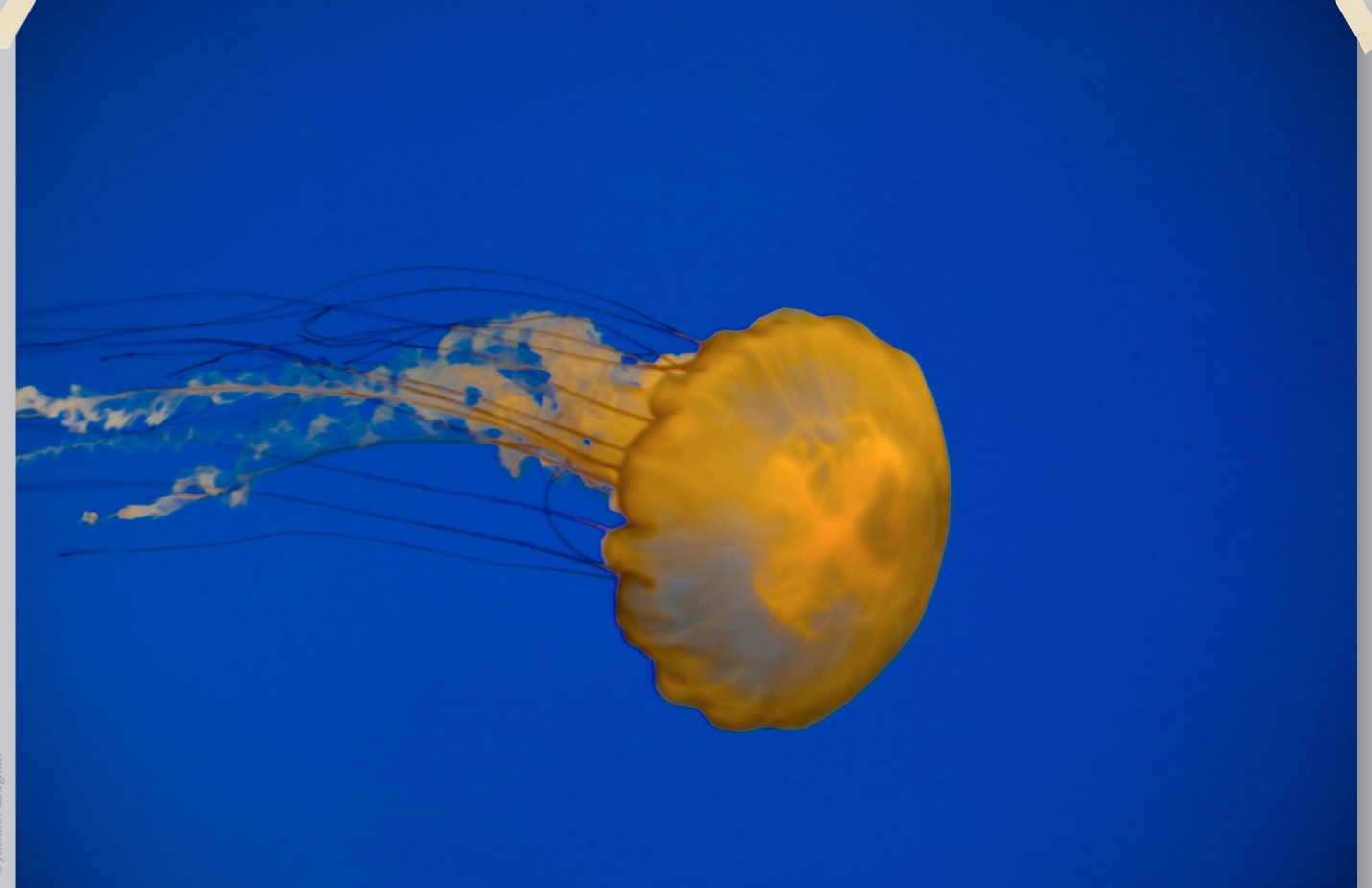
I was surprised when I reviewed this photo later, as it looks almost like a very shallow depth-of-field macro shot. But in fact it was just a lamp casting this beautiful rainbow against the ceiling. It made the whole interior decoration of this restaurant quite lovely.

Sven Thierie

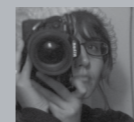


Yes, that was my immediate reaction, too. Delayed recognition that these are reflections adds to the interest. Good choice of positioning, with the diagonal direction from fitting to lamp tip making a cross with the orientation of the subject and the background.

Michael Freeman



© Jennifer Laughlin



The jellyfish had such an incredible color, contrasting with the blue tanks, I had to shoot it. I used a pretty long exposure, so it took me several shots to get a sharp one. I couldn't use flash due to the reflection it would create against the glass.

Jennifer Laughlin



These rich, saturated, contrasting colors work fantastically together. The shape of a jellyfish is always interesting anyway, and its body is all the more accentuated against that bold blue background. My compositional eye, however, wants to shift the view a little to the left—less empty blue on the right.

Michael Freeman

Pattern & Repetition



There's a wonderful French expression, "metro, boulot, dodo," that's used to describe the humdrum of working life. You commute to your job, you work, you sleep; the next day, you get up and do it all over again. What it describes is mundane, but the way that it describes it isn't. There's a rhythm and delicious melodiousness to the words that makes them attractive, and saying the phrase several times over doesn't diminish it. When it comes to imagery, repetition by itself can be monotonous; yet there is also an appealing stability, an attractive flow, and a captivating charm to a pattern.

← Backing up for perspective

A side-by-side shot showing only two of these boats wouldn't suggest a pattern, as there is plenty to distinguish them up-close. But as with many other subjects, backing far enough away causes the eye to look for similarities rather than differences. In other words, pattern can be a matter of scale.

© Daniela Bowker

Consistent Patterns

If you isolate a pattern from its environment, you can induce the sensation of the infinite in your image. The pattern has no beginning and no end, and for all that the viewer knows, it could go on indefinitely. This is the sort of photograph for which using a longer telephoto lens, or even a macro lens if you have one and are focusing on a very small area, is helpful. But don't think that it isn't possible if you've only a limited lens selection: Get in as close as you can, and if you have enough resolution, you can crop in even closer afterward.

Sometimes, altering your vantage point can help you to spot a pattern that you otherwise might not have noticed. For example, looking down from a tall building can give you the possibility of rooftops, of cars, of people, maybe even a sea of umbrellas if it is raining. Try looking up for architectural patterns or bark and leaves on trees. If you get in close, you can see the patterns in fruit skins, tire treads, and even the weave of fabric. Once you start to look for patterns, you'll spot them everywhere.

↓ Everywhere you look

Patterns come in both man-made and natural forms, and you don't have to look very far to spot one. Bricks in a wall form a pattern, as does the veining on a leaf. Man-made patterns tend to be regular and this can make them feel quite constrained and formal, whereas natural patterns usually have irregularities and feel more relaxed.



© Daniela Bowker

Broken Patterns

Spotting a break in a pattern—or even creating one deliberately if you have to—can be the focus of an effective photograph. The break can take almost any form: There could be a gap in a row, an aberration in a consistent flow of color, a change in texture, and so on. The key is that it inserts something arresting into the frame that draws the eye and forms the point of focus in the image. Patterns coming into conflict with each other are a slightly different take on the idea of a broken pattern. Two or more different patterns may create an unpleasant dilemma for the eye, so the point at which they clash should be the focus of the image.

Patterns and Color

There is often a strong relationship between pattern and color. In a monochrome image, it might be tonal differences in that one color



© Daniela Bowker

← Color coding (far left)

A row of red-orange jars alone would have been somewhat unexceptional as a subject, but contrasting those lines with yellows above and below, further separated by the dark brown shelves and punctuated by the white lids, all come together for a nice variety.

← Hides to dry (left)

This photograph is almost entirely different shades of yellow, but it's those different shades and the unusual shapes that give it interest. Furthermore, there is a repeated textural contrast between the smoothness of the hides and the roughness of the ground on which they are spread out.

that comprise the pattern. If you photograph a broken pattern, the break in the sequence might be something of a different color. The balance created by multiple colors in a sequence can prevent a pattern from looking too static and monotonous. Just because something is repetitive, it doesn't mean that it has to be boring.

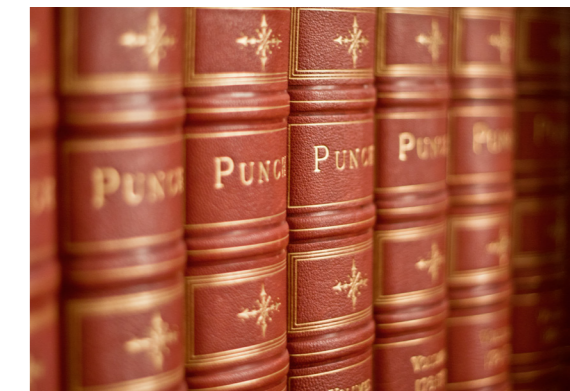
Pattern and Placement

You will often find that the constituent parts of a pattern, whether they be lines or the points at which an inconsistent pattern breaks, create natural compositional indicators. If you have strong horizontal or vertical lines, these will automatically suggest your frame orientation. A break in the pattern would be an ideal focal point and something to be positioned carefully (possibly off-center, to create tension). Knowing what it is that you are trying to convey in capturing a pattern—the odd one out, the feeling

of the infinite, or the sense of consistency—will help you to decide on the ideal placement as story and composition combine.

↓ Multiple volumes

If you want to create a dynamic image, think about setting the pattern on a diagonal. If you look at this photograph of shelved books, setting their spines square and head-on in the frame could well have made it too static and confrontational. Instead, the diagonal orientation induces a feeling of movement and continuity as the books head out of the frame.



© Daniela Bowker

Follow a Pattern

↓ Three in a row

Patterns don't have to stretch on into infinity—sometimes a simple arrangement is even more effective.

Patterns really are easy to come by and they can either contribute to or create a beautiful photograph. Whether you spot a man-made pattern, capture a natural pattern, or even create one yourself for the purpose of this challenge, that's what you're going to photograph.

It doesn't matter if you decide on a consistent or a broken pattern, either of those will create plenty of opportunities to practice the skills that we have covered already in the book. Just keep an eye out for repeated subjects, and consider carefully how you want to frame them up.

© Daniela Bowker



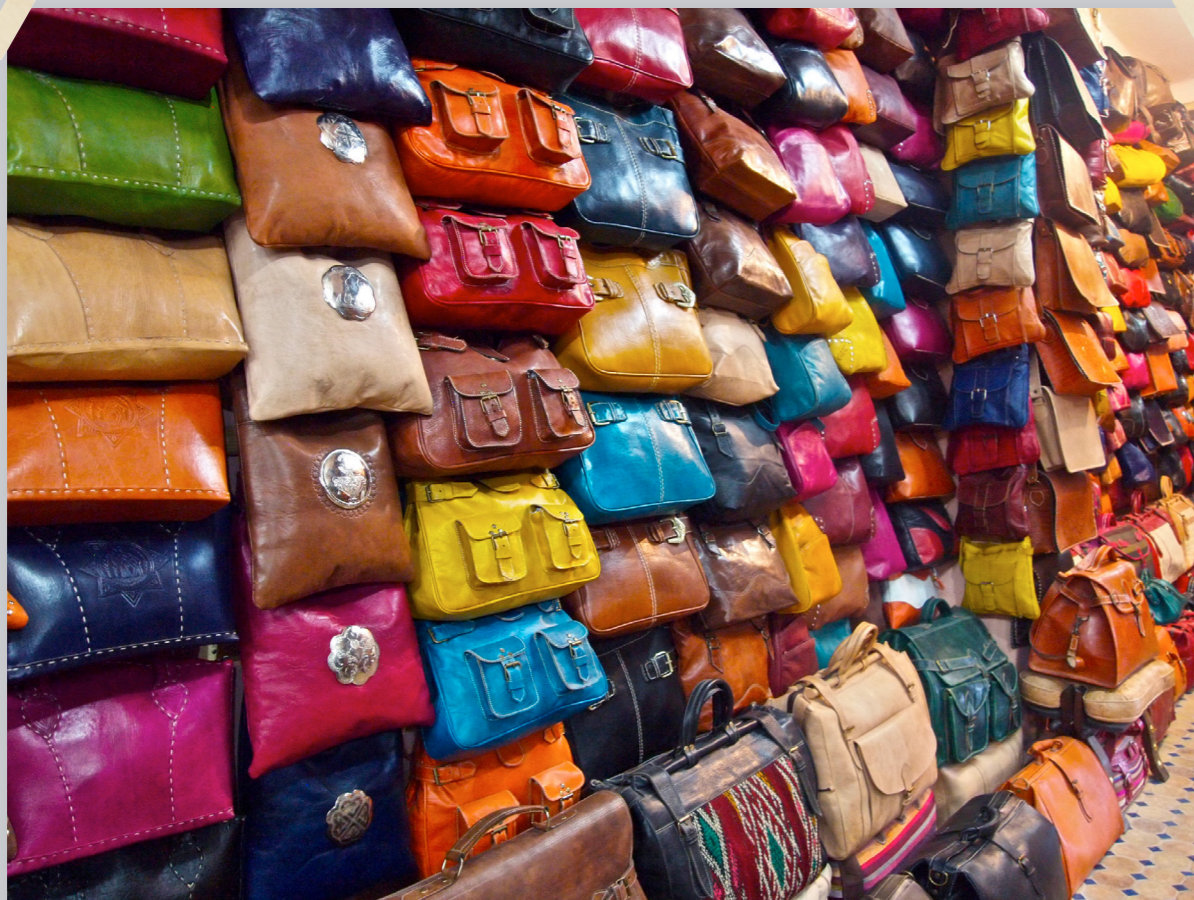
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↑ Textural close-up

Cropping in tight on an ongoing pattern will invite a close study of its detail.

Challenge Checklist

- Take a photograph that features a pattern.
- Consider your subject placement to ensure that you have a dynamic, balanced image.
- Think about the aperture you will use and how much background blur this will create.
- Take into account the impact of color on your photograph.



© Sven Thierie



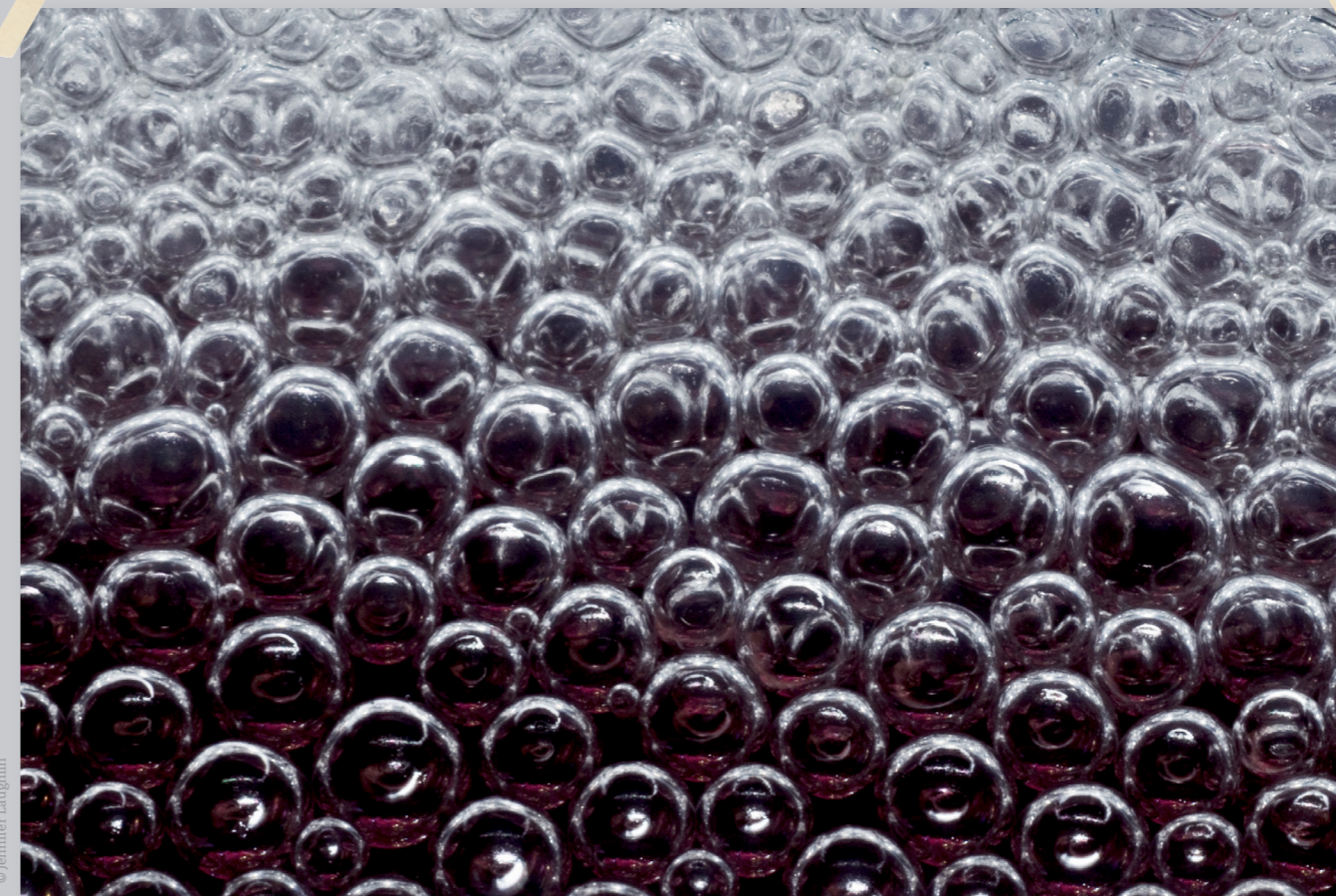
The diversity of bold colors shown here drew my attention from some distance away. I took a few shots looking straight at them, but they didn't look nearly as interesting as this angled shot which leads off to the right.

