

# Landscape photography tips for explorers



P a t r i c k S c h m e t z e r



PATRICK  
SCHMETZER  
CEO & FOUNDER

## About the Author

Patrick Schmetzer is a professional photographer & filmmaker based in Frankfurt, Germany. With over 6 years of experience in his field, Patrick's body of work spans an impressive breadth of styles and industries.

His diverse work includes portrait photography, landscape photography, event photography, wedding photography, food and restaurant photography, commercial photography, product photography, and many more.

Patrick is known in the industry for creating powerful and dynamic images and film productions. Full of passion for his craft, he pushes the boundaries of photography through unique perspectives and creative techniques that capture the essence of the moment and deliver an amazing body of work

Whatever the subject, Patrick brings a unique and devoted eye to his projects and assignments. His passion for detail reflects in his work, where he expresses creativity by capturing diverse moods to deliver stylized, cleanly executed photos and visuals.

Patrick is both meticulous and approachable in his work. He is a talented visual creator with a strong photographic base rooted in expressive storytelling.

**“Happiness is Not Something  
Readymade. It Comes From Your  
Own Actions”**

Steve Jobs



Castle Bodenschwing, Germany

## Foreword

Do you enjoy landscape photography, but find you're not satisfied with your images? Or simply don't know where to begin? This book will show you how to use the right equipment, simple techniques, and correct settings to improve your images significantly.

You will find out that landscape photography is more than just pressing the shutter button. It is also not rocket science but a craft that anyone can learn. You don't have to invest in expensive professional equipment or study photography. You will soon go home with stunning photos

# Introduction

You are back from an exciting trip or photography trip and can't wait to see your photos on the big screen, but you just don't feel it. In terms of location, everything looks impressive. However, your photos do not convey the beauty of the beautiful place you were so excited to photograph. The magic of the moment you remember is not reflected in your photos. Or maybe your image is out of focus or exposed incorrectly, and you don't know why? Maybe your photos look far from what you see in a calendar, photo album, or magazine. Perhaps you just shot in the fully automatic or scene mode, and now you want to go further? Maybe you are still in the starting stage, and all the wheels, buttons, and camera menus are overwhelming you? Are terms like aperture, depth of field, or hyperfocal length just a Bohemian village to you? In all these cases, you are here. I write my landscape photography skills directly from practice.

I am thrilled to be able to freely and openly share with you the knowledge I have gained from many years of landscape photography. Therefore, the e-book is free and will remain so in the future. Like thousands of other photography enthusiasts before, I hope you can benefit from landscape photography skills in the best possible way. Furthermore, I hope you enjoy reading and trying them!



An aerial photograph of a beach in Dubrovnik, Croatia. The beach is a mix of pebbles and sand, with several lounge chairs and people. To the left, there's a wooden deck with orange chairs. The water is crystal clear, showing the seabed. Several thatched-roof huts are scattered around the beach and on the rocky shore. The surrounding area is lush with green trees.

# 1. Following my Photography Tips

# What does successful Landscape Photography mean?

Before explaining how to take "successful" landscape photography, I want to define what needs to be understood. Like many things in life, this is a matter of opinion in the eyes of the beholder. So I can only tell you here what is a great landscape painting for me. In addition, if a picture meets the following requirements, then it is considered perfect for most people:





## ATMOSPHERIC

it should convey the exceptional character and "spirit" of a place or a particular moment



## EMOTIONAL

it should trigger something in the audience and arouse their desire in that place



## SHARP

as many details as possible should be visible, whether near or far



## VIVID

bright colors and high dynamic range, close to the field of view of the human eye



## AESTHETIC

exciting and  
harmonious at the  
same time, it  
attracts the  
audience



## PLASTIC

the 3D effect that  
immerses the  
viewer in the image



## PERSONAL

it should reflect  
what I see, but it  
also reflects my  
feelings



## TECHNICALLY PERFECT

no distortion,  
sensor spots,  
vignetting, color  
fringing, etc.



## 2. Appropriate Equipment

12mm - F/2.8 - 1/8000s - ISO 140

Obertauern, Austria



24mm - F/3.5 - 1/1250s - ISO 100

Ras Al-Khaimah, UAE

The right equipment is essential for landscape photography. Unfortunately, it is usually overrated, and many beginners tend to get stuck. As a photographer, a question I often hear is: "Wow, good picture. What camera did you use to take it?". The same famous saying is, "If I had a camera as good as yours, I would take such beautiful pictures." Many people think an expensive camera alone can guarantee good photos. But the opposite situation is more likely to happen.

Professional equipment is mainly free of automation functions and requires users to have specific professional knowledge. If you can't handle it, the result may even be disappointing. On the contrary, cheap equipment does not mean that you can't use it to take exciting photos. This principle applies not to the camera that takes the picture but to the person behind it.

First, it is vital to put together equipment that suits your needs and skills. Less is more. Especially beginners, limit yourself to a small number of devices first but learn to master it proficiently.

Most importantly, the equipment should be tailored to the unique requirements of landscape photography. Unfortunately, I often encounter situations where the photography equipment is not well thought out during my travels. The equipment purchase is usually based on the motto: "The more expensive, the newer, the more features, the better." But this is a fallacy. Many are not always very helpful. Therefore, I now want to give you some tips on what equipment you need.



# Camera

There is no doubt that a camera is an essential prerequisite for being able to take pictures. It doesn't matter which model you start within landscape photography. The cameras of current brand manufacturers have high standards. Therefore, which manufacturer to choose is more a matter of taste and belief. It may not be the latest model.

However, it's crucial to set basic photography parameters on the camera, such as aperture, exposure time, ISO value, etc. You will need these parameters to positively affect your image, as you will see in the next section. In addition, you should be able to capture images in RAW format.

Equally important, you can flexibly change the lens to cover different focal length ranges. This can be achieved with a so-called **system camera**, where you can assemble the camera system in a modular fashion through the camera body and lens. These include **single-lens reflex** and **mirrorless cameras**, and I mainly recommend them for landscape photography. You should also not be confused by the frequently discussed megapixel issues. Do you only use your photos privately? Are you not going to print the image at a place one meter away? In that case, 12 megapixels, long considered the standard, are still sufficient today.

The camera market-especially for beginners-is very chaotic, with countless manufacturers and models competing for photographers' favor.