Sven Thierie



An acute angle usually gives more dynamism to a pattern shot like this, as you rightly say. It also usually leave you with a decision about where to crop at the far end. Here you have more depth, but at the slight cost of corners that prevent the pattern from filling the frame completely.

Michael Freeman



© Jennifer Laughlin



This is a photograph of betta fish bubbles. My betta would make nesting bubbles at the top of his bowl. Using only window light and a small reflector card for lighting, I used a 55mm macro lens with an extension tube to shoot their pattern.

Jennifer Laughlin



Excellent lighting setup, as the gradation from light to shadow adds interest and also more and more catchlights in the bubbles as you move down the frame. Also a good example of how moving in close and eliminating any context makes patterns feel endless.

Michael Freeman

Changing your Angle

Shooting things at eye level is entirely natural and normal; it's how we see things, and so how we automatically translate them to a photographic image. But a portfolio or gallery of images all shot at the same angle will quickly feel boring and uninspired. If you're seeing things from that angle, then chances are just about everyone else will see it from that angle too. Fortunately, you can make dramatic changes to the angles of your shots by simply tilting your camera so that it isn't perpendicular to your subject.

Look Up

Trying to photograph all of a tall building at eye level is often a real challenge. If you shoot head-on (at eye-level) with a wide-angle lens, you'll miss out on its fine detail and end up with way too much foreground; and if you try to move back to fit it in with a longer lens, there's likely to be something obstructing your view. So what to do? Get closer and look up. By tilting your camera up, you will transform the building's vertical lines into diagonals, which you know from pages 44–45 will impart a dynamic and graphic style to the shot. From a technical standpoint, it's introducing perspective distortion, but don't let the negative connotations of the word "distortion" prevent you from experimenting with strong angularity and unusual, energetic compositions. It does require a delicate touch, as even slight shifts or movements will make dramatic difference in the final shot.



↑ **Above and authoritative**
The viewer imagines themselves at a lower, inferior position, which imparts an authoritative air to the subject.

As usual with wide-angle compositions (which are covered at length on pages 114–115), the foreground will be given a lot of emphasis, and that's where you'll see most of the detail in your shot. There is also an impression of authority and even intimidation resulting from this vertically skewed perspective—what may look like a graceful skyscraper from a distance becomes a towering fortress looming overhead. You'll get an amazing sense of the scale of the building—in fact, as it recedes into distance, it will appear even taller than it is.



© Daniela Bowker

↑ **Below and seductive**
Coupled with direct eye contact from the subject, this elevated position feels more intimate and suggestive.

The same air of authority is something that you can give to portraits if you shoot them from below. Your subject is going to look considerably more imposing when they're towering over you. It is worth remembering, though, that if you're photographing people from below, be careful that you don't give them double chins or look straight up their noses. Neither of these angles will contribute to the look you want, and they won't exactly flatter your subject, either. Have them keep their chin up and their gaze outward.

Look Down

Whereas crouching down and looking up is something you can do with the vast majority of subjects, it is not often so easy to position yourself (or your camera) above the subject. And yet, humans have a fascination with elevated views—we gravitate toward balconies, high cliffs with sweeping vistas, and window seats on airplanes. These positions are valued for both their rarity and the unique perspective they give of a scene. Take a city street for example: What could be a messy and busy shot that doesn't convey very much at all at eye-level suddenly becomes ordered and has purpose when shot from one or two stories up. And from even farther up, you can convey an encompassing sense of the spirit of the town or city and its greater structure and organization.

Get Down

Another option for finding a unique perspective is to crouch down, but keep your angle parallel to the ground. This is classically a useful way to photograph pets and children. It may seem counterintuitive, in light of everything this section is suggesting, to photograph these subjects at their eye-level; but in fact, because we are used to looking down at subjects shorter than us, suddenly find ourselves on an equal playing field (visually speaking) has a striking and novel effect. What's more, your smaller subjects will probably appreciate and feel more at ease with the interaction at eye-level, so you'll find yourself with even better photographs.



© Daniela Bowker

↑ **Bird's-eye view**
From ground level, the trees surrounding this Akha village in Thailand would only ever have been a background element; but from the air, they encircle the village in a natural frame, and also illustrate the way in which the village emerges from the surrounding wilderness.

← **Through a child's eyes**
There's a subtle irony in this portrait, in that while this small child is normally seen looking up at other people, he is nevertheless composed at eye-level, suggesting an equality between the viewer and the subject.

Natural Frames



Viewfinders aren't the only things that can frame a scene. Far from it. If you keep an eye out for them, you will find innumerable "natural frames" that you can capitalize on to aid in your composition. Despite the word "natural," they don't have to be organic in substance; it's just that they happen to be there in the image already—a frame-within-a-frame. They serve as great compositional tools to direct the eye straight to the subject of the photograph. They're also valuable because they can bring perspective and a sense of three-dimensionality to an image. It's as if you're looking through one layer of the image and on to another. We also tend to find images that use natural frames attractive because it brings order, in the same way that using triangles helps to organize scenes with multiple subjects. A frame puts a limit on the scene and provides it with some boundaries.

Almost anything can serve as a natural frame: windows, doorways, and arches are obvious choices, but trees, fences, and cave openings work as well. They don't have to be complete frames, either. You might find that the trunk and over-hanging branches of a tree create a frame on only two sides of an image, but it is enough to create a feeling of depth in the photograph and direct the focus to the subject.

When you're composing a photograph using an existing natural frame, it's important to think about how the frame is going to interact with and affect both with the subject it's containing and also the photographic frame of the image itself. You'll need to pay attention to the lines that the image is creating, and how they are going to emphasize the subject and maintain a sense of dynamism.

← Frames within frames

Architectural design often takes into consideration how certain views will be framed as one moves through a building, so keep an eye out for these cues and take advantage of them as they present themselves.

↓ Singapore sights

Natural frames work best when they bear some thematic relationship with the subject they are framing. This shot combines two iconic Singapore landmarks—the Singapore Flyer (the ferris wheel) and the Skypark (a skyscraper with a huge pool on the roof)—and in doing so, identifies itself strongly with the whole city.



© Rachel Kwek

Just because the image has a natural frame that is bringing focus to the subject, you shouldn't ignore other compositional theories—for example, the Golden Ratio. By combining these techniques, you'll be able to create a great image, not just a good image.

Think carefully about the depth of field that you'll want to use in your image, too. If your subject is at a different distance than the frame you want to use, and you intend for both frame and subject to be sharp, then you will need a small enough aperture to give you adequate depth of field. Alternately, sometimes a natural frame can still serve its purpose without being in sharp focus, and you can isolate only the subject in a shallow depth of field. In the portrait to the right, for instance, the dark shadow of the tree does the job of framing the little boy while being nothing but a blurry amorphous shape. Indeed, details in the branches or trunk likely would have only distracted the viewer.

If you're inside a cave or tunnel, shooting out through its opening to capture a subject that is brightly lit by exterior light, you might find that you will have to compensate the exposure in order to use the opening as a natural frame. If you are using a matrix metering mode, you can ensure the exterior is not overexposed by dialing in some negative exposure compensation. Another approach is to use spot metering to measure only the light falling in the exterior. On the other hand, if you want to capture the full dynamic range of both the interior frame and the exterior subject, you can take two shots—one for the shadows, one for the bright outside subject—and combine them in post-production.



Finally, a note of caution: Using frames within frames is so effective that it can be easy to get carried away and try to use them to solve all your compositional problems. One natural frame in a portfolio is clever; a dozen is cliché. Just because a potential natural frame exists doesn't mean it is the best way to compose the shot—ideally it should still bear some relationship to the main subject.

↑ Partial framing

The frame isn't complete—the tree trunk and branches form only two sides of it—but it nevertheless manages to place the subject. Coupled with the position of his eyes in accordance with the Golden Ratio, this portrait ends up with a strong composition.

Frames within Frames

Over to you: Find a scene that includes a natural frame and shoot it! Your frame can be man-made or organic and your subject can be anything that you want. You may even want to make the frame yourself. Regardless of how you achieve the shot, you just have to make it work. You're going to be combining

quite a few of the techniques that we have covered in the book so far, but if your image involves extremes of light, then you will need to think more carefully about your exposure than usual. Pay close attention to your histogram and use the appropriate metering mode.

© Daniela Bowker



↑ From one frame to another

In this diptych, the frame is the subject for one image. And the candle and the ledge are balancing each other perfectly.



© Daniela Bowker

Challenge Checklist

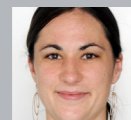
- Shoot a photograph that involves a natural frame.
- Take into account the orientation of your subject and the frame.
- Remember to use other compositional techniques, such as balance and the Golden Ratio.
- Think about the exposure of your image and don't accidentally underexpose the main subject.

↑ Pure-black frames

Don't be afraid to underexpose the natural frame if you have to—besides, it often adds a dramatic touch.



© Gillian Bolsover



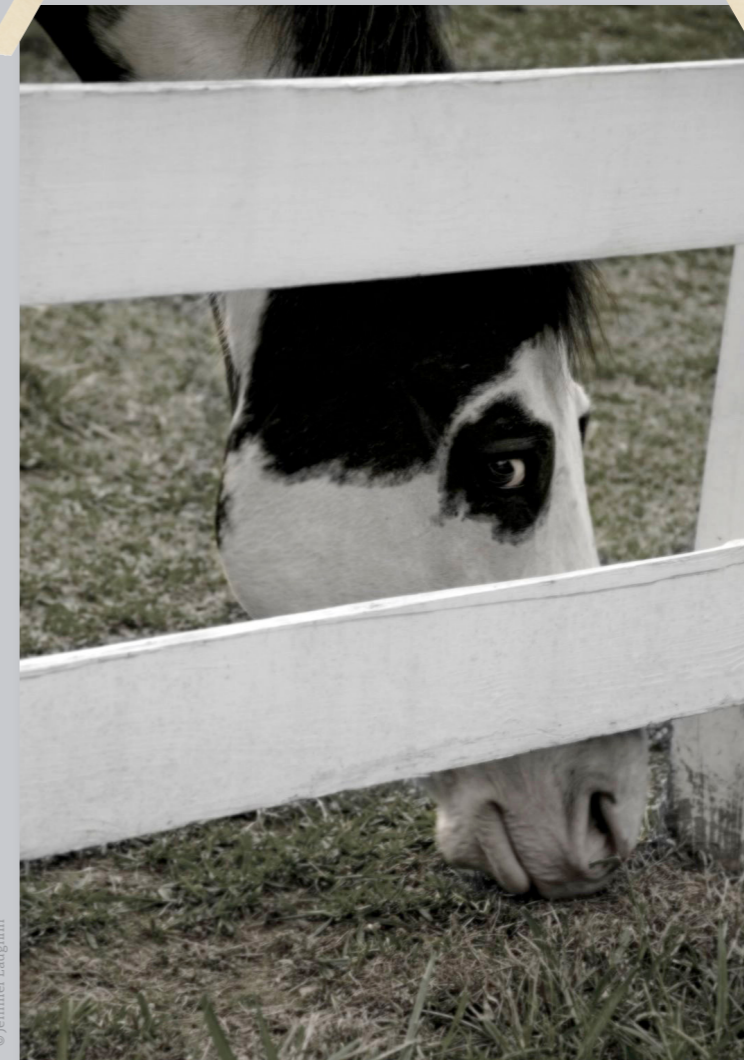
When I worked at a newspaper, my boss got mad if I tilted even one frame in my take, so when I left I went on a tilting spree. I often shoot with a diagonal composition, so here the tilt creates a diagonal, drawing the viewer into the two ladies walking down into the subway.

Gillian Bolsover



Yes, tilting (known as “dutching” in the movies) is very personal. And personally I like this, for the reason that the extra energy from the diagonals of the frame complement the perspective energy of the view through.

Michael Freeman



© Jennifer Laughlin



This photo was shot with a Nikon D300 using only natural light. I couldn't resist getting a shot of the fence framing his one black eye.

Jennifer Laughlin



The expression—all in the eye—is the point of this shot, and potentially a good one. A significantly tighter crop would serve it even better, and while doing that, you could perhaps align the top edge exactly with the frame.

Michael Freeman

Negative Space

In the first chapter we looked at the idea of “filling your frame,” or getting in close, and how if you can’t justify why something is in your scene, then it shouldn’t be there. An extension of this idea is negative space, or quite literally having areas of nothing in your photographs. It might seem counter-intuitive to talk about “filling your frame” and “negative space” in the same sentence, but it’s more helpful to think of them as two sides of the same coin.

↓ Placid water, empty frame

Because the majority of this frame is empty, the few elements that remain are further emphasized and given greater focus.

If you have a complex subject that’s detailed and busy, contrasting it against a blank area will bring some balance to the composition. It helps the eye to find a point of focus and to prevent the image from presenting itself as chaotic. The negative space itself, however, needs to be absolutely barren and as uniform as possible in order to maximize its effectiveness. Consistency of tone and color can support the main subjects without offering any distracting elements. Heavy fog can achieve this very well, as can blank architectural walls. The negative space may be a complementary color, but most often it’s a simple neutral.

A Sense of Space

We’ve already looked at how to create the illusion of the infinite by filling your frame with a pattern or repeating subject and denying any sense of a boundary. You can create a similar feeling of infinity by surrounding a solitary subject with negative space. For example, you could photograph a sailboat on a lake and include the shoreline, but that limits the feeling of space and gives a boundary to the water. By composing your image so that you capture just the sailboat on a negative space of water, it is suddenly sailing on an infinite sea.

Creating Atmosphere

Negative space can contribute to the atmosphere that you want to create in your photographs. Dark negative space (i.e., shadow—something that we’ll cover in more depth on pages 90–91) can imply brooding and foreboding. Negative space in certain colors can lend a particular feeling to an image; blue is calming, for example, while yellow is uplifting. Light-colored areas of negative space work toward a feeling of airy positivity, which is something that we’ll explore more in the section on high-key photography.

Accentuating the Subject

When there is nothing else to look at except the subject in an image, that’s exactly where the eye will go. Placing the subject in a sea of negative space will accentuate it. Obviously this is ideal for product photography, when you want a \$50,000 diamond ring to be the center of attention; but you can also use it to make dramatic or slightly surreal images that aren’t intended to sell something. The first option is to photograph your subject on a plain background. If you don’t have a professional backdrop, a scarf or a sheet of uniform color and texture will work, too. However, you can also use lighting to surround your subject in negative space. You can either light your background so strongly that you “blow it out,” or overexpose it to the extent that the sensor cannot detect anything in that area; or you can light the subject with something significantly more intense than the ambient light, so that it will look as if it is emerging from the darkness.



© Daniela Bowker

↑ Spotlight lily

The flower is beautiful enough that it would make a good subject even against a typical green, natural background. But by draping a black cloth behind it and using the sun as a strong spotlight, the flower takes on a kind of grandiose elegance, rising as it does from nothingness, first with its soft, white petals, and then with its delicate but radiant-orange stamens. The negative space is just as much a part of the finished photograph as the subject itself.



© Daniela Bowker

↑ Double negative

The black outlining the windows forms one negative space, and the light coming through the window and highlighting the detailing of the latticework creates a second.

Enhancing Patterns and Shapes

Our eyes and brains are constantly searching out and recognizing patterns and shapes. Think about gazing up at a bright blue sky, and how we look out for cloud formations that resemble faces, animals, and countries. The interaction of positive and negative space in a

photograph, especially a minimalist black-and-white composition, creates similar opportunities to create and/or discover different shapes. You just have to look out for the interplay among objects, or between light and shadow. High-contrast renditions will further enhance the effect, which can be done in post-production (see pages 148–149).



Take Advantage of Negative Space

Despite negative space being such a straightforward concept, it can make its way into photographs in many different forms and have numerous effects on them. So for this challenge we'll keep it relatively simple, allowing you to experiment with the impact that negative space can have your photographs.

Take a photo in which negative space makes a significant effect on the overall composition. Just leaving a bit of space toward the edge of the frame won't cut it; you must learn to meaningfully manipulate negative space so that it augments the rest of the frame—either by playing directly off the subject, or simply giving it room to breathe.



© Daniela Bowker

↔ Not too tight

Not only is the horizontal image a better representation of the off-center placement, it also gives the subject space to express itself, and includes a sense of environment.

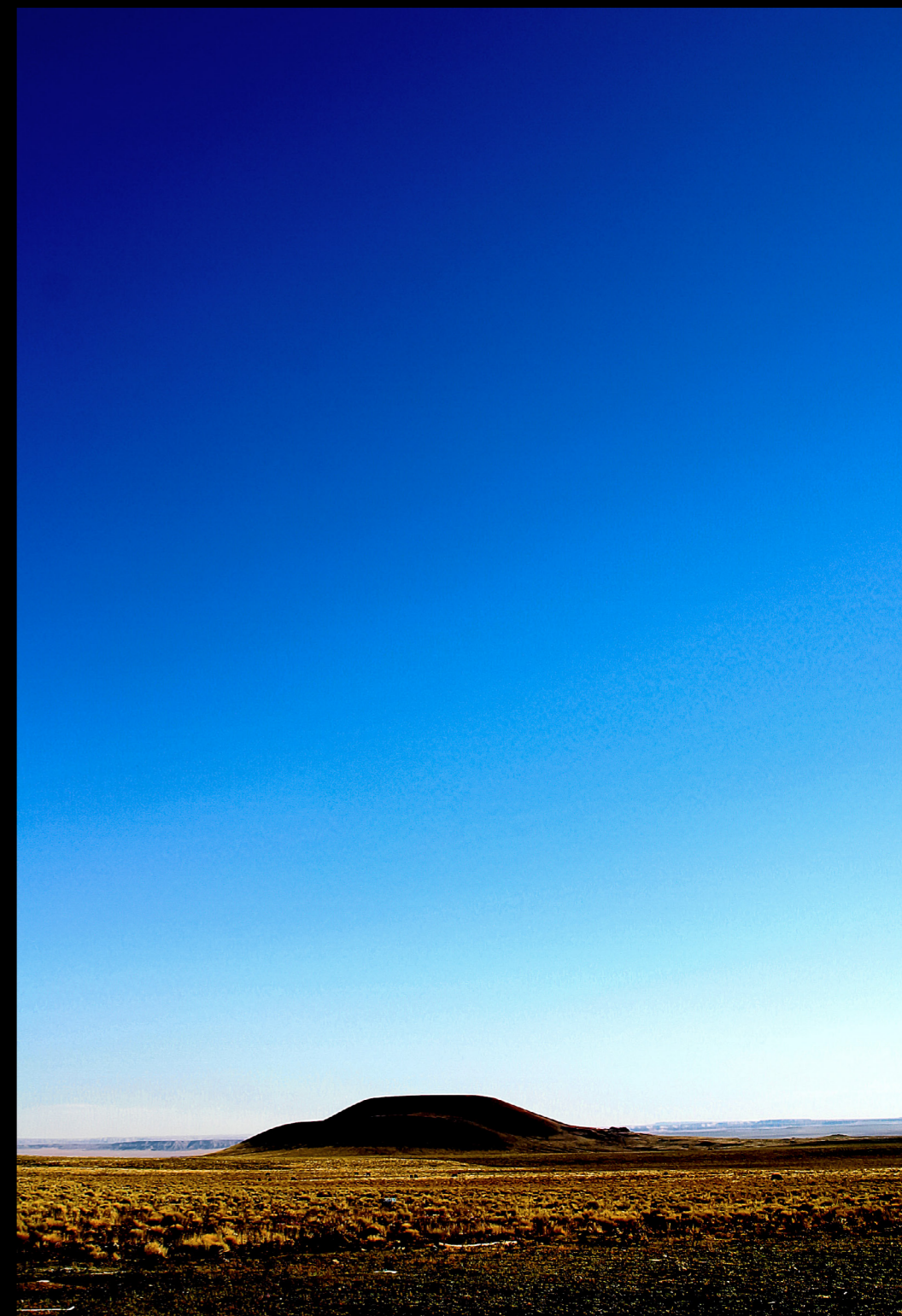
→ Tall skies

Coupling a large expanse of negative space with a longer or wider aspect ratio can have a powerful impact.

Challenge Checklist

- Use negative space as a significant and meaningful part of your composition.
- The photo should still recognize the usual compositional guidelines.

© Daniela Bowker





© Adam Graetz



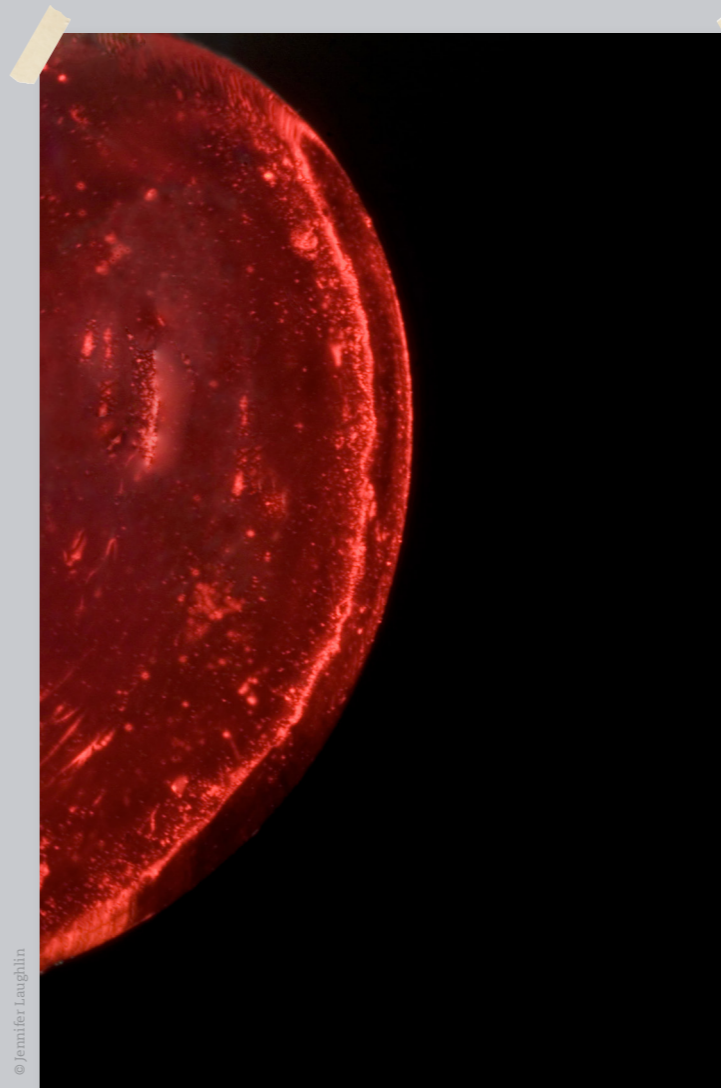
The light on the tops of these trees was fantastic, but a head-on shot would've included too much distracting foreground. I could've cropped out the sky to focus more on the trees, but in the end I really liked the balance—as if the trees are reaching up into the open sky above.

Adam Graetz



There's a nice, subtle gradient to the blue in the sky, and that negative space combines with the outstretched treeline to pull attention vertically up across the frame. A good color palette, also. But what's that dark triangle near the bottom? I would definitely crop in to lose that.

Michael Freeman



© Jennifer Laughlin



I shot this necklace pendant in the studio using a 55mm lens with an extension tube. I only used one hot light with a diffuser, placed just to the left of the camera. I chose to shoot only half of the pendant to make use of negative space. I like the contrast of the deep red against the black.

Jennifer Laughlin



Excellent lighting on the pendant—and at this close distance it becomes quite abstract, which plays well off the pure-black negative space on the right. Almost feels like a molten planetary body floating out in space. The proportions of red and black are also finely balanced to my taste.

Michael Freeman

Of Light & Shadow

The word “photography” is a composite of the Greek words *phos* (φῶς—light), and *graphé* (γραφη—drawing). It is, therefore, quite literally “drawing with light.” Without light, we wouldn’t be able to make a photographic image, and with this light comes its inseparable counterpart: shadow.

There can often be some kind of terror associated with shadows in photography, as it is true that the perfect image can be ruined by a misplaced or completely obscuring shadow. While this is an entirely legitimate concern, it is easy to forget that shadow doesn’t always have to be a negative in your photographs. Shadows can make bold statements or cast subtle hints in your images. There’s even an Italian word—*chiaroscuro*—that literally means light-dark, and describes using the contrast of light and shadow to shape the main subject. Shadows are definitely not something of which you should feel afraid. If you approach your photograph from a different angle, you might find that a shadow, far from ruining a composition, can help to make it succeed.

In fact, light itself can often be the main subject of your photograph. Perhaps the light streaming through a window is casting beautiful shadows of a row of bottles sitting on the

→ The light comes first

In this shadowy Italian cathedral, it was the contrast of the shafts of light slicing through the shadows that caught my eye. The ornate architecture is really just a backdrop (granted, a very nice one).



© Daniela Bowker



© Daniela Bowker

windowsill across the wall. Or maybe it's the interplay of light and shadow falling through a tree canopy that is creating an image that deserves to be captured.

A silhouette can work as a main subject as well, though it isn't strictly a shadow. Rather, it's the outline of something unlit in the foreground against a more brightly lit background. If you have a beautiful, burning red sunset sky, it can make a stunning background for the twisted shapes of tree branches, or of a couple walking hand-in-hand on a beach.

Shadows that Conceal

Occasionally, what a photograph doesn't show can be just as effective or telling as what it does show. By

letting the shadows dominate your frame and inserting an abundance of negative space, you can create something moody, atmospheric, and evocative. If dark tones are the prevailing feeling from your photo, then it's known as a low-key shot (think "low" on the histogram).

These sorts of low-key images that are full of shadows don't have to be sinister and brooding; they can be enticing and intriguing, too. It will all depend on what it is that you're photographing and what you place in the shadows. The light cast into a shadowed room by a door left ajar can evoke a feeling of intrigue; light coming through shuttered windows might make an image feel more constrained. A half-lit face with a coy smile is potentially seductive; a half-lit face with a glare can suggest menace,

↑ Shadow performance

Strong directional lighting always casts obvious, defined shadows. You can either keep an eye out for natural shadows created by nearby objects, or use that lighting to pose a subject for an interesting shot.

and this effect can be emphasized depending on the angle from which you photograph your subject, too.

If you are having a go at nude photography, shadows are a highly valuable tool. First, they are suggestive and emotive, and can be used to hint at what is going on in the scene, piquing the viewer's interest without being explicit. Overall, shadows contribute to the atmosphere by resonating with the hidden depths and secrets of the subject. And they can also provide some anonymity for the model.

Embrace the Shadows with a Low-Key Shot

↓ Not quite pure black

Even if you want part of your subject itself to fall into shadow, try to keep just a touch of detail in the darker areas, while still allowing the background to drop off into pure black.

The low sun of early or late on in the day casts longer shadows than the midday sun, which means that you are more likely to catch natural shadows at these times of day. If you want to work with natural light for your shadow photography, it's best to do it then. Of course, if you're attempting to achieve a particular shadowy look in your photos, it will be easier to manipulate and control your own photographic/studio lights.

As we have already looked at using shadows to balance your images or form a pattern, this challenge will focus on low-key photography, using shadows to create atmosphere in your images. Dark and brooding or coy and intriguing, it doesn't matter; what does matter is that shadow should be an overwhelming factor in what you try to express through your photograph.



© Daniela Bowker

→ Eye-lines up and out

Shadows and directional lighting are a sure-fire way to add drama and an element of seduction to any portrait.

Challenge Checklist

- Use shadow to evoke atmosphere and mystery in your image.
- Think about the story that your photograph is telling—what needs to be shadowy and why?
- Take care to not underexpose the important parts of the frame—it's a fine line!

© Daniela Bowker





© Adam Graetz



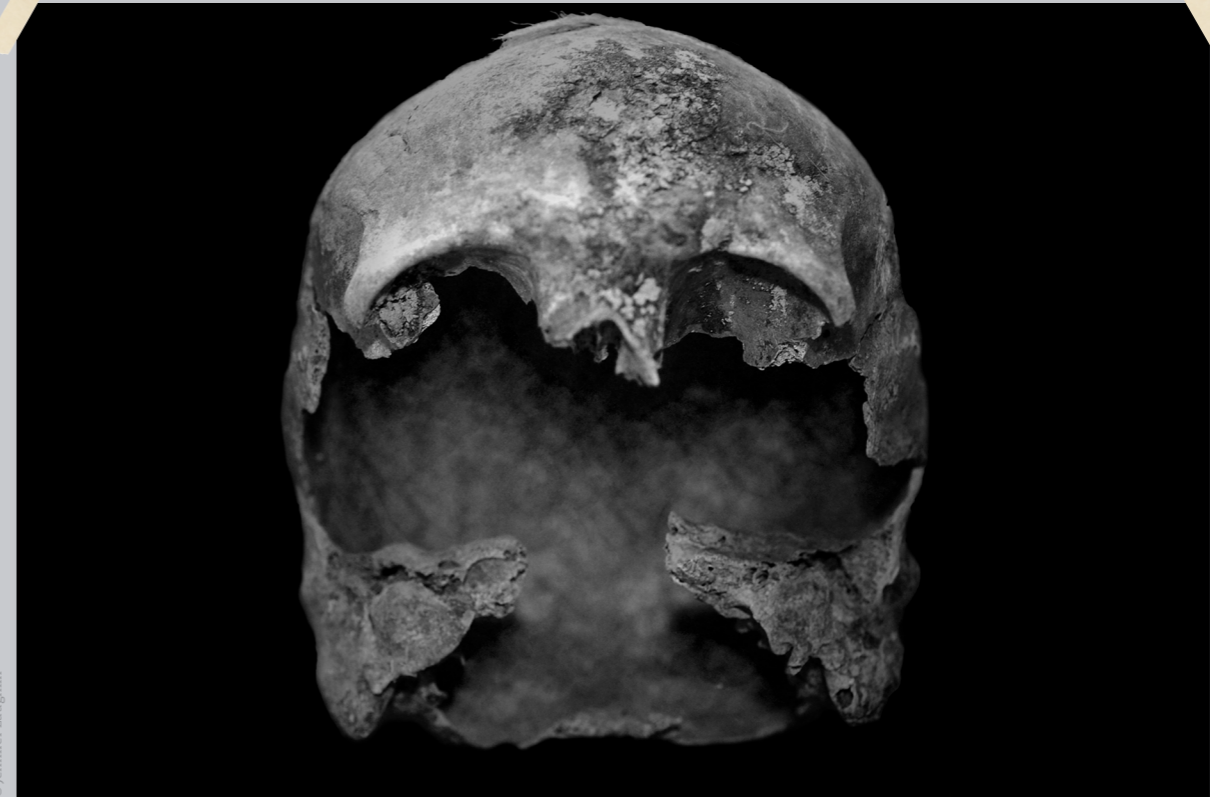
I shoot at night quite a bit, because of all the different perspectives it gives. During the day this would have been a throwaway snapshot, but at night this lone street lamp—exposed so the rest of the scene falls off quickly into pure black—is something completely different.

Adam Graetz



An eerie, atmospheric shot. Positioning the lamp behind the tree branches adds to the effect, as even the light source itself is left mysterious. It's good that you resisted any temptation to open it up in processing, as many people would have done. The viewer is encouraged to peer into the view.

Michael Freeman



© Jennifer Laughlin



This is a photo of a partial skull discovered during an excavation. I shot it at the Office of State Archaeology. I chose the black background for a dramatic effect, using only one hot light and a white reflector card to get some detail toward the back of the skull.

Jennifer Laughlin



An appropriate subject for a low-key shot. The lighting setup is excellent, bringing out the microcontrast and texture in the surface of the skull—and even offering a peek into the interior. The result is an eerie *memento mori*—an empty skull floating in empty space, looking like a Greek warrior's helmet.

Michael Freeman

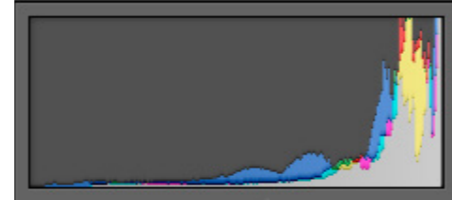
High-Key Lighting

Low-key photography is dark, moody, and full of contrast. It should make you think of baroque organ music, film noir, and Gothic horror novels. Its opposite, naturally enough, is high-key: light, airy, and low on contrast. High-key is bright, has few shadows (if any), and lends itself to positive and upbeat images. It's the photographic equivalent of reading Jane Austen and listening to Petrushka.

The fun and happy feelings that one associates with high-key photography is something that advertising agencies love. Lots of product photography is done in high-key so that there aren't shadows on subject, and also to encourage potential consumers to identify positively with the subject. A bride in her white gown against a white backdrop is the quintessential high-key shot, with no shadows and a feeling of optimism and hope for a bright future. If you read around the Internet, you will come across a common misconception

that high-key photography describes overexposed photographs. It doesn't. Overexposed is just overexposed. High-key is very bright, but in a well photographed shot, all the important areas of the frame will still have ample definition. The most effective high-key photography uses lots of evenly diffused light to dispel shadows and keep the tones bright. Take a look at the histogram of a high-key image and you will see that most of the data is pushed over to the right-hand side, in the highlights.

It is almost certainly easier to take high-key photographs in a studio where you will have access to a white background and directional lights that you can use to suppress the shadows in the background and to light the subject properly. Still, it isn't impossible to shoot high-key images in your living room, bedroom, or even the garden. You will need a white or pale backdrop, plenty of natural light in which to bathe



↑ All the way to the right

For a high-key photograph, the histogram should show the majority of tones in the highlights. It may even go so far right as to clip (lose detail in pure white), which isn't necessarily an error in this type of photography.

your subject, and a reflector to help direct that light. It's also worth noting that paler tones are easier to render in high-key, as they are already reflecting a great deal of light.