It is best to start with a DSLR or entry-level mirrorless camera. The difference between these two cameras is that DSLRs have an internal mirror that reflects light directly into the optical viewfinder, allowing you to see what the lens is seeing. Mirrorless cameras don't have this feature so that they can be smaller and lighter. Market prices for a brand new DSLR or entry-level mirrorless camera typically range from 300€ to 800€, not including lenses or accessories.

Do your research, choose one, and don't struggle with the decision because every option on the market today is pretty good. Even with a smartphone camera or a point-and-shoot camera, there is no problem using the camera you already have. You can take great photos with any gear, as long as you know its limitations.





Lens

Although a lot of attention is focused on the camera, many beginners believe the lens is not as important. But they are at least as necessary. After all, they form an optical unit together with the camera. Even the best camera sensors can only process information that arrives through the lens.

The main difference between lenses is their focal length, measured in millimeters. It determines the angle of view that can be captured and how much fits the image. The design and intended use of the lens is also different.

If you are still in the early stages of photography, you can also be pragmatic in terms of the lens. The kit lens with the camera is sufficient for starters and usually only requires a small budget. However, with the accumulation of experience, you can consider upgrading to a better and more professional lens at any time.





# Filter



Optical filters are trendy in landscape photography. A filter is a glass or plastic disc placed in front of the lens to change the image before reaching the camera sensor. Of course, you don't necessarily need these filters in the first place. However, as you go a step further in photography, you can use filters to enhance your images and give them extra charm with specific effects.



For example, you can use polarizing filters to enhance or eliminate reflections on lakes. You can also use it to improve the saturation and contrast of the sky, clouds, rainbows, and plants. You can achieve a longer exposure time even at noon with the gray filter. It is also helpful, for example, to make the water movement in the photo look beautiful and silky or to make people "disappear" in the picture.

Using the gray gradient filter, you can compensate for brightness fluctuations in the image, thereby avoiding underexposure and overexposure within a specific range. Light pollution filters are used for night photography to reduce light pollution caused by artificial lighting. UV filters are also commercially available, but they have little effect on modern coated lenses and, at best, can only be used as mechanical lens protection.





# Tripod

One of the most common landscape photography techniques is to use a tripod. However, a tripod is not necessarily one of the most popular devices. Bulky, cumbersome, and a bit annoying-does it have to be? Yes, it does. If you are serious about shooting landscapes, you will not be able to get around a sturdy tripod. First of all, it can help you avoid camera shake when releasing the shutter, which is a prerequisite for a clear image. It is especially true in dim lighting conditions, which we often use in landscape photography. On the other hand, a tripod can help you compose your photos consciously and calmly.



# Monitor

Like camera equipment, displays are essential for any aspiring photographer, professional or amateur. The monitor is at the end of the photography process: you can view and edit the photos on the monitor and prepare them for further use, from presentations on the Internet to printing and exposure. For a photographic screen, it is essential to have a high resolution. The most important thing is that it can reproduce the camera's color and tone values comprehensively and accurately.



## Remote Trigger

The remote shutter release is practical because you don't need to touch the camera when releasing the shutter, thus avoiding camera shake and the resulting blur. It is essential for long exposures. The remote release is ideal if you want to immortalize yourself in your photos. The remote shutter release is also applicable when shooting in winter or cold nights because you only need to put your hands in your pockets. There are radio and cable versions. I prefer the wireless version because it is more flexible, you can trigger from a greater distance, and there is no annoying cable dangling. If you only want to take a simple image, any device for a few euros will do. If you wish for programmable time and interval switching features, you must spend extra money.



## Memory Card

You should also carry many memory cards with you and don't store them on the wrong end, especially since memory is very cheap now. After all, the small card is responsible for the security and handling of your photos. Therefore, I recommend that you only use branded memory cards. Since modern cameras record large amounts of data, you should pay attention to high storage capacities, such as 128 GB. For the fast storage and transmission of image files, it is essential to have a high read and write speed. Level 10 cards are a good standard today. Select your camera's correct memory card format (SDXC, SDHC, Compact Flash, etc.).



## Batteries

During your photography journey, you should always carry enough charged batteries. There is nothing more annoying than shooting a dream subject in front of the camera and then running out of battery. Therefore, I always recommend the original battery from the camera manufacturer. They are more expensive but usually more reliable than replicas. For white-label batteries, I always encounter the problem that they discharge by themselves or cannot be charged reliably.





## Cleaning Utensils

In landscape photography, your equipment is often exposed to bad weather conditions. It would be great if you could remove dust, dirt, or moisture from equipment (especially the lens) on the spot. Therefore, you should always carry a small dust blower, a brush, an optical cleaner, and a large microfiber in your photo backpack.

# Sensor Cleaning

Every time you take the lens off, dust from the surrounding air can get into the housing and settle on the mirror. You will only see substantial dust particles and fluff as long as you shoot with an open aperture. From aperture 11 onwards, however, smaller dust particles also become visible.

Many manufacturers have been offering integrated sensor cleaning as standard in most models for some years now. If stubborn dust has settled on the sensor, then automatic cleaning is of no help: the dust stays where it is. There are two good ways to clean the sensor:



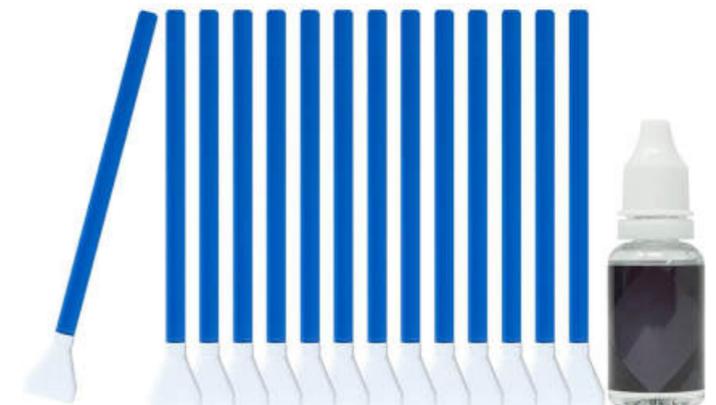
## Blowing off through a dust blower

It helps to hold the camera's opening down while blowing out the loosened dust.



## Sensor Cleaning Swaps

The most common method is a combination of wide-area wiping and a solvent that evaporates without leaving a residue. In addition, many photographers use Sensor Cleaning Swaps with a special liquid.