↓ Clean and clear

The ethereal quality of many high-key shots means they will rely on subtlety and suggestion far more than a typical shot with an explicit, obvious subject.

You might find that you will have one or two shadows in the image, but they should be subtle and never detract from the overall feeling of airiness in the photograph. As for a reflector, don't feel that you have to rush to your photographic supplier of choice to buy one if you don't already own one. Some aluminium foil wrapped around a piece of cardboard will do the trick.

It is possible to convert your images into high-key using post-production software. Some editing suites have presets that are programmed to make the conversion for you, or you can play around with brightness, exposure, and contrast until you get the effect that you want. However, it is preferable to do the hard work when you're shooting, and to make minor adjustments when you're editing. If you are aiming for a high-key look and work toward that, the final result will be far more successful than something that you convert later.

High-key images, just like their low-key equivalents, are full of negative space. It's that bright, shadowless background of nothingness that contributes to the prevailing ethereal feeling in the photograph. Of course, with no background and no shadows in high-key images, your composition has to be precise. There won't be any background to provide context, lines will be limited to anything in or on the subject itself, and there won't be any shapes or colors in the frame to provide balance. The story of your photograph and subject placement will be vital.

→ Showcase what's important

In portraiture, high-key can focus attention on eyes, lips, and hair, without capturing blemishes in the skin.



© Daniela Bowker



Lean Toward the Highlights with a High-Key Shot

↓ Golden Gate fog

Heavy fog, of the type so characteristic of the San Francisco Bay, is a natural subject for high-key photography. There's a lot of exposure leeway, but by keeping most of the scene near the highlights, the image will feel soft and light rather than gray and dreary.

This challenge is likely to be your most difficult yet: You need to photograph a high-key image. I would recommend photographing something inanimate, such as a flower or a stuffed toy, because getting this right might take some time and a real-life model could get a touch bored!

You will want to photograph your pale-colored subject on a white or very pale background and ensure that there is plenty of even light washing around it to eliminate as many shadows as you can. Be careful not to overexpose your image, but do keep it as bright as possible.



→ Subtle shapes

If your subject is completely white, you will still need some amount of shadow, however soft, in order to give it shape and texture.

Challenge Checklist

- Use plenty of light to achieve a shadow-free, high-key photograph.
- Think about your subject and your story to make the image work.
- Take care not to overexpose your image.
- Consider your subject placement to create a compelling photograph.





© Sven Thierie



I could have dialed in some negative exposure compensation to capture more detail outside, but the result was in fact quite loyal to the original setting. There was a lot of hustle and bustle on the street on a bright, sunny day, contrasting with this simple scene of a family eating together.

Sven Thierie

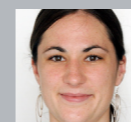


The exposure and processing do convey a sense of a bright, sparkling day, and it works. Moreover, the overall brightness of the setting makes a background against which the two subject areas interact—the man outside with the bike and the family at the table.

Michael Freeman



© Gillian Bolsover



The white cloaks of The Druid Order against the gloomy sky of a London autumn creates a sombre but clean color palette that is appropriate for the mood of the equinox ceremony.

Gillian Bolsover



Wonderful composition, with a symmetrical framing that uses the diagonals against the diagonal of the instrument. The clouds are a perfect match for the white cloaks, and the exposure is right on—any brighter and the drapery of the cloth would have been lost.

Michael Freeman

People

Just about everything that we have looked at so far can be applied to photographing people. In most cases, we have explored how much of an impact a particular theory or technique, whether it's the rule of thirds or high-key lighting, can have on a portrait. But photographing people is very special (it's not for nothing that some cultures liken it to stealing souls), and it deserves a closer look.

Like any photograph, a portrait tells a story, and you have to be certain of that story when you take the picture. It doesn't matter if you're having a go at street photography, capturing a spontaneous moment at an event, or working more formally, there will always be something that you are trying to convey. Maybe it's the mischievous glint in someone's eye, the hunch of their exhausted

shoulders, or their sassy strut down the street; it's all a story—a personal and individual one.

The Eyes Have It

For nine photos out of ten, the most crucial element will be getting the eyes in focus. Even if the subject isn't looking at you, which is going to be the case for a good many spontaneous photographs as well as some posed ones, the eyes still need to pin-sharp. Good communicators always make eye-contact in order to build a connection between them and their audience or conversation partner, and that's applicable to photography as much as verbal communication.

Candid and Momentary

Lots of people are nervous around cameras; it's not that they object to having their portraits taken—which is an entirely different situation—but that they simply find it unnerving. If you're taking photos at a party or among a group of people, you can help to alleviate their anxieties by reassuring them that they don't need to pose and that they don't even need to look at the camera. They can concentrate on having a good time and you can concentrate on documenting it.

← Cute and candid

The model is looking down, but her eyes are still in focus.



© Daniela Bowker

Formal vs Posed

“Posing your subject” has connotations of ghastly school portrait sessions, stiffly and grudgingly sat for in front of murky gray backdrops and then shoved into cheap cardboard frames. Of course, it doesn't have to be like that at all. Asking someone at a party to move slightly because you want to catch them against a complementary background isn't formal, but you are still posing them. A holiday snap can become something so much better if you take a moment to ask your subject to move into the shade or turn their face into the light. Indeed, you may be surprised how often a subject will welcome a bit of instruction—it takes the burden of proper posing off their shoulders and puts them at ease.

This sort of candid photography has the advantage of putting people at ease as well as presenting you with plenty of opportunities to take photographs that capture a moment. It might be a look or a laugh, but it will be the perfect expression of events. It's also the sort of photography that you are likely to practice out on the street or when you're traveling, capturing the fleeting instant when something catches your eye that is the visual realization of your experience.

As you practice more, you'll find that your eye will become attuned to seeing things that make excellent photographs—people's reactions and expressions, the effects of light, shadow, color, and shapes—and that you will be able to compose on the fly. The vital factors to remember are to get the eyes in focus, to orient the frame to support the image, not to center the subject, and to get in as close as you can. The more pictures that you take, the better you'll become!

→ Look for their eccentricities

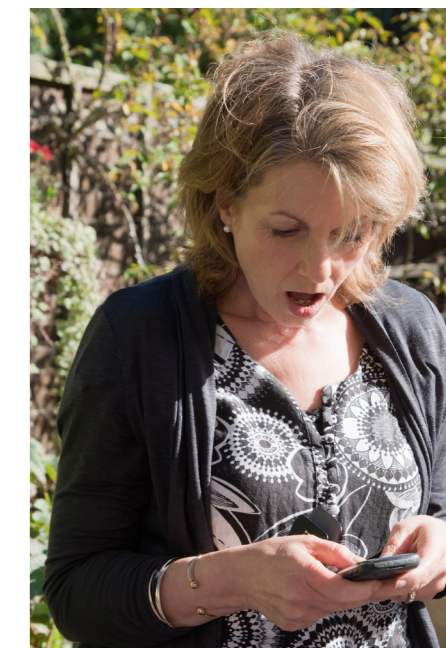
There is a time and place for stiff portraits, with makeup and hair styling and all the trimmings. But candid portraits often do a better job of telling a story and giving a sense of time and place. Keep an eye out for hand gestures, facial reactions, or funny and energetic movements in your subjects. Anticipating such actions will give you time to angle and compose other elements in the shot.

A photo shoot in your garden doesn't have to be formal, but it can certainly be posed. This sort of directed portraiture will help give you the opportunity to compose your shots more completely, taking into consideration the light, subject placement, lines, color, and shape. Just remember to give plenty of feedback to your model, showing them what you've done and explaining to them what it is that you are trying to achieve. If the atmosphere is relaxed, your subjects may insist on seeing the results on your camera's LCD. I'll leave that decision of whether to share or not up to you, though in my experience, people are inclined toward humility and tend to dislike the initial results. Sometimes it's better to save show-and-tell until you've had a chance to touch up the portraits in post-production.

© Daniela Bowker



© Daniela Bowker



Capturing Couples

Capturing an individual's personality in a photograph can be challenging enough; doing it for a pair can be downright intimidating. When you're taking spontaneous or candid photographs, you have to be on the lookout for the moment of interaction between two people that comprises their story. When you're starting out, you'll be more inclined to focus on capturing the moment—the quiet look, the raucous laugh, the gentle touch—than anything else. After all, this is what makes the photograph special and meaningful.

If you've only a split-second to take the photograph, spending too much time worrying about composition will doubtless mean that you'll miss what it is that you want to capture. The more photographs that you take, the more naturally composition will come to you. Keep in the back of your mind the fundamentals of eyes-in-focus, frame orientation, off-centering the subject, and getting in close, and you'll be fine.

If you have the opportunity to photograph two people in a more structured way, you'll benefit from having more time to compose every shot, but you will need to be careful that you don't lose the intimacy between your subjects as you direct them. Whatever their relationship may be—lovers, siblings, parent and child, friends—each photograph will still be about their interaction, so think about what it is that you're trying to convey first, then set about achieving it.

There's an old saying that the eyes of one of the subjects should be on the same plane as the mouth of the other, to make sure that there's a sense of movement in the image and it doesn't come over as flat and dull. While you should focus on capturing their relationship and the vibrancy between them rather than worrying about such compositional rigidity, it is indeed an effective technique if you have time to implement it.



© Daniela Bowker

© Daniela Bowker



↑ Speaking with shapes

While this couple was goofing around and enjoying themselves, there was just enough time to move such that they were in between the camera and the sun, and then expose for the sky to render them in silhouette.

Aperture causes a few problems when they're first having a go at couple's portraiture. Obviously you want both people in focus, but you probably don't want to have an abundance of background too sharp. Keep your couple close together, get in as close as you can, and try something between $f4.0$ and $f5.6$. After that, it's all about having fun with different angles, with eye-lines, with negative space, and getting the balance right. Yes, the operative word here is fun.

← The eyes tell it all

Talking to your subjects will always set them at ease, and with couples, their conversation will eventually take off on its own, giving you time to work and observe their interactions. This was shot during a split-second pause as the woman reacted to her boyfriend's comment.

© Frank Gallagher



Groups

Much the same as photographing couples, photographing small groups of people is going to be about capturing the relationships among them, and you'll want to approach it in the same way.

Photographing large groups of people can easily become more of a tribulation than something fun. Someone is always reluctant, there's always at least one person playing the clown, and it can feel as if you're attempting to herd cats. Aside from recruiting the services of a Sergeant Major, there are a few things you can do to make life easier. Try photographing them from an elevated position, whether up a step-ladder, from a balcony, or even leaning out of a window (carefully, of course)—this makes it easier to direct your subjects.

Alternatively, turn that situation on its head and have the group stand on a staircase with you at the bottom of it.

Arranging taller people at the back and shorter people at the front is an obvious one, as is staggering the arrangement of rows, giving everyone an individual space for their head. Taking many, many photos will increase your chances of having at least one where all your subjects are smiling, looking in the right direction, and have their eyes open.

Bear in mind that you might need a smaller aperture for a deeper depth of field as more people are introduced into the frame. An aperture of around $f11$ will require plenty of light for the exposure, too, because it will be coupled with the fast shutter speeds needed to freeze the action of so many people.

↑ The whole family

Outdoor group shots on uneven ground will be made easier if you can climb up a small step ladder (being careful to keep your balance) to ensure that your subjects don't have their feet cut off by a rolling hill. As you organize the group, speak loud enough to be heard by all, but be sure to keep it fun and light-hearted.

A Couple's Portrait

challenge

↓ A simple gesture

Sometimes faces aren't needed to communicate an intimate moment.

Seeing as you might already have photographed one person for earlier challenges, and large groups of people aren't readily available, this challenge will focus on capturing the interaction between two people in a photograph.

Whether you would like to try a more directed shoot or something spontaneous is up to you; the important thing is to clearly identify the relationship between the two subjects and bring it to life in a meaningful and flattering way.

© Daniela Bowker



© Daniela Bowker



→ Different heights help

Capturing a moment between two people can be something very small and very delicate.

Challenge Checklist

- Capture a moment between two people.
- Think about the aperture you will need to use to ensure that both sets of eyes are in focus.
- Use the right frame orientation and get in close to bring out the best in your subjects.



© Jennifer Laughlin



I wanted to capture this couple in a natural setting using only daylight. I liked the idea of the sun filtering in through the trees. We waited until late afternoon to get the nice golden light for the photograph.

Jennifer Laughlin

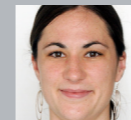


The lighting quality is very good—warm but not too directional, hazy and late in the day. The color palette is restricted and subtle. Expressions are good and affectionate, and my only slight criticism is that they seem to be neither quite standing nor quite walking.

Michael Freeman



© Gillian Bolsover



This is a photo that preserves my memories of Indian sleeper trains, the friendly Goan couple I shared my journey with, and the bright countryside I could barely see flying by from the perspective of my top bunk.

Gillian Bolsover



There's a great sense of relationship here, with relaxed body language and expressions. Excellent choice of camera angle, too, nicely angled to make use of the diagonals for energy—I know those multi-tiered Indian sleeper carriages well!

Michael Freeman



Technical

While composition might be predominantly a creative and theoretical art, there is a technical side to it, too. The type of lens that you use or the speed of your shutter can have an impact on your photographs beyond making sure that you fit everyone into a group shot or that your exposure is correct. By the end of this chapter, then, you will be better acquainted with focal lengths and shutter speeds.

Much of what we have covered so far has been possible with that 50mm prime (or fixed-focal-length) lens. However, there are other lenses out there with different attributes and qualities that serve different purposes. We're going to be focusing on what you can achieve with telephoto and wide-angle lenses. And our technical odyssey will continue as we look at how to introduce a sense of motion into photographs, whether that's through motion blur or freezing the action.

Focal Length

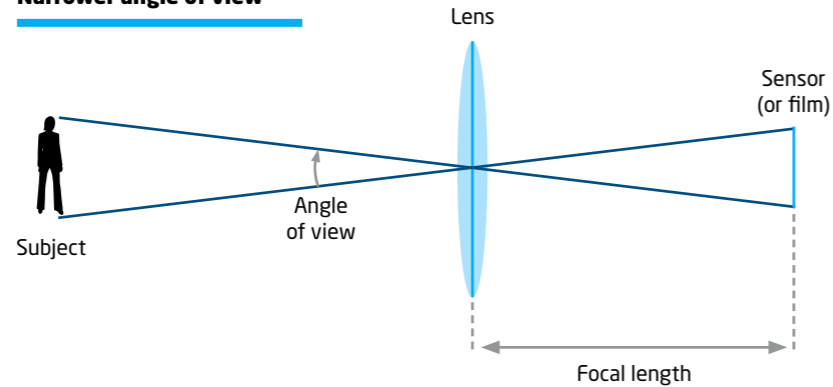
Your camera's lens works by refracting the available light from a scene and converging it at a single focal plane on your sensor to create an image. How much of a scene a lens is able to bring into view depends on its focal length—which is measured (in millimeters) as the distance between the lens and the imaging sensor.

You will hear lots of figures and jargon bandied about in relation to lenses, and have probably already heard terms like "35mm equivalent," "full frame," and "crop factors." It's important to establish our terms now in order to avoid a lot of confusion in our discussion of focal lengths: Rather than repeatedly write out the various equivalent focal lengths relevant to each individual camera and its corresponding sensor size, all the discussions of focal lengths in this book are referring to the angle of view that such a lens would have on a traditional, 35mm camera. If your camera has a 1.5x crop (i.e., an APS-C sensor), just divide the focal lengths given here by 1.5, and you'll have your camera's equivalent figures.

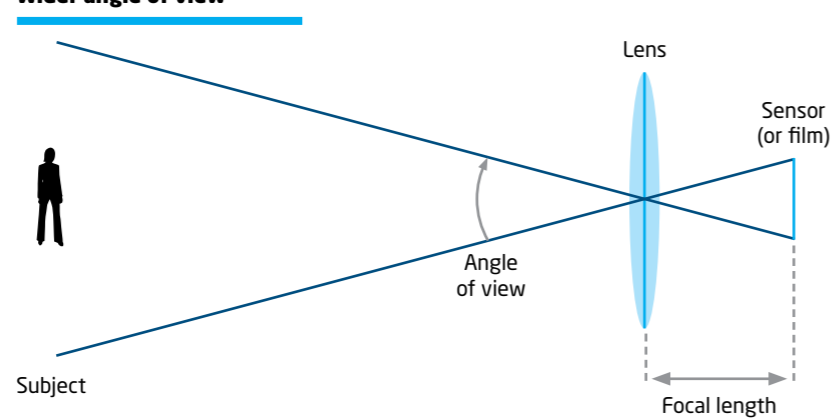
Prime and Zoom Lenses

Your DSLR probably came with an 28–85mm kit lens (or something in that wide-to-short-telephoto range). It has a variable focal length, and is therefore a "zoom" lens. You can change the focal length between 28 and 85 millimeters, which alters the angle of view. Another popular, but very different kind of lens would be a 50mm "prime" lens,

Longer focal length / Narrower angle of view



Shorter focal length / Wider angle of view



meaning that it has a fixed focal length and its angle of view doesn't alter. If you want to change the size of the subject in the frame, you have to "zoom with your feet," that is, move physically closer to or farther away from them. Prime lenses exist for almost every practical focal length, and they induce a very different way of shooting than what is common with zoom lenses.

One tends to be more contemplative, paying closer attention to the edges of the frame and with a keener eye for potential compositions. There's nothing inherent in the design of a fixed-focal-length lens that makes a photographer act differently, and indeed a zoom lens can facilitate precisely the same degree of contemplation. It's simply a matter of restriction breeding creativity.

Another advantage of using fixed focal length lenses is that you learn to gain appreciation for the differences particular focal lengths have on your shot. Zoom lenses tend to make wide angles function simply as means to "get it all in," whereas telephoto lenses end up being a means of bringing faraway objects closer. These are indeed true benefits, but they do not take into consideration the dramatic differences in perspective that changes in focal length will create. For instance, we've already discussed how wide angles tend to introduce strong diagonals in a composition, which may or may not be your intended effect. Regardless of whether you use a zoom or a prime, you should always be sensitive to the effect of the focal length on your scene.

Rough-and-Ready Guide to Focal Lengths

The exact focal length you use will depend on your personal preference. For example, you might like to work with the traditional 85mm for head-and-shoulders portraits, but your friend favors a 50mm lens to include some context in his portraits. Still, this rough-and-ready guide to what you might want in different situations is useful. Note that the examples of lenses shown here are just that—examples. They by no means cover the full range of available lenses from all manufacturers. For each focal length range, a zoom is pictured on the left, while a prime is on the right—you can see there is a significant size difference.

Focal Length	Nomenclature	Common Use
<24mm	Ultra-wide angle	Architecture
24-35mm	Wide angle	Landscapes
35-70mm	Standard or normal	Street, documentary, some portraiture
70-200mm	Telephoto	Portraiture
>200mm	Super Telephoto	Sports and wildlife

Wide-Angle Lenses & Perspective

Wide-angle lenses greatly affect our perception of depth in an image—which, remember, is essentially a visual illusion, as a photo is only ever a two-dimensional representation. So while the viewer is not able to physically reach into a scene and explore its depth and dimensionality, you can use an exaggerating perspective to draw them in visually by capturing a wide angle of view. So the question is, what is responsible for the exaggerated perspective? And how does one use that exaggeration to maximum effect?

Technically speaking, the emphasis on depth is a matter of spacial distortion,

in that the space and distance between objects seems much greater as your angle of view widens. Of course, this depends on your viewpoint and what is in the frame. If you are shooting off the edge of a cliff without including any foreground elements, all the elements of the composition will be far away and there will be hardly any effect on the perspective. But if you include some object closer to the camera, the space between it and the distant landscape features will seem immense. Additionally, the size of that foreground element will appear quite large comparatively, as it will take up much more of the frame compared to more distant elements.

While this all seems very technical, the visual effect is quite subtle, insofar as it simply suggests that the scene extends beyond the frame, giving the viewer a sense of "being there," in the middle of the scene or amid the action of the moment. For this reason, wide angles are a trademark of photojournalism, in which it is critical for the viewer to feel a connection to the scene, and to give them a sense of participation. Shooting a crowd with a telephoto from across the street feels flat and voyeuristic—you won't be able to include as many elements, and they won't extend around the edges of the frame in the way a wide angle lens does when it is thrust into a middle of the action.

← Step right in

Although the lamposts nearest the camera are only a few feet away, the stonework foreground manages to constitute a full third of the complete frame. The effect is such that you can very much imagine yourself standing there in the courtyard, with the building continuing along the right and left of the scene. Additionally, note how far apart the first pair lamposts seem from the second, which themselves are about midway between the camera and the archway at the far end of the courtyard. Although the second pair bisects the distance almost exactly, it appears as if they are much closer to the archway because the foreground distance is so heavily exaggerated.



© NStanev

Unflattering Foregrounds

If you take a portrait with a wide-angle lens, the subject's nose looks comically large and their chin juts out absurdly far. This is because by the time you fill up a wide-angle frame with a face, you are mere inches away from it, and as you now know, as objects get closer to the frame, their size becomes exponentially exaggerated. Relative to the rest of the face, the nose and chin are going to look huge, and the ears will be tiny specks on either side. This same effect will be responsible for making the base of a building appear absurdly large and the entire structure look ridiculously tall if you shoot it up close and from a low angle. Being so close emphasizes the foreground, while the increased angle of view brings more of the building into the scene. But what works well for buildings doesn't necessarily translate into a successful portrait, so it's wise to keep a safe distance when photographing people with a wide-angle lens, and make it an environmental portrait.

© Frank Gallagher



Enclosed Spaces

If you're taking photographs in an enclosed space, using a wide-angle lens will ensure that you can fit everything or everyone into your scene without having to resort to demolishing walls, which you'd have to do if you were using a normal or telephoto lens. It also makes interiors appear spacious and comfortable, and as such they are well suited for indoor events and real-estate shots.

Converging Verticals

Owing to perspective, parallel lines will gradually appear to converge toward a vanishing point as they approach the horizon, regardless of the lens that you use. However, this effect is far more noticeable with a wide-angle lens as it takes only a very small adjustment of the camera to move the vanishing point quite significantly. If you want to avoid this effect, however, it's best to aim your camera perpendicularly to the front of the building, and crop out the bottom later to make it more attractive.



© Frank Gallagher

↑ Unflattering portraits

Granted, this statue already had a fairly large beard, but the wide angle further exaggerated its jaw, making it appear almost twice the size as the rest of his head.

↓ Keystone correction

This shot on the left shows how strong the converging verticals (an effect also called keystone) appear if the upward angle is too sharp. On the right, the same photograph has been adjusted in post-production (using the Filter > Lens Correction > Vertical Perspective tool in Photoshop) so that the verticals are all parallel, but it required cropping out extensive areas on the side and at the top.



Broaden your View with a Wide-Angle Lens

↓ Close and wide

Most wide-angle lenses let you focus quite closely, giving some of the benefits of a macro lens, but also letting the scene retain a sense of the surrounding environment.

If you don't already own a wide-angle lens, don't feel as if you have to go out and buy one because your photographic arsenal will be incomplete without it. Maybe you can borrow a lens from a friend, or rent one for a weekend to get a feel for it. If you decide that you like it, then you can think about investing in one.

As part of your experiments with wide angles, try to compose a photograph that makes use of the emphasis that they place on the foreground. Perhaps try a fun, nontraditional portrait that has disproportionately large features, or attempt an immersive shot where you feel as if you're right in the middle of your scene.



→ Leaning lines

Don't be afraid to induce strong angles and converging lines—it's not a perfectly accurate representation, but that's not always the point of the photograph.

Challenge Checklist

- Work through a series of different focal lengths to examine their varying impacts on your composition.
- Try focusing on some vertical lines and see how they converge when you alter the position of your camera.
- Use a wide-angle lens to distort the proportions of subjects in the foreground of your scene.





© Sven Thierie



These countless concrete objects lining the beach caught my eye, and I thought they'd be an interesting foreground for a seascape. I had to stop down to a narrow aperture to make sure everything was in focus.

Sven Thierie



What would've been just another ocean shot is definitely enhanced by including a lot of interesting foreground shapes. And getting low and close to those concrete objects gives a near-far sense that relates them to the distance. The band of sky, though, is too featureless to merit a quarter of the frame.

Michael Freeman



© Adam Graetz



The wide angle let me include enough foreground to contrast with the faintly lit horizon, and also by holding the camera upward, the towers appear to lean backward, following the power cables into the distance.

Adam Graetz



Keystoning, coupled with the lines of the power cables, does a good job of pulling your attention into the image, and makes the scene more imposing than would a higher viewpoint. The exposure is also effective—moving up the frame passes from shadow to light and back to shadow again.

Michael Freeman

Telephoto Lenses

Roughly speaking, telephoto lenses (also called long lenses) have focal lengths beginning at around 70mm, and going as high as 600mm (at least in terms of normal photography—there are telephoto lenses that reach well into the thousands of millimeters, but unless you operate a stellar observatory, you're unlikely to ever get your hands on one). This is an immense range that exhibits diminishing returns the higher you go—not in image quality, necessarily, but rather in visible effect. Whereas the 10mm difference between a 28mm and an 18mm wide-angle lens is extremely noticeable, the difference between 300mm and 310mm is barely perceptible (such that no 310mm lens exists—instead, manufacturers tend to make leaps from 300mm to 400mm to 500mm, etc.).

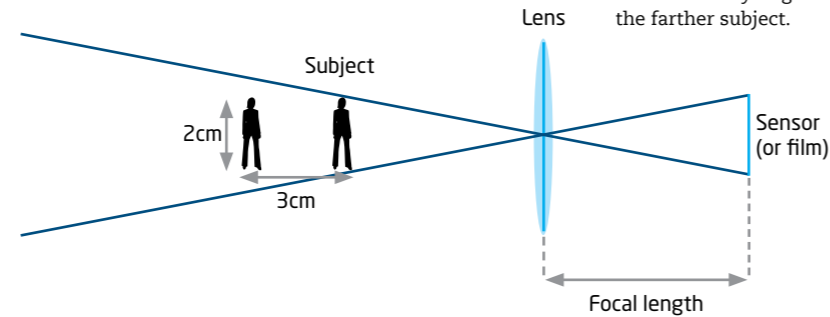
When people think of telephoto lenses, they automatically have visions of wildlife or sports photographers with obscenely long lenses protruding from their cameras, because they are wonderful for bringing distant subjects closer. But that isn't their only function; and you needn't be on the sidelines of the football field to consider adding a long lens to your arsenal.

Normalizing

The narrow angle of view from a telephoto lens will create an impression of scenes being compressed and flattened, with distance between objects made less obvious. This is excellent for portraiture, ensuring that all parts of your subject's face are represented in

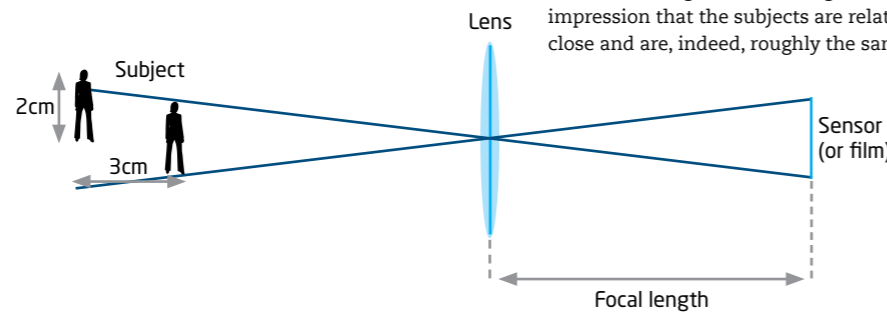
equal proportion to each other. The narrow angle of view means that objects in the background of a scene take up proportionally more of the frame, making them appear roughly the same size as things in the foreground, even if they should be considerably smaller. This is known as the "normalizing effect."

Shorter focal length / Less compression



The wider angle of view will give the impression that the subjects are farther apart from each other, and that the subject closer to the camera is considerably larger than the farther subject.

Longer focal length / Greater compression



The narrow angle of view will give the impression that the subjects are relatively close and are, indeed, roughly the same size.

Camera Shake, Magnified

Whatever you do when you use a telephoto lens, be aware that even the slightest movement of the camera will be magnified massively. This makes it very easy for your point of focus to be a blurry smudge instead of a crisp image, especially because telephoto lenses tend to be heavy and fairly unwieldy. The easiest solution is to use a tripod, but if that isn't practical, keep your shutter speed as fast as you can manage. The general rule for finding the slowest shutter speed appropriate for a given lens is to divide 1 by the focal length of the lens. So a 200mm lens should use a minimum 1/200 second shutter speed, and a 500mm lens shouldn't venture below 1/500 second. That said, your telephoto lens may have a stabilizing feature (called Vibration Reduction, Image Stabilization, or other names depending on the manufacturer) that compensates for varying degrees of perceived motion. These features can be highly effective, though it is important to be aware that their effectiveness is often unpredictable. Unless absolutely required by low lighting conditions, you should always try to keep your shutter speeds as high as possible. Also, be sure to deactivate the stabilizing feature if you mount the lens on a tripod, as it can overcompensate and induce blur itself.

Density

The impression that telephoto lenses give of compressing scenes and bringing subjects closer together as well as normalizing their relative sizes means that you can increase the apparent density of your subject, and make it look as if there is more happening in the frame. You could

photograph a moderately busy high street with a telephoto lens and the compression effect will make it look bustling and full of people. A flower bed can look positively overwhelmed with flowers as you keep the relative sizes of the flowers approximately the same and the distances between them look as if they've been reduced.

Layering

Far too often it's taken for granted that a landscape must be captured with a wide angle lens. While that is an effective way of representing wide open spaces, a telephoto approach opens up many other compositional possibilities for a landscape. If you emphasize the idea of different layers in a photograph, with clear foreground, mid-ground, and background elements fit tightly into frame, you can create remarkably effective landscapes with strong graphic qualities that emphasize the shapes and textures of the various elements, giving them an opportunity to contrast with and play off of each other.

➤ St. Paul's to scale

A short telephoto perspective retained the sense of scale: The people in the foreground are small, the cathedral in the background is huge.

➔ Dense down below

Shooting this city street from far above with a very long telephoto pulls all the elements of the scene into a very tight, compressed composition that, coupled with the technique of letting the elements reach all the way to the edges of the frame (as discussed on page 70), makes the scene feel crowded, busy, and energetic.



© Daniela Bowker

© Kropic



Reach Out with a Telephoto

© Daniela Bowker



As with a wide-angle lens, if you don't already own a telephoto lens, don't feel compelled to splash out a serious chunk of cash right now because you're somehow not a real photographer without one. For a start, your kit doesn't define you as a photographer, it's the photographs that you produce from it that count. And secondly, gobble up gear in haste and you can repent at leisure. Try borrowing or renting a lens first. Get a feel for it, have a go at this challenge, and make use of a few other long-lens opportunities. Think about how it will contribute to your photographic life, then make the decision.

Experiment with compressing and increasing the apparent density of your subject by using a telephoto lens. You can pick anything as your subject, but the idea is to get a feel for how a telephoto lens can be used creatively—not just for bringing distant subjects closer.

← **Closing the distance**
Wildlife is obviously well suited to telephoto focal lengths, giving you plenty of room to work without disturbing your subject.

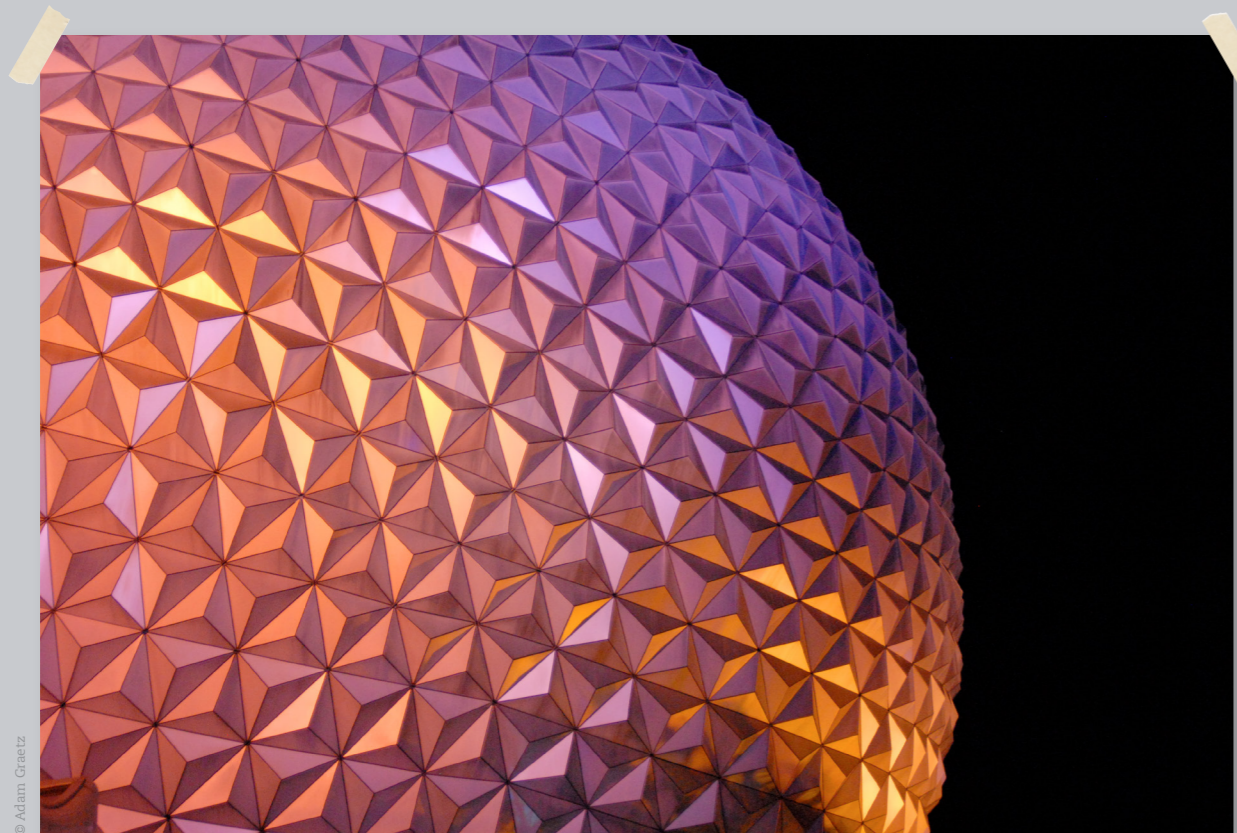
→ Compressed composition

By using a telephoto lens, the distance between each of these mountains was made less obvious, creating a layering effect all the more accentuated by the fog gradually obscuring them as they move farther away.