# Photo Backpack

As a landscape photographer, you will carry your equipment over mountains in wind and weather and sometimes through rugged terrain. As equipment and weight increase, how to best manage this problem arises. I prefer photo backpacks and would like to recommend them to you. It is the most comfortable and safest way to carry heavy equipment and free your hands. You should pay attention to a good carrying system, good padding, a well-thought-out and preferably flexible internal layout, and waterproof, sturdy materials. It is also ideal if the backpack has a hand luggage size because then you can take it with you on the flight to the photo destination.



# Pack the right Equipment

You have now assembled equipment suitable for landscape photography. However, it also makes sense to consider which parts of your photo adventure are needed before each photo tour.

In this way, you can avoid carrying unnecessary amounts, but you can also avoid losing something at the decisive moment. Admittedly, this technique sounds trivial. Nevertheless, I brought it up because I have repeatedly seen that people don't have the equipment that suits their photo situation. What equipment you should carry with you depends on what you want to photograph and how you travel. During the weeks of hiking through the mountain wilderness, your luggage will be different from the car trip on Sunday. For example, I usually limit myself to two lenses on long hikes, even if I naturally have more in my pocket. Remember that you always have enough empty memory cards and fully charged batteries when discussing this topic.



# Learn to use your Equipment

Are you ready for the ideal photographic equipment?

Great, you have laid a good foundation for landscape photography. But now, it is crucial to use your great equipment correctly to reach its potential. Familiar with the functions of the camera. Most importantly, look at the manual. It is especially true if you plan a big trip and are not yet familiar with the camera's operation. Reading the manual is not as exciting as a holiday thriller. Do this anyway. It's worth it, especially if you have to move fast.

After all, certain moments in life will only occur once, especially when the most beautiful moments pass too quickly. It is especially true of capturing them in photos. Imagine hiking in a fantastic landscape, and suddenly the landscape shines in magical light. If you now consider how to set the aperture or set the position of exposure compensation, then you have not even taken a picture before it is over.

You should control your camera, not the other way around. Ideally, you can intuitively operate all buttons, scroll wheels, and menus and know which settings to change.

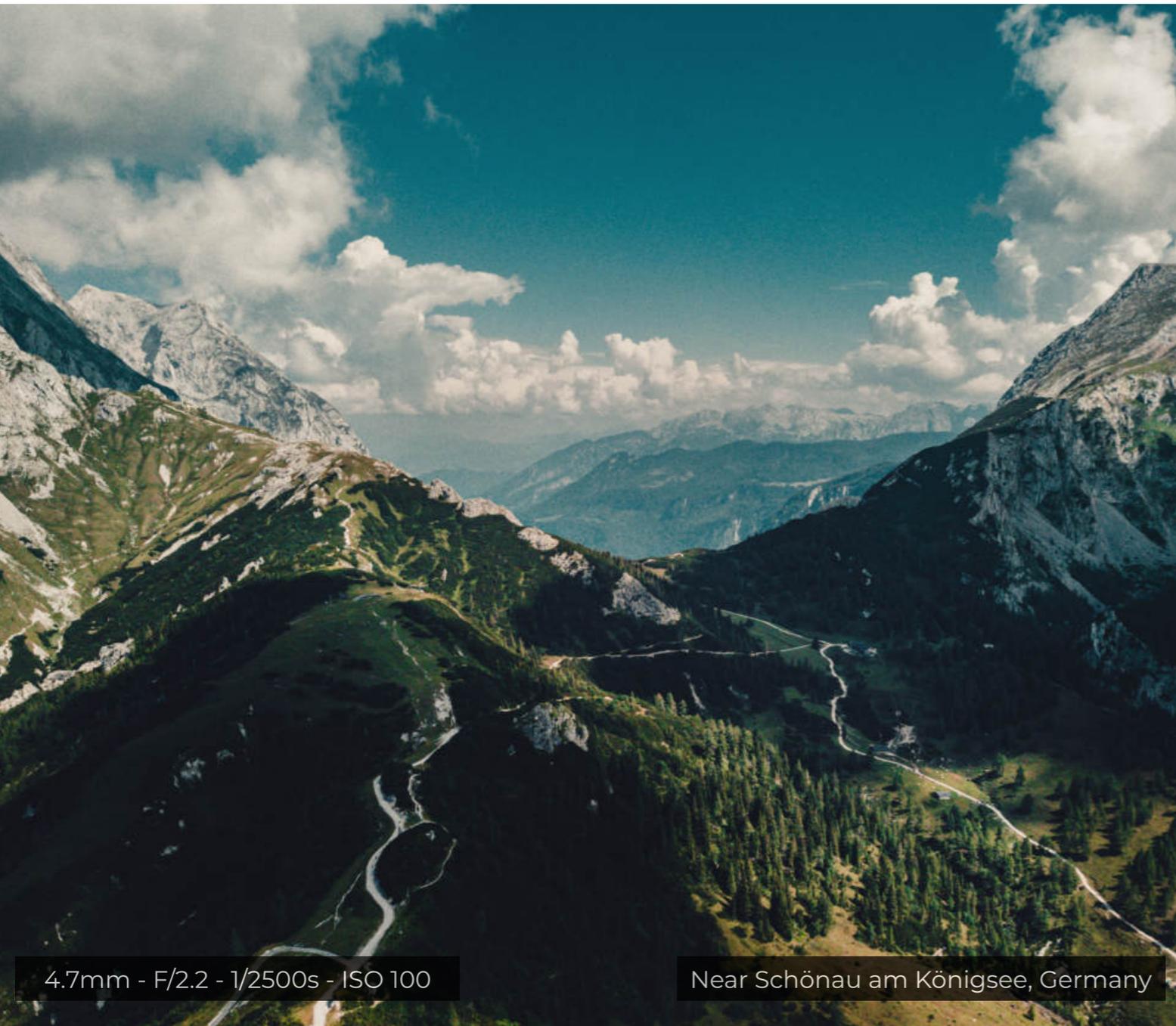




### 3. Photo parameters and Camera Settings

10mm - F/6.3 - 1/320s - ISO 100

Dubrovnik, Croatia



4.7mm - F/2.2 - 1/2500s - ISO 100

Near Schönau am Königsee, Germany

## You don't take a photograph; you make it

You can now operate your camera and know where to find which settings. But now, it's also essential to understand precisely how these settings affect your photos. Ansel Adams, the founder of landscape photography, once said, "You don't take a photograph. You make it." It is no coincidence. In other words: it is not the camera but the person behind the camera. Their skills are the decisive factor in the success of any good photo. If you take pictures quickly and trustfully automatically, you will have a hard time getting compelling images that will not affect your pictures. Therefore, one of the vital landscape photography skills is understanding the essential photography parameters and their effects on photos.