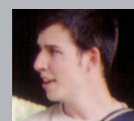
Challenge Checklist

- Use your telephoto lens at a variety of different focal lengths and distances to explore the effect.
- Alter the aperture you use to see how the depth of field seems to decrease as the subject is magnified.
- Check your shutter speed and stance to make sure that you get a sharp image.
- Take a photograph that uses the compression effect to increase the apparent density of the subjects in your scene.





© Adam Graetz



There's no shortage of photos of the iconic Epcot, so rather than fit the whole structure in frame like all the postcards, I zoomed in close on just one section. I ended up being more interested in the color and texture of the surface than the overall shape.

Adam Graetz

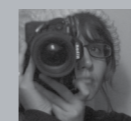


Telephotos are excellent for cropping in tight on architectural elements, often giving more interesting results than trying to fit the complete structure in frame. The rich colors also play nicely off the pure black negative space on the right. Glad to see you set the aperture small enough to render it all focused.

Michael Freeman



© Jennifer Laughlin



This photo was shot with a 300mm telephoto lens at the Pittsburgh Zoo. On the practical side, I wanted a closer shot of the animals than what my 18-135 mm was offering, but I also liked the tight, compressed compositions I was getting with it.

Jennifer Laughlin



Getting in so close with a telephoto emphasizes the interesting shape of the elephant's trunk and head, which work well in the vertical orientation. And by capturing the animal mid-stride with one leg up, the image feels more alive and energetic. Good timing. Maybe could be cropped in a little tighter?

Michael Freeman

Panning

To be honest, panning is one of the more difficult photographic techniques to get right, but the results are so impressive when you succeed that it makes the frustration worthwhile.

The trademark of a panned image is a subject in sharp focus, cast against a motion-blurred background (as opposed to a simple shallow depth-of-field shot in which the background communicates no sense of motion, and is blurred by being out of focus). The contrast makes the subject feel as if it is leaping off the page, as its orientation is in the opposite direction of the motion blur. The effect is achieved by tracking your moving subject across a plane, and using a shutter speed that is just low enough to blur out the background as you pan across it, but still fast enough to freeze the subject before it moves too far out of frame. The subject has to be kept exactly in the same position within the frame—which is particularly difficult as the viewfinder will black out as soon as the exposure begins. It takes practice, anticipation, and steady hand-holding technique (a dollop of good luck doesn't hurt either). When you first start panning, you will likely have a pile of photographs in your trashcan that are no more than blurry messes or have subjects that are half in the frame, or even missing from it entirely. However, the process and technique does gradually become intuitive, and the skill of tracking your subject translates to other types of photography as well.



↑ Forward panning

Once you master the panning technique, you can apply it to other scenes beyond those passing from left to right directly in front of you. It gets more difficult, of course, but you need only capture part of the subject sharply for the effect to be readily apparent.

Shutter Speed

Obviously you need a relatively slow shutter speed, as this will create the background blur that provides the sense of motion. So that you won't have to worry about aperture but you have control over the shutter speed, set your camera to Tv or S mode, and a shutter speed around 1/30 second should give you sufficient blur. If 1/30 second is a little too slow for you at first, try something a bit faster, maybe 1/60 second. At this speed the background blur will be less pronounced, but you will get a feel for the technique. As you improve, you can slow down the shutter speed more and more, which will increase the blurriness of the background and make it look as if the subject really is whizzing past you.

Subject

The faster your subject moves, the harder it will be to capture it; so starting off your panning practice at a Grand Prix will likely result in a lot of frustration and not very many usable photos. Planting yourself on a street corner and starting with bicycles or passing cars is ideal. When you feel that you've mastered those, you can try motorcycles and cars, too—not to mention dogs, horses, and runners.

Stability

Using a small, light lens, with elbows held tight against the torso, feet shoulder-width apart, and left hand underneath the lens for support, you should have the stability needed to capture a shake-free shot. Often this is even more useful than a tripod with a swivel head. If your lens or camera has an image stabilization feature, either deactivate it, or switch to one of its panning modes, so it doesn't interfere.



© Daniela Bowker

Composition

Aim to keep the subject in the center of the frame—at least at first as this will be easiest—and don't obsess about the image feeling flat or dull. The idea is to capture a sense of motion, and if you're successful, it will still feel dynamic regardless. You will, however, want to get in as close as you can so that you can photograph the detail of the subject but still have some background to give the feeling of movement. If your camera's autofocus is fast, you shouldn't have any problems focusing on the subject by half-pressing the shutter release button and allowing it to focus just before you take the shot. Otherwise, you will need to pre-focus manually on something that's the same distance away from you as your intended subject.

Technique

You've chosen your position so that you can track your subject, set all your camera settings, and braced yourself for stability. You're ready to go. When you've spotted your subject, position it in the center of your frame and track it with your camera, moving at the same speed by rotating your torso. Make sure that you use your viewfinder rather than your LCD screen, so that there is no delay (however fractional) between what the subject does and you seeing it. As your subject begins to pass in front of you, gently release the shutter and keep following it with your camera at the same speed. Follow through with the movement even after the shutter has closed again. The more you practice, the steadier you will be able to track your moving subjects.

↑ Street scene practice

Make sure that you're able to move your camera in parallel to your subject and that nothing is going to obscure your view. You want to be able to track your subject smoothly as it approaches, passes in front of you, and then moves off. Even though your shutter won't be open for all of this motion, the fluidity and follow-through will help you to capture a better image.

Practice your Panning Technique

↓ Practical panning

Usually a busy street would have a lot of distractions in the background, but with the right technique, you can blur them out against your sharp subject in the foreground.

As the technique that you are going to use in this challenge is probably the most difficult that you'll encounter in this book, the challenge itself is relatively straightforward: Take a panning shot. Your resulting image should have a relatively sharp subject

cast against a blurred background, and the overall impression should be one of movement. You can photograph anything that moves, but beginning with something that is moving relatively slow and following a set path will be easiest—a bicycle, for instance.

© SVLuma



→ Angular tracking

Once you feel comfortable, try diverging from the horizontal format and inducing some interesting angles to your panning shots.

© Luciano Meirelles



Challenge Checklist

- Set your camera to Tv or S mode.
- Use a shutter speed around 1/30 second (although if this proves a struggle initially, use something faster and slow it down as you master the technique).
- Pre-focus on something the same distance from you as your intended subject.
- Track a moving subject as it moves in front of you, using the optical viewfinder, and take a photo.
- See how much you can reduce the shutter speed.
- Try to capture faster moving subjects as your technique improves.



© Sven Thierie



With this shot, the motion blur turned everything except the car into abstract lines and shapes, and by rotating it to a diagonal in post like this, I wanted to accent those geometrics all the more.

Sven Thierie



Yes, using some imagination like this takes the image further than a straightforward car shot, bringing in interesting triangles and diagonals. I wish the car could have been ultra-sharp for maximum contrast.

Michael Freeman



© Jennifer Laughlin



Having been camped out on the sidewalk for a while, I was just about to give up on getting a sharp shot and head home when I saw this sports car and thought I'd give it one more try. For some reason it's always the last shot that comes out the best.

Jennifer Laughlin



Good technique—with this shot you can even make out the driver's expression, while the background is well streaked. Here is a case, to my mind, for cropping to a widescreen format or wider, which would have the advantage of taking out the bright areas top and bottom.

Michael Freeman

Motion Blur

While blur may be the enemy of sharpness, it is not necessarily the enemy of good photography. This may take some getting used to, as sharpness is typically seen as a sort of prerequisite for an acceptable shot. In most cases this is perfectly logical, but when it comes to communicating motion, the rules change a bit. No longer are you necessarily seeking to freeze a moment in time, because motion is an extension of that moment, and a sharp, frozen representation isn't necessarily an effective way to communicate that. Blur, on the other hand, can extend that moment and preserve a sense of time and motion within a single, still frame. Like so many other creative decisions in photography, whether or not this particular technique is a success is a matter of intent. A viewer can easily tell the difference between a blurry shot resulting from sloppy handholding technique and one that uses that blur for a self-evidently creative purpose.

The classic shot that makes use of motion blur is probably the rear lights of cars streaking into the distance. It might have been done a million times or more, but there's a reason for that: It looks fantastic. It's evocative and expressive, and the colors work. It also happens to be an easy introduction to long exposures and motion blur; the cars don't know that they're being photographed, and if the location is busy enough to ensure a constant stream of cars, you can take your time in setting up the shot and experimenting with different exposure settings and compositions.

Any kind of light in captured in motion can produce eye-catching, energetic images—fairground rides, fire dancers, sparklers and fireworks, the list goes on. There's very little chance of any of these images feeling static and dull, so with a little creative subject placement, you're easily on to a stunning photograph. What will make all the difference, however, is how you manage to control and compose around the rather chaotic nature of many of those subjects.



© Daniela Bowker

Moving water—waterfalls especially—is another commonly blurred subject, and one whose motion is easier to predict. The water takes on the appearance of a shimmering silver haze, and as the background doesn't move, its sharpness contrasts with the silky contours of fluid motion to great effect. The same principle applies to water splashing up against the shore. A tripod is usually essential for giving you the greatest range of creative options.

← 30-second exposure

The individual, separate dots of blue light are the results of an emergency vehicle passing beneath the bridge from which this was shot.

Dancers, musicians, and other performers all exhibit a vitality and spirit that lends itself very well to motion blur. The swish, sway, sparkle, and color of dancers in motion can look just as effective in motion blur as a shot that freezes the action and depicts their shapes. The key, as with many other motion subjects, is to still capture some sharp element off of which the blurred areas can contrast. This will also help ensure that your subject is identifiable, and keep it from descending into total abstraction.

If you're out and about and spot some street performers juggling, use a slower shutter speed and try some shots that emphasize their movements. The same goes for sports photography. Sport is all about movement, so capturing that in a photograph makes sense. Think about using the lines from the motion blur so that they act as leading lines, or work with the frame orientation. The actual motion in the image will help to prevent it from feeling dull, and by studying the action and anticipating the climactic moment but by nailing your placement.

Long Exposure

Apart from your subject actually being in motion, your shutter speed will be the critical factor in achieving a photograph that captures motion blur. As a consequence, you will want to set your camera's exposure mode to either Manual or Shutter Priority (Tv or S, depending on the make of your camera).

There's no definite formula that dictates how long your shutter needs to remain open. The slower your



← Just a touch of blur

The motion blur is made all the more effective by contrasting against the sharply captured faces and other figures in this shot. The two elements reinforce each other to communicate the festive spirit of the occasion.

shutter speed and the faster your moving subject, the more blur you'll see. If you're aiming for any kind of motion blur from a snail, you might need a shutter speed of several times longer than you would from a moving car. The car's motion blur you could probably achieve within a few tenths of a second. Really, it will be a case of playing around to discover what works best in the situation.

If you're concerned that having your shutter open for a long period is going to overexpose your image before you can capture some motion blur, even with a small aperture, then you might want to consider using a neutral density filter. These filters work by reducing the intensity of all wavelengths of light equally as they pass into the lens, so that the colors aren't altered, but excessive brightness is reduced. A neutral density

filter can be incredibly useful on a bright day, even if long exposure work isn't something that you're thinking of doing, as it will allow you to use a larger aperture for creative purposes without having to use a super-fast shutter speed.

There is something of a difference between motion blur and a blurry photograph; one is creative and the other is, well, a blurry mess. Your shutter is going to be open for a relatively long period of time to allow you to capture your subject in motion. This will, however, lead to the entire photograph being blurry owing to camera shake if you don't stabilize your camera. Using a tripod is probably the easiest way to ensure that you get the photograph that you want, but depending on where you are and what you're photographing, a beanbag or a flat surface can suffice, too.

Communicate Movement through Blur

↓ Urban dynamics

Street scenes are filled with motion, and benefit from a touch of motion blur here and there.

Movement happens all the time, all around us, so there's no reason why you shouldn't be able to capture it effectively in a photograph. It will help to tell your story and to give your image a feeling of dynamism. The key is to ensure that any instances of motion blur look deliberate, and not just an accident of sloppy photography. You want enough blur to give a sense of movement, but not so much that the image is just a mass of streaks with no obvious subject.

As well as thinking about your shutter speed and ensuring a good exposure for your photographs, you must consider the direction and flow of the blur and how that will have an impact on your composition. Primarily, you will probably want to think about leading lines and frame orientation, but just about any other compositional factor can come into it, too.

© Daniela Bowker



→ Energetic and spirited

Action, be it an athlete running across a field, or a dancer performing, is easily represented by some well-controlled motion blur.

Challenge Checklist

- Use a range of different shutter speeds to identify their effects on motion blur.
- Take care not to overexpose your image.
- Compose your frame carefully to make the most of the blur.
- Use a tripod or other stabilization mechanism so that the only blur in your photograph is from the subject in motion, not camera shake.





© Sven Thierie



A 20-second exposure, with one figure standing center bottom rotating her sparkler in a circle, and another (myself) that ran from camera left out and around the tree, making two laps before the exposure ended. It was just shot for fun, but I was surprised how sharp the individual leaves on the tree were captured.

Sven Thierie



An imaginative interpretation of blur. Experimentation is a good way to develop ideas and techniques. You didn't say whether this was successful on your first try. In any case, it's an idea that I'm sure you can continue working with. I wonder what it might look like with the central figure both more and less evident.

Michael Freeman



© Gillian Bolsover



I wanted to take this shot of the line of dancers in the parade. I must have spent several minutes running by their side, camera held over my head composing the picture, before I found a frame I thought could work.

Gillian Bolsover



I like the limited blur in this shot, confined mainly to the bottom right, to which it draws attention. Angling the camera favors the position of the dancers, though personally I would crop at left to keep it *all* dancers—but that's just a matter of taste.

Michael Freeman



Post-production

You should always value each shot that you take—there is nothing as satisfying as nailing a shot in-camera, with perfect exposure and ideal composition. What's more, we are photographers and not editors, and our time is better spent out in the field than behind a computer. That said, there is ample time for some of both, and cultivating your post-production and editing skills—even if only the essential ones—is an inseparable part of learning digital photography.

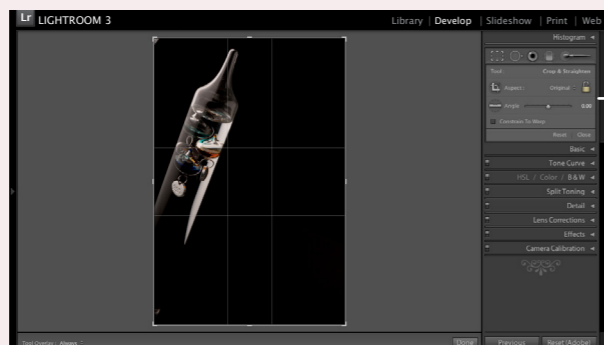
Far from exploring the infinite subject of post-production in great detail, in this chapter I will simply cover three essential elements: the crop, the color, and the contrast. There are myriad different edits that you can make in addition to these three and you can spend as much or as little time as you want experimenting with them and exploring their effects on your images, but start with The Three Cs. They might be just what you need to make a photograph a success.

When it comes to editing software, Adobe Lightroom is discussed here, which is just one of a vast array of program that are available. You might observe some differences in the layout and operation in your program of choice, but the principles will remain the same.

Cropping

There is no substitute for getting a composition right at the time of capture—it will always be best to consider an optimal design while the subject is there in front of you, as you can explore different angles and exposures along with different cropping possibilities. That said, it is silly to disregard the significant advantages that a conservative approach to cropping can have on the quality of your photography, particularly considering the ever-increasing megapixel counts of today's cameras, offering you more than enough resolution to accommodate even the occasionally dramatic crop.

© Daniela Bowker



Adobe Lightroom tools

The crop panel is on the upper right in the Develop window. Click on this broken box, and a helpful overlay will appear. You can choose from a range that includes the rule of thirds and the Golden Ratio.

But so long as you considered the composition originally, cropping should typically consist of minor fixes and adjustments—a fixed horizon here, a distracting background element deleted there. The difference a subtle crop

makes is sometimes dramatic, and can elevate an image by ensuring the viewer's attention is focused as you intend it to be. It pays to experiment and observe the effect various crops have on the final image.

←← Clean it up

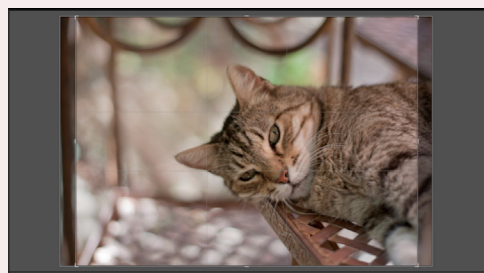
By cropping out the metal-work to the left and the front paw on the right, there's no distraction from the cat's face.