# The magic photo square

The four most critical photographic parameters are:

Aperture

Exposure Time

ISO Number

Focal Length

All four factors determine the sharpness and exposure of your image.



# Aperture

# Influence of the aperture on the exposure

The iris is a mechanical device on the lens that controls the amount of light passing through it through slats that open and close like blinds. So the choice of the aperture determines how much light falls on your sensor. The smaller the gap, the less light, and the longer the exposure time. The aperture series scale indicates how much light enters your sensor at the selected aperture. The corresponding aperture number is always indicated by the "f/" (f-stop = shutter).

You need to know: from one aperture stop to another, the "opening" and the amount of light transmitted is halved. Thus, the light is split every time you close the iris by a total value (for example, from f/2.8 to f/4), which means you have to expose it twice as long. Conversely, opening the iris by a value (for example, from f/11 to f/8) will double the amount of light. Then you only need to be exposed for half the time.

**f/1 – 1.4. – 2 – 2.8 – 4 – 5.6 – 8 – 11 – 16 – 22 – ..**

Today, the aperture usually is set electronically. You can select the desired value in the camera menu or through the dial on the camera body. In addition, you can use the rotating ring (aperture ring) on the lens for analog lenses to set the aperture.





Dortmund, Germany

# Effect of the aperture on the depth of field

Good lenses usually start at  $f/2.8$  (open aperture), and slower models typically start at  $f/3.5$  or  $f/4.0$ . In most cases, you can set the aperture value up to  $f/22$ .

The smaller the aperture, the larger the f-number, the greater the **depth of field**, and vice versa. Depth of field is the range of sharp areas in the subject. The greater the depth of field, the more precise the image. If you want a shallow depth of field, for example, because you want to crop a flower or a tree in front of the background, choose an open aperture (small f-number), such as  $f/2.8$ . Then the background becomes blurred, that is, out of focus. On the other hand, if you want a high depth of field—which we usually aim for in landscape photography—you have to stop, that is, close the aperture. Then everything is sharp from front to back.

You may think I will only use the smallest aperture, such as  $f/22$ , and have the most incredible clarity in the picture. It is the tip you often read on the web. But things are not that simple; you can forget the truth right away. In addition to the depth of field, there is another effect, the so-called diffraction blur. The smaller the aperture, the more light the aperture blade refracts. It, in turn, will cause the overall sharpness of the photo to decrease, and it will look more and more turbid. Therefore, stopping to infinity is not a good idea at all. The maximum aperture of each lens-camera combination is different. If maximum sharpness is essential, you can test your lens.

A helpful rule of thumb is that the best overall clarity is usually 2 or 3 stops below the opening. As a result, you should find a good compromise between depth of field and diffraction blur. It is called the **conductive aperture**. Depending on the lens, it is in the middle aperture range, usually between  $f/8$  or  $f/11$ .



Parc naturel régional des Vosges du Nord, France

## Exposure Time



Short exposure time: 1/100 second  
Long exposure time: 1 second

Amsterdam, Netherlands

The exposure time represents when the camera's shutter remains open to allow light to shine on the sensor. Therefore, it is also called shutter speed, which is decisive for whether your image is correctly exposed. Exposure time also indirectly affects sharpness. The darker the subject and the higher the number of apertures used, the longer the exposure time required. You should know that even if your hand is stable and under bright lighting conditions, you can only hold the image with your bare hands for a fraction of a second. Then it will be blurred; that is, it will be out of focus. If you do not use a tripod, the longer the exposure time, the higher the risk of blurring.

You can set the exposure time in the camera menu or through the dial on the camera body. There, you can usually set 1/8000 to 30 seconds. If you want to use a longer exposure time, you can use the bulb mode. This can be accessed via the dial ("B"); on other cameras, you can manually access this feature by turning the dial to set the exposure time to more than 30 seconds. In bulb mode, you can perform exposure as needed. However, you must close the camera shutter yourself. To avoid a camera shake, you should use a remote shutter release. If it is a slightly better model, you can set the desired exposure time there. Otherwise, you have to check the clock yourself.



# ISO Number

The ISO number determines the camera sensor's sensitivity and how much light reaches the sensor within a certain period. The higher the value, the brighter the image. Therefore, you can shorten the necessary exposure time to obtain a clear picture by increasing the ISO value. The rule of thumb is that doubling the ISO value (for example, from ISO 100 to ISO 200) will halve the exposure time. With many modern cameras, you can turn on the supported ISO automatically. If the exposure time is too long to maintain blur-free shooting under the existing lighting conditions, the camera will automatically switch to a higher ISO value.

That's why landscape photographers like to use large sensors and usually use tripods: we can keep the ISO value as small as possible. There is one exception. In night photography, when shooting stars and the Milky Way, we use a high ISO value because of the darkness. In this case, we must accept intense image noise and remove it in post-processing.

Increasing the ISO has consequences. Photos shot at too high ISO will show a lot of grain, also known as noise, and may not be usable. So brightening photos above ISO is always a compromise. You should only increase the ISO if you can not use shutter speed or aperture to brighten the image (for example, a slower shutter speed would result in a blurred subject).

Every camera has a different range of ISO values . A common set is as follows:

**ISO 100 (low ISO)**

**ISO 200**

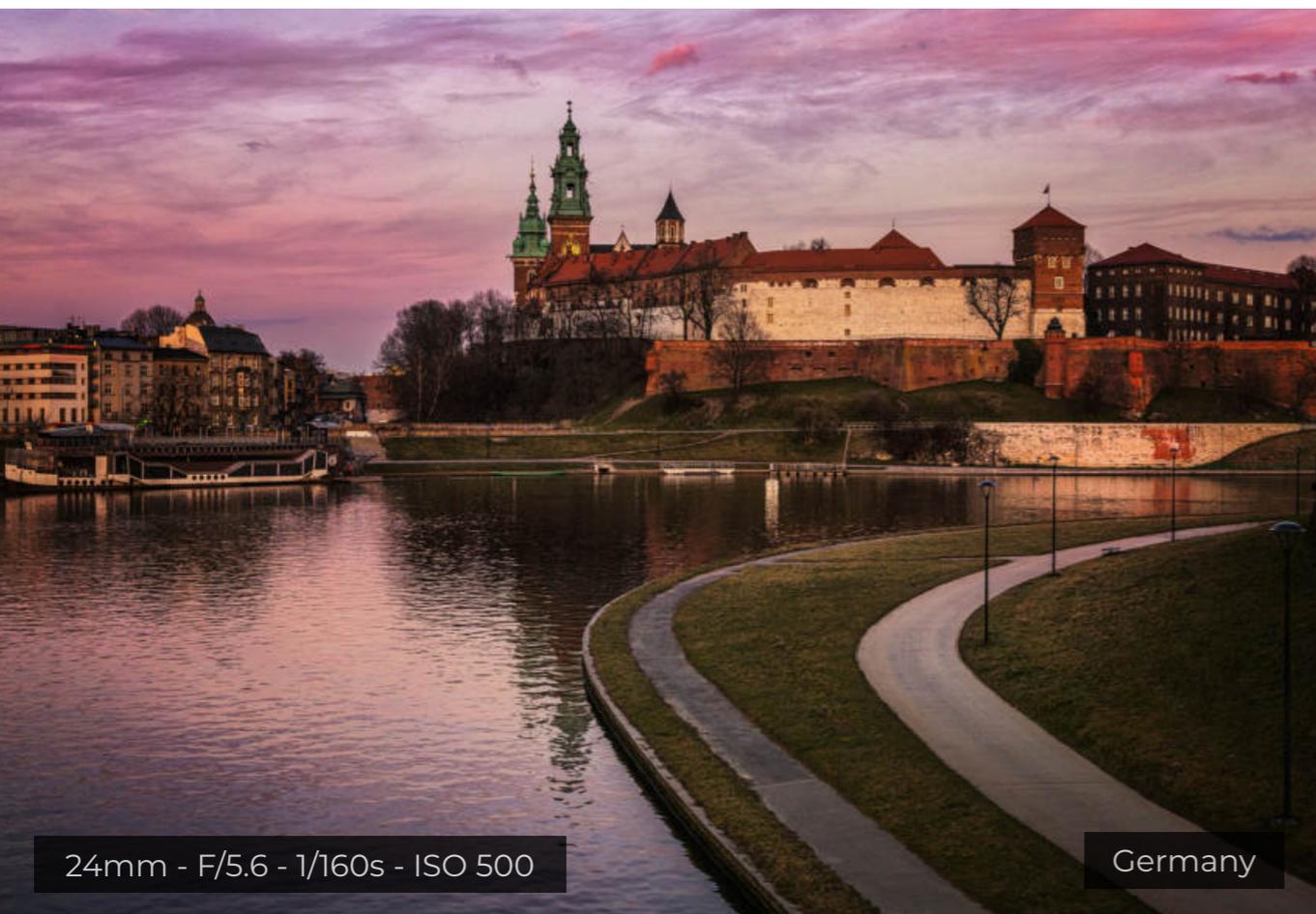
**ISO 400**

**ISO 800**

**ISO 1600**

**ISO 3200**

**ISO 6400 (high ISO)**



24mm - F/5.6 - 1/160s - ISO 500

Germany



# Focal Length

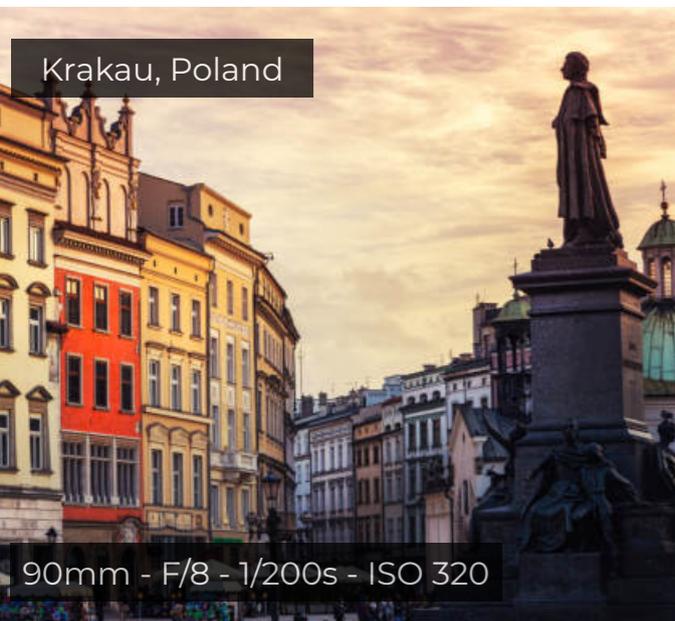
Alicante, Spain



Small Focal Length

18mm

Krakau, Poland



Long Focal Length

200mm

90mm - F/8 - 1/200s - ISO 320



Germany

The focal length and the sensor size determine the image angle, how much is in the image, and how close or far it is to be imaged. The focal length also has an indirect effect on sharpness. The longer the focal length, the longer the exposure time required, and therefore the greater the risk of blurring.

An old photo formula says that you can take a blur-free photo during the day, up to  $1/\text{focal length}$  (at ISO100 and medium aperture). So if you have a 50mm, you can start handheld shooting during the day with a maximum exposure time of  $1/50$  second. For longer exposure times, you need a tripod, or you must increase the aperture or ISO.

# A, M, P, S

## The Alphabet of good light



Dubai, UAE

A is not only the beginning of the alphabet but also the most popular setting for landscape photography. Using the so-called **aperture priority**, you can set the desired aperture, usually to control the depth of field, as described above. The camera will then automatically select the appropriate shutter speed, taking into account other settings such as ISO, focal length, and lighting conditions. It is the ideal choice if you don't care about other parameters. Then, you can let your camera support you with this semi-automatic function.

You will find this feature under A (Nikon, Sony) or Av (Canon). "A" stands for aperture. This mode is also called **auto exposure** and is the default setting for most landscape photographers.

Shutter speed priority is another semi-automatic mode. In this mode, the photographer sets the desired shutter speed, and then the camera adjusts the aperture accordingly. This mode is shown on your camera as S (Nikon, Sony) or Tv (Canon), where S stands for shutter speed. This mode is also called aperture priority.

**The program mode** is a fully automatic mode in which the camera will automatically set the aperture and exposure time. You will find this mode under "P." Since you do not affect aperture and exposure time, this mode is like a lottery. Therefore I do not recommend it.