→→ Square it off

For more obvious corrections of skewed horizons, you may end up cutting out so much space along the sides of the shot that a different aspect ratio is needed. Consider what works best for your subject.



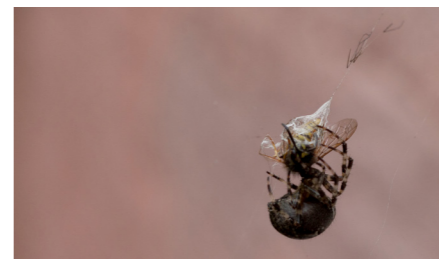
© Richard Connors



© Daniela Bowker

More Extensive Cropping

There are photographers who say that if they have to crop more than five percent of the photo, then they have got their composition wrong. You might think that's a sentiment I'd support, but curiously enough, I don't—not necessarily. Yes, of course you should try to get the composition just right and you shouldn't be cropping vast chunks out of every photograph that you take, but don't feel that a photograph is a failure if you want to crop more than five percent of it.



© Daniela Bowker

For a start, when you look back over your photographs, you have the benefit of a less time-pressured perspective.

How you framed what caught your eye when you were out on the street could, on reflection, not have done it justice. By adjusting your crop, you can place a different emphasis on your subject and capitalize on the good work that you've already done. Ideally you don't want to rely on post-production too much, and you would prefer to have spotted the better crop in the field, but you didn't. So why cut off your nose to spite your face? At least you'll know better should a similar situation arise. On a tangential note, you should review your photographs after the shoot on a large screen and in good light. Don't make hasty decisions in the field. This is a policy that has prevented me from deleting many a good photograph.

→→ Look closer

As megapixel counts increase, your options for reaching farther into an image to pick out interesting detail increase as well.



© Taro

Second, sometimes you have to make the best of what you have. When the series of photos above was taken, a macro lens was simply not available. It would have been the ideal lens for the situation, but you can't use what you don't have. So a compromise was made: Using the sharpest lens available at the closest focusing distance, the shot was taken with the full intention of

↔ Faux-macro

With some creative cropping, I was better able to isolate this spider in action. In fact, I was able to generate two different orientations of the same image—a useful benefit of cropping in post-production.

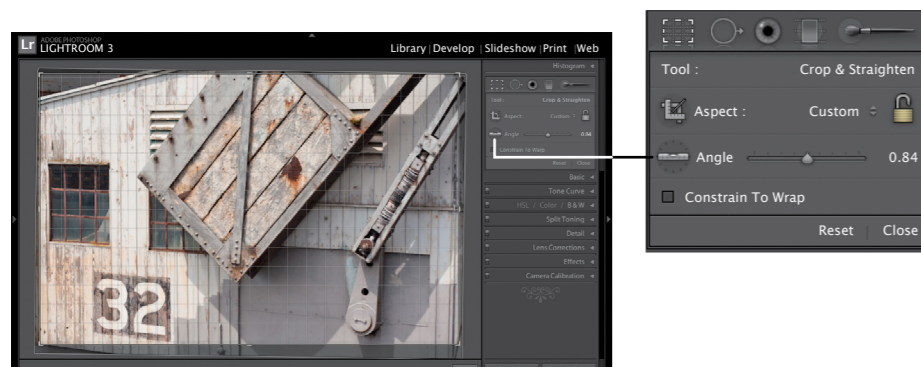
cropping afterward. A steady hand was essential, and the subject was placed in the center of the frame for maximum leeway in composition later on.

Straightening

Closely related to cropping is the straighten tool. Try as you might, sometimes you don't always manage to ensure that your horizontal lines run parallel with the horizontal edges of your frame, and the vertical lines with the vertical edges. Some cameras benefit from horizon overlays or

spirit levels on their viewfinders, which should help to straighten your photographs. However, if you don't have either of these and have been shooting on uneven ground, or from a difficult position, fixing wonky photographs using editing software is straightforward and simple.

The straighten tool is in the same panel as the crop tool. Click on the Angle button and a grid will appear. Then you can adjust the angle by using the slider in the tool panel.



← The angle tool

With this, you can manually rotate the image by clicking and dragging on a corner, or you can be extremely precise by dialing in the degree of rotation, one digit at a time.

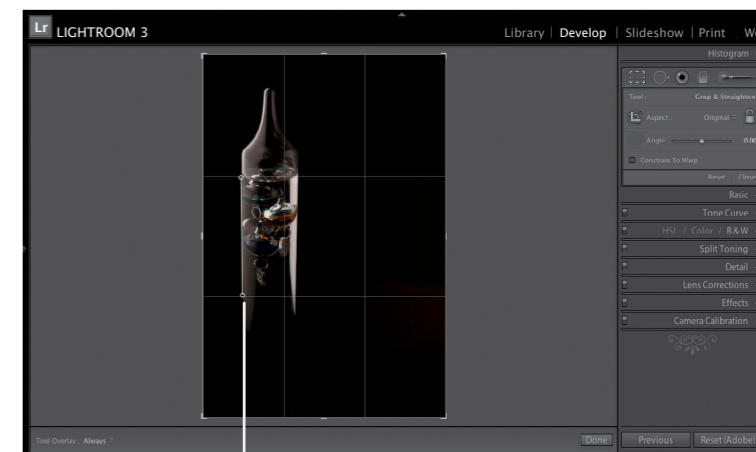


← Into alignment

This image has been adjusted by 0.84 degrees. Not much, but enough to make a difference—particularly because the lines along the side of the building would have been obviously out of alignment with the edges of the frame.

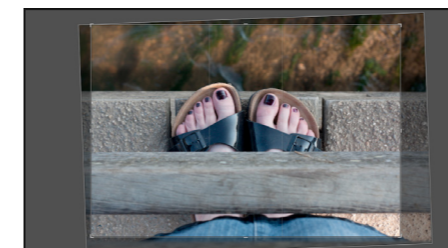
Sometimes the click-and-drag and slider tools can be difficult to use with great precision. If there's a prominent line in your photograph that you'd like to use as a point of reference, however, you can click on the Angle button and a spirit level will appear on your image. You can use that spirit level to draw a line that follows the one that you want to be straight. When you release the mouse button, the image will snap into alignment, and the edges will crop off accordingly.

The photograph below has been straightened and cropped slightly. The railings and the edge of the bridge were lined up with the horizontal frames of the photograph, and it was cropped to bring the subject slightly closer and farther up in the frame.



Galileo thermometer

This line will ensure that the subject appears straight in the photograph.



↑→ Perfectly geometric

Even slight crops can make a dramatic difference on some shots—particularly when they rely on perfect geometry for a successful composition.



Cut Out the Excess

↘ ↘ Get rid of annoyances

This simple crop focuses attention on the sharp figures at the left by eliminating the out-of-focus, distracting area on the far right of the original.



© Flowerpower

Crop and straighten are two very simple tools that can have a surprisingly powerful effect on your photographs; a minor crop to remove some unwanted background or aligning the horizon to ensure that it's level will improve your images phenomenally. Have a go yourself with some of your own photographs, but don't embark on a huge cropping frenzy—just a sliver

here and touch there, to get a feel for how influential it can be. This challenge is about building on the good work that you will have done already, not creating something new from scratch.

Try straightening an image, too. Adjust a horizon so that it is level or align a bottle so that it is upright. It's a tiny change that can make a big difference.

→ ↘ Level horizons

With the horizon level, the slight diagonal of the posts along the bottom of the frame is made much more effective.



© Marcin Chodorowski



Challenge Checklist

- Familiarize yourself with the crop and straighten functions in an editing program.
- Identify the different methods available to straighten an image.
- Select photographs that are already good and will benefit from minor adjustments.



© Jennifer Laughlin



I really loved my dog's expression here, but the lopsidedness was really distracting at first, particularly because all the other lines of the window frame make the angle all the more obvious. A simple rotation fixed that, though.

Jennifer Laughlin

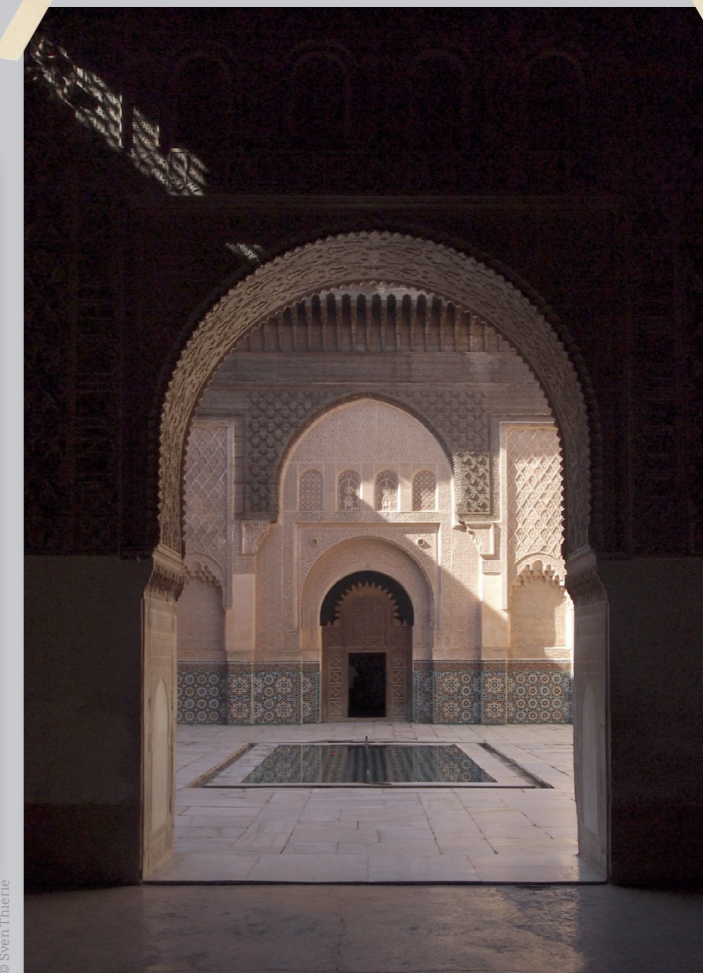


What a difference a seemingly minor rotation and crop can make. The left side is a classic case of a distinct line so close to the framed edge that it needs to be either aligned or distinctly not. The narrower aspect ratio also suits the subject well.

Michael Freeman



© Sven Thierie



I had only a split second to take this shot before the inner courtyard was full of people again, so I didn't quite have time to line it up perfectly. Fortunately I was far enough back to give me plenty of room to crop and rotate in post-production. I also did a very slight perspective distortion correction to fix the converging lines.

Sven Thierie



The diagonal shafts of light on the nearer and farther walls are what makes this shot, and cutting out the excess gives them the attention they deserve. Alignment, as you've done, can always be fixed later (a complete change of values, by the way, from the days of shooting film transparencies).

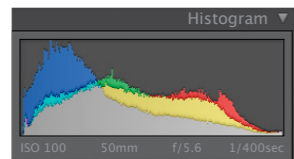
Michael Freeman

Contrast & Color

Raw files are the key to successful post-production work. JPEG files are much smaller, but it's the larger size of Raw files that makes them more valuable, as they are preserving more information. All the information that a Raw file retains makes it far easier for you to manipulate your images to ensure that the end result is just as you want it. Using JPEG means that you lose the ability to adjust your white balance properly, to sharpen your images yourself, to decide on just how much color saturation you want, and to alter your contrast effectively. What's more, when the image is compressed to create the JPEG file, up to one third of the full color information is lost in the process. With JPEG, decisions about



© Daniela Bowker



↑↑ Contrasty histogram

There's plenty of contrast in this image, which was taken in bright sunlight. The histogram is broader, but it is also slightly flatter.

your images are made for you; with Raw, you get to make them yourself. And when it comes to color and contrast in post-production, that's just what you want.

After cropping an image, the next two standard edits to consider are contrast and color. Any further adjustments—like cleaning up skin blemishes or removing sensor dust spots—will depend on the individual photo, and really, that's for another book. But as with cropping, contrast and color are related to how the image is composed and the story that it tells, which is why we should take a look at them.

Contrast

Contrast is the difference in brightness between the light and dark areas of an image. Without contrast, we wouldn't have an image as everything would be all black, all white, or all one shade somewhere in between the two. The greater the contrast in an image, the greater its visual impact; shadows will have more depth and highlights will be more pronounced.

You can ascertain the contrast of an image by taking a look at its histogram, which maps the distribution of its pixels from shadow (on the left) to highlights (on the right). A broad graph is indicative of a contrasty image; less contrast will result in a narrower graph with a sharper rise in the middle, and the image will likely look dull.



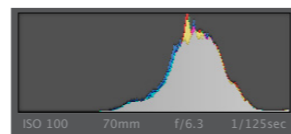
© Southshore

↑↑ Bringing out detail

Exceedingly misty environments can be so low contrast that detail and colors are hard to bring out—but at the same time, it's the low contrast that gives such shots their signature ethereality. Here, the contrast slider was adjusted until a good balance was struck.



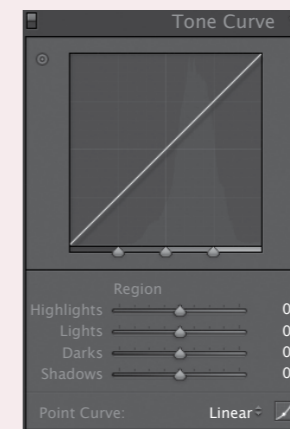
© Ignatius Wooster



↑↑ Low-contrast histogram

There's very little contrast in this image as seen in its narrow histogram. It looks flat and dull—very typical of shots taken during heavy fog.

If you're using Lightroom, the simplest way to adjust the contrast of your image is to use the contrast slider in the Basic panel. Move it to the right and you increase contrast; nudge it to the left and contrast decreases. As you increase the contrast, you'll see the histogram broaden. It may flatten a bit, too, which means that you'll lose some detail in the mid-tones. Contrast is about give and take: if you want more in the highlights, you'll have to lose some from somewhere else. While using the contrast slider is easy, it's also a sweeping adjustment. It is possible to make far more nuanced alterations to contrast using the tone curve.



← Lightroom tone curve window

Here you can alter the highlights, lights, darks, and shadows individually. If, for example, you wanted to retain the detail in your shadows but increase the contrast in your highlights, you could make that adjustment using the tone curve. That would be reflected in the histogram as its data shifted to the right, but not towards the left. This is especially useful if your histogram is showing a great many data in one area and you want to balance out the image.

In the original image of the waterfall, there is plenty of data in the shadows and some in the lights and darks, but practically nothing in the highlights. By adjusting the contrast using the contrast slider, you can see that the data is redistributed across the full range of tones, pulled out of the shadows and spread out across the mid-tones and highlights. In fact, the adjustment has pushed the data so far to the highlights that some of the detail will have been lost in those areas.



↑ Original image

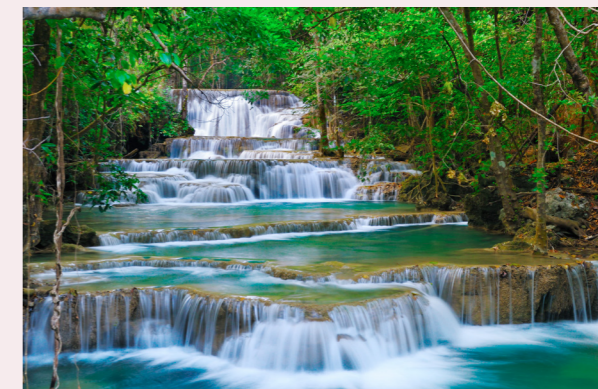
This is straight out of the camera, without any contrast adjustment yet made.



↑ Contrast-adjusted

Here contrast has been increased by 20 points on the slider. Notice how there's more definition in the water and the colors seem to have more punch.

Whatever adjustments you choose to make, remember that they're just that: a choice. There is no right or wrong degree of contrast in your images; it's about your vision and the expression of the story of photograph. You might want to avoid having huge swathes of black or washed-out areas running through your photographs, but it's still a choice. Sometimes you might want a low-contrast image, high-contrast at other times.



© Lkunl

← Final tone curve fix

By using the tone curve, the blacks can be adjusted, but not clipped, and the contrast in the highlights and lights can be increased significantly. Finish it off with an increase on the Vibrance slider, and the photo is finished in just a few steps.

White Balance & Saturation

What we think of as white light isn't really white—it's a composite of different wavelengths of light from across the spectrum. Different light sources comprise different proportions of these wavelengths and therefore have different color temperatures, measured in degrees Kelvin.

Warmer light temperatures look more blue, cooler light is more red. That might seem counter-intuitive, but it's about the energy in the light. If it helps, remember that something white hot is hotter than something red hot. Our eyes are remarkably efficient at adjusting for the temperature of light and always manage to render white as white; unfortunately, our cameras have a little bit more trouble. Sometimes, photographs taken under incandescent lights can have a red-orange cast, while those taken in the shade can be tinted blue.

We can adjust the settings on our cameras to accommodate this and ensure that white looks white. However, unless I'm shooting in very specific circumstances, I don't normally worry too much about the white balance until it comes to editing. If you've shot Raw, you can adjust the white balance with

no detrimental effect on your image quality. In Lightroom, there's a color thermometer in the basic panel. You can adjust the temperature until it renders the colors accurately in your photograph.