**The manual mode** is just the opposite. Here, you can set the exposure time and aperture yourself without any intervention from the camera. This mode is usually located under the "M" of the camera. Now you may be wondering why you should take a picture manually. The camera's automatic exposure will fail in low-contrast light conditions, such as dusk, night, or fog.

On the other hand, you may want to use exposure time and aperture together as a design tool. For example, when you want to shoot the night sky or dynamically capture waterfalls, rivers, or the sea, this is suitable for long exposures. In these cases, you have complete control of the manual mode, but you must also make sure that you expose the image correctly.



42mm - F/8 - 1/320s - ISO 160

Chiemgauer Alps, Germany



## 4. Find Motive and Plan



15mm - F/6.3 - 1/250s - ISO 100

Ras Al-Khaimah, UAE

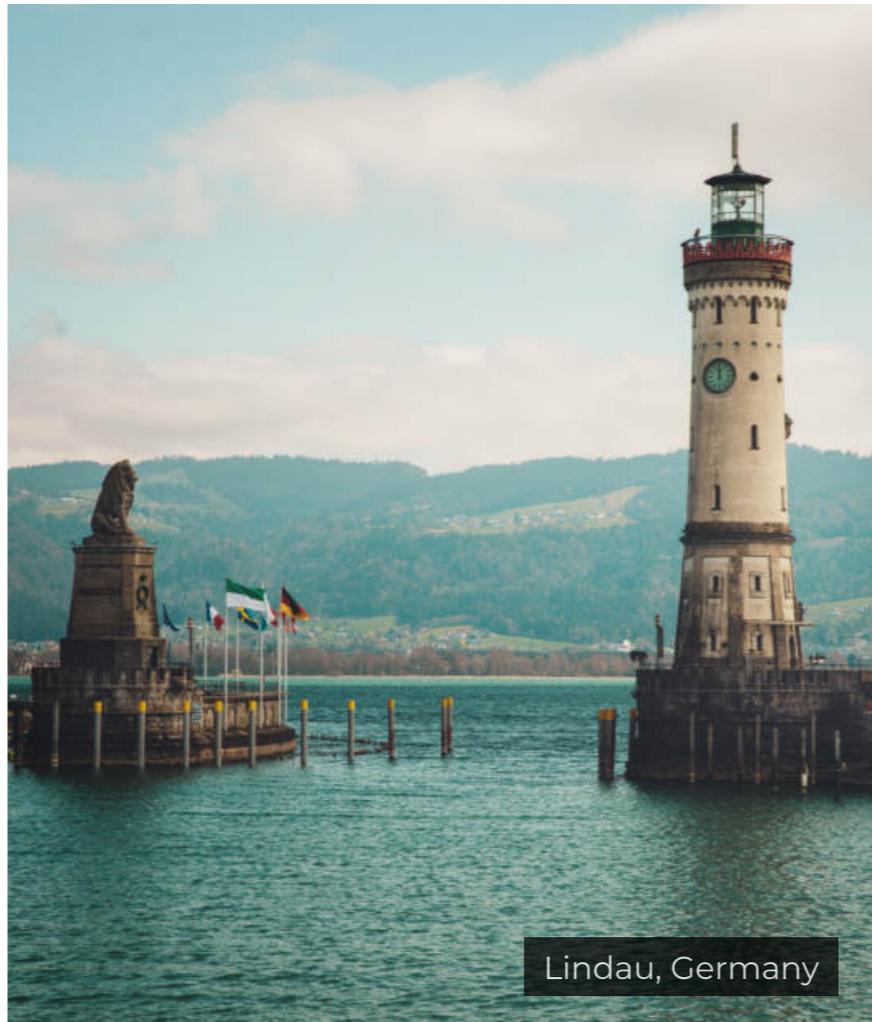
## The motive is half the battle

A good landscape photo stands and falls with the subject and sees something on it. Amazing landscape photos are rarely related to chance but usually require some preparation, especially to find exciting subjects. Therefore, the creation of most of my images started long before the actual pressure of the shutter release. Thus, the research and planning of great photo spots will require some time for my photography activities. Below I will explain to you why this period is worth the investment.

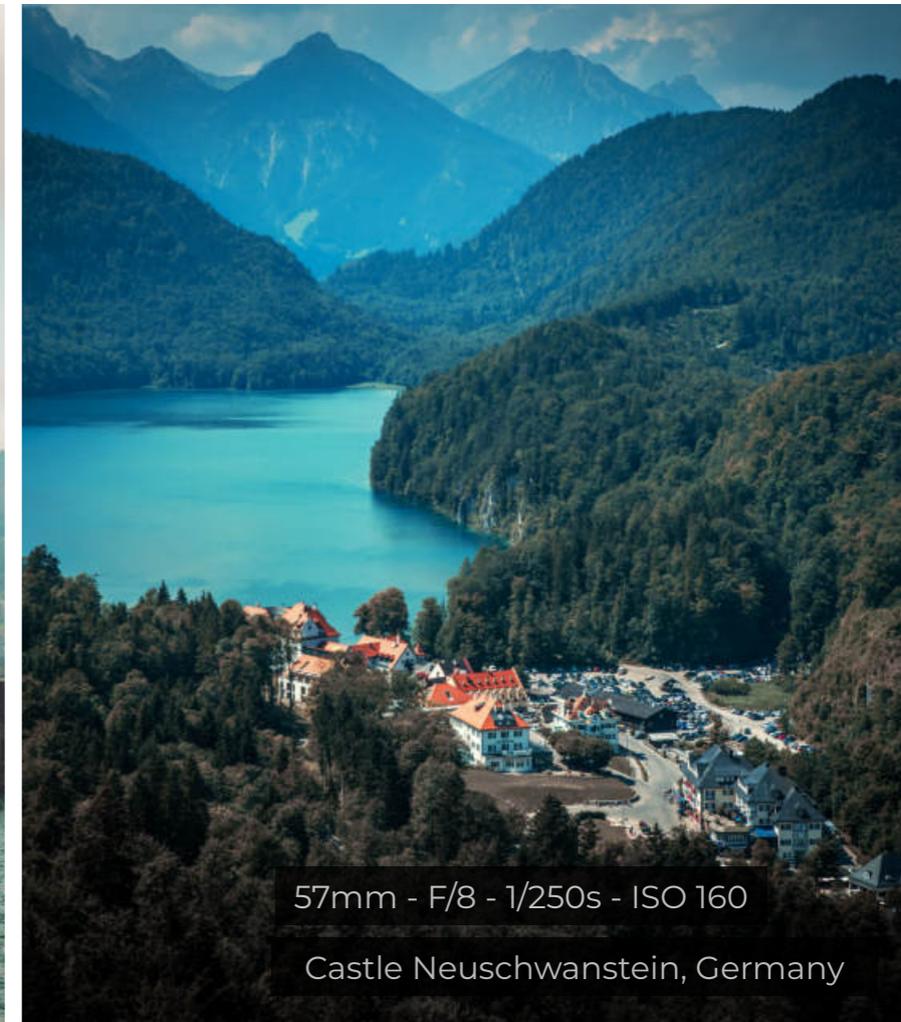
# Find Photo- Locations at home

Once I have determined where my next photography trip will take me, I will first conduct extensive research on my home computer. First of all, of course, I am interested in finding exciting locations for photos. What is attractive for photography on-site? For example, where can I find lakes, rivers, mountains, and waterfalls? What is a favored terrain? Which viewpoints will be interesting? How can I get there? It is what we photographers call location scout. It started when I was already at home. Why? Because at that time, I knew where I had to drive or walk before my photography trip and would not waste the usually limited on-site time unnecessarily.

I still like to use classic resources such as travel documents and maps. However, today, various digital tools can give you a good idea of what will happen when you get there. To get some inspiration in advance, it is worth trying an image search on Google or Bing first, and check the related photo forums (nature photographer forum, Flickr, 500px, YouPic, etc.). Unique location search sites (such as [locationscout.net](http://locationscout.net)) or smartphone apps such as ViewPointer are also good sources of inspiration. You can even try social media like Facebook, Instagram, or Pinterest by entering the hashtag of your destination.

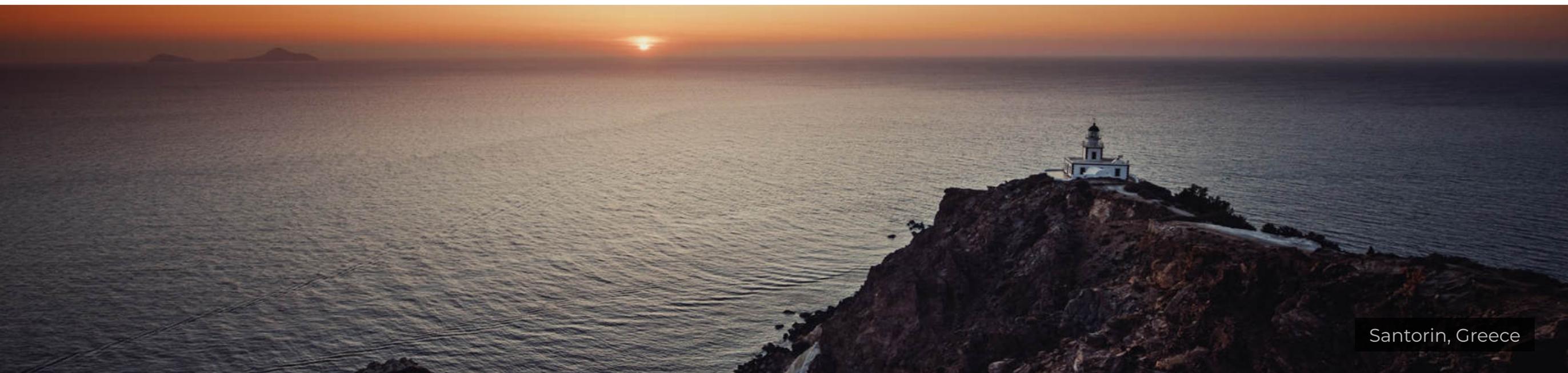


Lindau, Germany



57mm - F/8 - 1/250s - ISO 160

Castle Neuschwanstein, Germany



Santorin, Greece

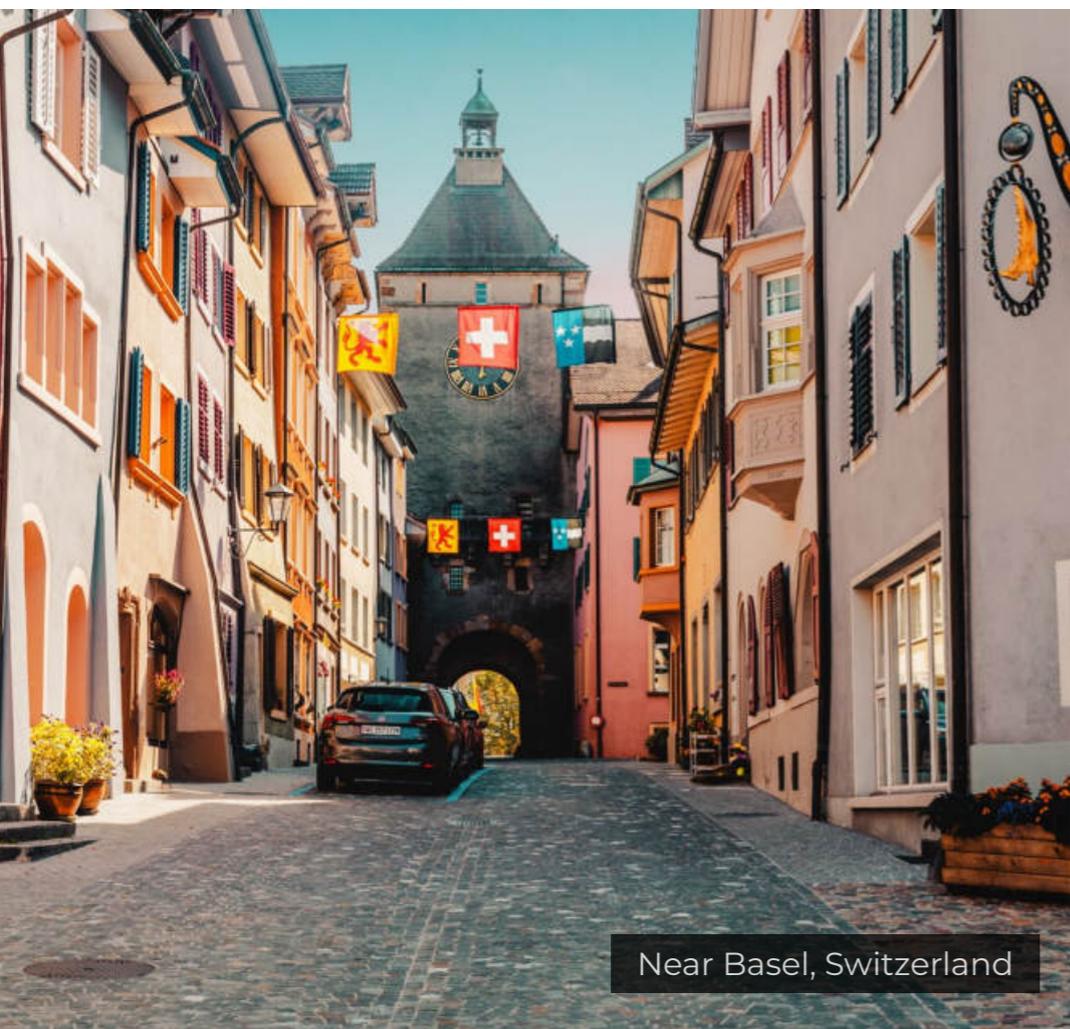
My favorite tool is Google Maps/Google Earth. Here, you can view satellite and aerial imagery, topographical maps, and realistic 3D views from anywhere in the world completely free of charge and in remarkable detail. It dramatically helps the pre-visualization of your patterns. Landscape photography skills: use tools such as maps, GPS, Google Earth/Maps, or smartphone apps.