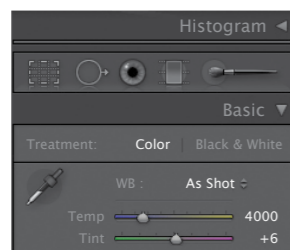
The practical scale of color temperature

K	Natural source	Artificial source
10,000	Blue sky	
7500	Shade under blue sky	
7000	Shade under partly cloudy sky	
6500	Daylight, deep shade	
6000	Overcast sky	Electronic flash
5200	Average noon daylight	Flash bulb
5000		
4500	Afternoon sunlight	Fluorescent "daylight"
4000		Fluorescent "warm light"
3500	Early morning/evening sunlight	Photofloods (3400K)
3000	Sunset	Photolamps/studio tungsten (3200K)
2500		Domestic tungsten
1930	Candlelight	



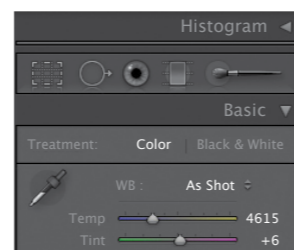
Original white balance

This photo was taken using mid-afternoon sunlight coming through a doorway. As a consequence, it has a slight bluish cast to it.



Adjusted white balance

By adjusting the color temperature, the image has a more realistic golden glow.



© Daniela Bowker



Saturation

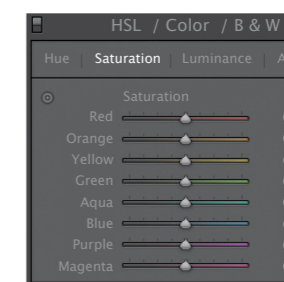
The intensity of a color is determined by its saturation. By oversaturating the colors, you can make a statement that's bold and punchy. Alternatively, by slightly desaturating, you give a more subtle look. Sometimes this can present itself as elegant, other times somber. Either way, saturation is a creative choice: The intensity of the colors in your photograph will depend on the effect that you want to achieve. It's also quite easy to accomplish. You can increase or decrease the overall saturation of colors in an image by using the saturation slider. Generally, you should avoid going too far to either extreme. A black-and-

white image that has been achieved by complete desaturation usually looks flat and dull; an entirely oversaturated photograph loses a great deal of its definition and becomes unreal. A little saturation, or a touch of desaturation, can have an impressive impact on a photograph, however.

In addition to altering the overall saturation of a photograph, Lightroom allows you to manipulate the intensity of eight different colors independently of each other. This is very helpful if you need to adjust the intensity of one or two colors in an image; perhaps you want to make a sky look just that bit more blue, or you want to tone down someone's ruddy complexion a smidge.

The Goldilocks approach

From left to right: The original image; then -40 saturation (too dull, but it does illustrate that muted, subtle effect); and then +40 saturation (which looks quite garish!).



Color Adjustment Panel

Slide the button to the left to mute colors and to the right to embolden them.

Original portrait (far left)

This portrait was taken in a green marquee. The beautiful pink tones in the photograph were being overwhelmed by a nasty green tinge. It made the subject's skin sallow and gave her hair a peculiar hue.

Color cast removed (left)

By desaturating the green tones, the image is that much warmer and pleasing on the eye. Just to help it along, the oranges, purples, and magentas were also boosted, but only by fractional amounts. The red was left alone, or it would have exaggerated her already-bright fingernails.



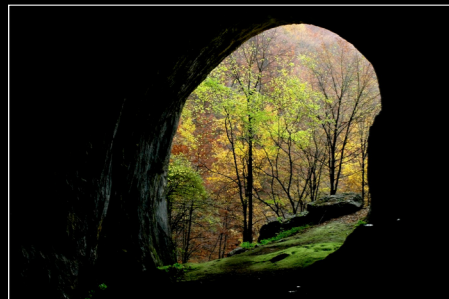
© Daniela Bowker

Experiment in Post-Production

There's been a lot to take in with this section; it has covered contrast, white balance, and color saturation. However, all of these elements are important when it comes to ensuring that your images look just how you want them to. Don't forget that with editing software, the different permutations for one image are infinite, so whatever you do to it isn't necessarily the end. If you're ever feeling frustrated by your photography—it can happen sometimes—revisiting old photographs and re-editing them can be a way to unleash some of your creative juices.

Sometimes, it is fun to play around with an image to see exactly what you can accomplish with it.

For this challenge, take one photograph and edit it so that you give it several different looks and you get a feel for how powerful editing software can be. Adjust the contrast, try to select a white balance that you think does it justice, play with the saturation levels making it both oversaturated and slightly desaturated. Remember: There's no right or wrong here; it's about what you want to achieve or accomplish.



↕ Open up the shadows

The original was exposed only for the exterior light, but the scene was made much more effective by opening up the blacks just a bit to get some detail of the cave interior.



© Salajejan

→ A touch of contrast

Sometimes a subtle touch is all that's needed—a bit of contrast added to make the top of the frame distinct from the bottom, for instance.

Challenge Checklist

- Use one image so that you can compare the results and appreciate the effect of editing.
- Identify the tools to manipulate contrast, white balance, and saturation in your editing software.
- Adjust the contrast to make it both high and low contrast, before settling on the degree of contrast that you think works for this photograph.
- Note the effect of different white balances on the image. Select the white balance that most accurately conveys the colors you want.
- Manipulate the saturation levels to both desaturate and oversaturate your image. Adjust the levels so they meet your vision of the photograph.



© Kevin Eaves



© Sven Thierie



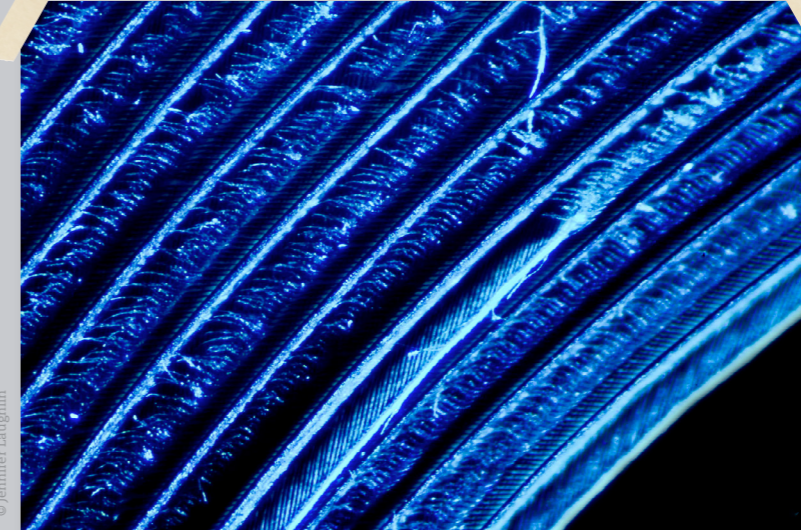
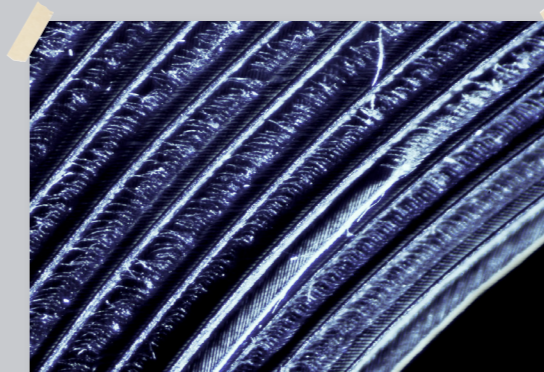
I knew when I took this shot that I was going to play around with it in Photoshop. I framed it to avoid any footprints or people, capturing only the patterns in the sand. Then I boosted the saturation and contrast way up to really accent the texture and make it pack a bold, vivid punch.

Sven Thierie



Good that you'd thought it all through at the time of shooting. Once you know your subject, just as you describe it, the rest follows naturally, and you've enhanced the contrast the right amount. I imagine also that the final color is the way you felt it should be at the time.

Michael Freeman



© Jennifer Laughlin



I was very pleased with the detail in this extreme close-up, but the colors didn't do the shot justice. I played around with the white balance and tint, but in the end all it needed was a global saturation increase.

Jennifer Laughlin



I like the balance between the black corner triangle and the curving diagonals. Color certainly helps the shot overall, which would not be much in black and white. But to me the saturation is a little over the top. That intense blue reminds me of the strange colors you sometimes see in a heavily dyed microscope specimen.

Michael Freeman

Glossary

A Aperture priority mode, as indicated by some camera manufacturers.

Ambient light Environmental light, for example daylight and light from normal domestic fittings.

Angle of view Essentially what your camera is able to “see,” from wide to telephoto.

Aperture The opening behind your lens that allows light to pass through it and reach the sensor.

Aperture priority A camera setting that allows you to choose the aperture while the camera selects the appropriate shutter speed to ensure a good exposure. Some camera manufacturers indicate it with A, others with Av.

Artificial light Photographer-supplied light, usually from a flash.

Autofocus When the camera lens adjusts the focus to ensure a sharp image.

Av Aperture value, the term used to indicate aperture priority mode on some cameras.

Background The part of the scene behind the subject.

Backlighting Light that comes from behind the subject, into the camera.

Barrel distortion The effect when straight lines appear to curve, as if they’ve been stretched over a sphere or barrel, seen with wide-angle and fish-eye lenses.

Balance What you want to achieve with your composition: A sense of equilibrium in an image achieved by the considered placement or use of color, light, and subject matter.

Blown-out Areas of white in an image where it has been overexposed.

Chiaroscuro Literally “light/dark,” the interplay of light and shadow to create an image.

Color wheel A diagram that shows the relationships between different colors.

Complementary color Colors that sit opposite each other on the color wheel, for example green and red.

Contrast The range in difference between light and dark tones in an image.

Crop The framing of a scene, either through the viewfinder or in post-production.

Depth of field The zone of sharpness in front of and behind the subject.

Ev Exposure Value, how the brightness of a scene is measured.

Exposure How much light reaches a camera’s sensor.

f-stop The measurement of the variable opening in a lens (the aperture) that allows light to pass through it and reach the sensor or film. f1.4 is a large, or “fast” aperture; f22 is a small aperture.

Fast A term used to describe a lens with a large maximum aperture, usually f2.8 or wider.

Fluorescent light Domestic lighting that doesn’t get hot, but gives blue/green color casts.

Focal length The distance between the mid-point of the plane of the lens and the sensor or film in a camera.

Focal point The center of interest in a photograph, the area where you focus your camera.

Focus When you adjust the lens or camera to ensure that your image is as sharp as possible.

Foreground The part of the scene between the camera and the subject.

Golden hour The period after dawn and before dusk that offers a soft, golden light ideal for dramatic photography.

Golden Ratio A proportion that is aesthetically pleasing. It is equal to approximately 1.61803, and sometimes denoted by the Greek letter Phi (π).

High-key Low-contrast images that have a feeling of light airiness and positivity.

Highlights Technically, the pure white parts of an image, but often it refers to the lightest areas of an image.

Histogram A graph indicating the distribution of pixels in an image from light to dark.

ISO Stands for International Standards Organisation; it’s a numerical value given to the sensitivity of products, for example photographic paper or sensors, to light.

JPEG “Joint Photographic Experts Group,” a universally recognized, lossy file format for photographs.

Kelvin A unit of measurement for temperature; in photography, it is used to measure the temperature of light.

Landscape A photograph of a vista; the orientation of the frame so that the longer edges form the horizontal borders.

Leading line A line in an image that draws the eye to the subject.

Lens A piece of glass with curved sides that allows you to focus and direct rays of light.

Low-key High-contrast photographs, usually very dark in tone, that have a feeling of brooding.

Macro A photograph taken in extreme close-up, often of small things, for example insects.

Manual An exposure mode that allows you to directly determine aperture and shutter speed to create the exposure that you want.

Megapixel About one million pixels, also the term used to express the resolution of your camera’s sensors.

Negative space Areas of a photograph that do not contain any subject matter.

Neutral density filter A neutral color filter that absorbs light from different wavelengths without altering the overall color of an image, permitting longer exposures or wider apertures when there is too much available light.

Noise The graininess in images that appears as you increase the sensitivity of your sensor to light.

Normal lens A lens with a focal length between 40mm and 60mm.

Orientation Vertical, horizontal, or somewhere in between: How you hold your camera.

Over-exposure What happens when too much light reaches the sensor or film and a photograph is too bright with too many pure-white areas in the frame.

P Program mode, an autoexposure mode in which the camera chooses both the aperture and shutter speed, but you can manually change the relationship between these variables, and all other camera settings remain available for you to adjust.

Panning A photographic technique in which you move the camera in time with a subject in motion to create a image where the subject is sharp and the background is blurred.

Panorama A wide view of a scene, usually a landscape.

Perspective The phenomenon that allows images rendered in only two dimension, for example on paper, to appear as if they have depth.

Pixel The smallest units of a digital image, pixels are the square screen dots that make up a bitmapped picture. Each pixel carries a specific tone and color.

Portrait A photograph of a person; the orientation of the frame so that the shorter edges form the horizontal borders.

Post-production The adjustment of images after they have been recorded by the camera.

Prime lens A lens with a fixed focal length.

Raw A file format that preserves extensive image information and allows you to manipulate your photographs using editing software.

Resolution The level of detail in an image; measured in pixels-per-inch (ppi).

S Shutter priority mode as indicated by some camera manufacturers.

Saturation The intensity of a color or hue.

Sensitivity How reactive a sensor, or film, is to light (*see* ISO).

Sharp In focus, clear.

Shutter priority A camera setting that allows you to control shutter speed, while the camera determines aperture to ensure a good exposure.

Shutter speed The period of time for which the shutter remains open and allows light to reach the sensor or film.

Side-lighting Light that hits the subject from the side, as opposed to the front or back.

Silhouette The outline of a subject against a brighter background.

Stop An increment of the measurement of aperture.

Stop down When you reduce the size of the aperture, and increase depth of field.

Subject The main focus of a photograph.

Telephoto lens A lens with a focal length in excess of 70mm.

Tripod A three-legged device to stabilize a camera during a longer exposure, preventing camera shake.

Tungsten light Incandescent light, light from normal ceiling bulbs and standard lamps; it’s usually warm in color.

Tv “Time value,” the term used to indicate shutter priority mode on some cameras.

Underexposure When too little light reaches the sensor or film and a photograph is too dark.

White balance The color balance of light that ensures white always looks white.

Wide-angle lens A lens with a focal length under 35mm.

Zoom lens A lens with a range of variable focal lengths.

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Bibliography & Useful Addresses

Books

The Complete Guide to Light and Lighting in Digital Photography

Michael Freeman

The Photoshop Pro Photography Handbook

Chris Weston

Perfect Exposure

Michael Freeman

Mastering High Dynamic Range Photography

Michael Freeman

Pro Photographer's D-SLR Handbook

Michael Freeman

The Complete Guide to Black & White Digital Photography

Michael Freeman

The Complete Guide to Night & Lowlight Photography

Michael Freeman

The Art of Printing Photos on Your Epson Printer

Michael Freeman & John Beardsworth

Digital Photographer's Guide to Adobe Photoshop Lightroom

John Beardsworth

The Photographer's Eye

Michael Freeman

The Photographer's Mind

Michael Freeman

Websites

Note that website addresses may often change, and sites appear and disappear with alarming regularity. Use a search engine to help find new arrivals.

Photoshop sites

Absolute Cross Tutorials

www.absolutecross.com

Laurie McCanna's Photoshop Tips

www.mccannas.com

Planet Photoshop

www.planetphotoshop.com

Photoshop Today

www.designertoday.com

ePHOTOzine

www.ephotozine.com

Digital imaging and photography sites

Creativepro

www.creativepro.com

Digital Photography

www.digital-photography.org

Digital Photography Review

www.dpreview.com

Short Courses

www.shortcourses.com

Software

Alien Skin

www.alienskin.com

ddisoftware

www.ddisoftware.com

DxO

www.dxo.com

FDRTools

www.fdrtools.com

Photoshop, Photoshop Elements

www.adobe.com

PaintShop Photo Pro

www.corel.com

Photomatix Pro

www.hdrsoft.com

Toast Titanium

www.roxio.com

Useful Addresses

Adobe www.adobe.com

Apple Computer www.apple.com

BumbleJax www.bumblejax.com

Canon www.canon.com

Capture One Pro

www.phaseone.com/en/Software/

Capture-One-Pro-6 Corel

www.corel.com

Epson www.epson.com

Expression Media

www.phaseone.com/expressionmedia2

Extensis www.extensis.com

Fujifilm www.fujifilm.com

Hasselblad www.hasselblad.se

Hewlett-Packard www.hp.com

Iomega www.iomega.com

Kodak www.kodak.com

LaCie www.lacie.com

Lightroom www.adobe.com

Microsoft www.microsoft.com

Nikon www.nikon.com

Olympus www.olympusamerica.com

Pantone www.pantone.com

Philips www.philips.com

Photo Mechanic www.camerabits.com

PhotoZoom www.benvista.com

Polaroid www.polaroid.com

Ricoh www.ricoh-europe.com

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Symantec www.symantec.com

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