In the last step, I plan how I will get there and where I will spend the night. For example, if I walk or ride a bicycle, I will use my GPS device or application in a later photo tour. Ideally, this can also use offline maps without an internet connection. I use Outdooractive Pro myself, and I can download maps in advance. When I spend the night, I always try to be as close as possible to the location of my photo. The reason is that I don't have to drive or walk too far at the best shooting time (such as at sunrise).

Landscape photography is usually carried out in protected areas such as national parks or nature reserves. For example, think of popular photo spots in Germany, such as Berchtesgarden Land or the island of Rügen. If you want to take pictures in such a protected area, I suggest that you know in advance whether you need a permit and must comply with the entry time or other rules. It is especially true abroad, unlike in Germany, where you cannot visit these places any day or night.

# Arrive First

After all the preparations, you finally arrived at your photo location. You are ecstatic. Your fingers are itchy. What was the first thing you did? You might take out your camera and start taking pictures, right? I can understand, but I still advise you not to do this.



Near Basel, Switzerland

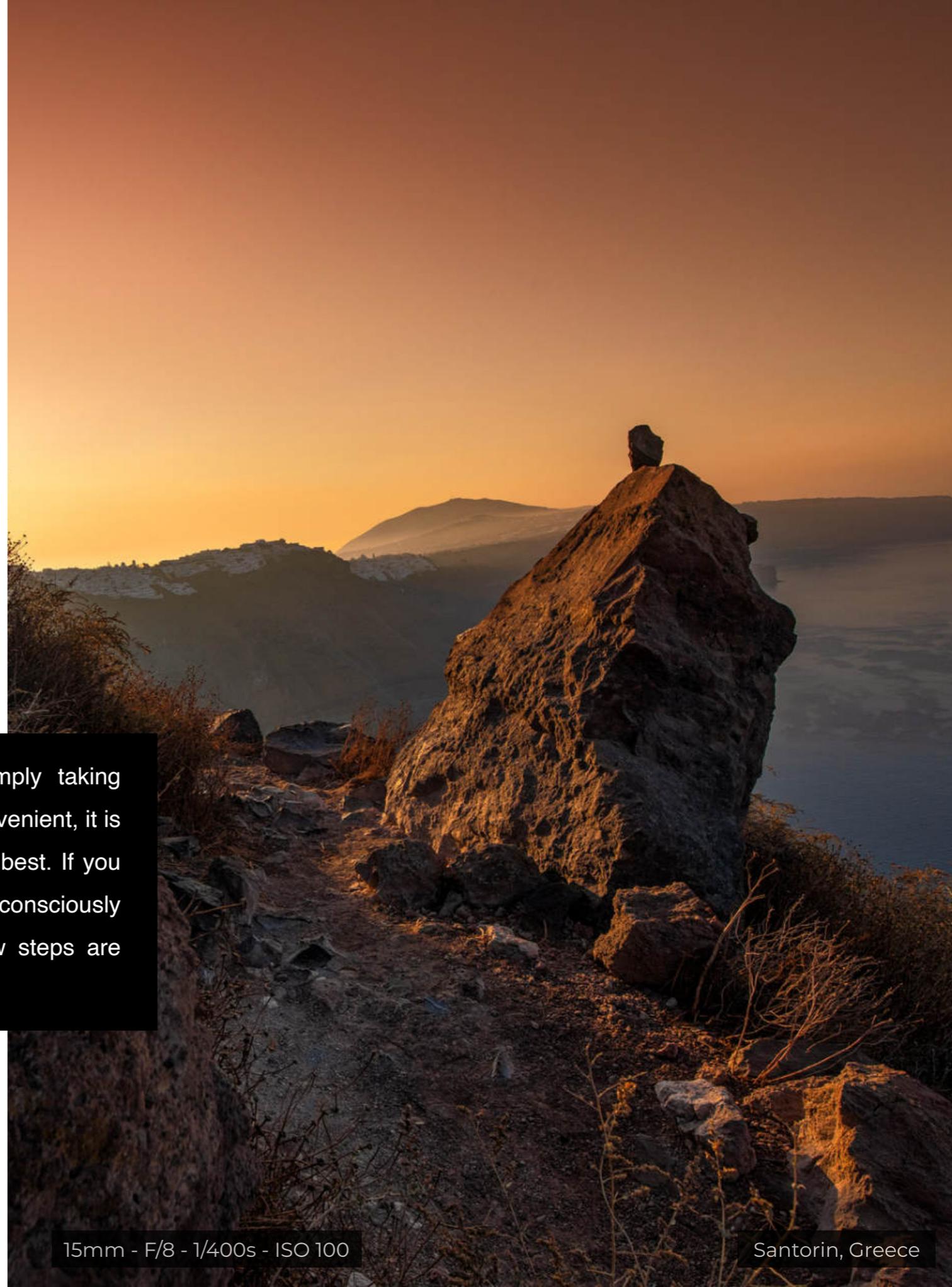


Amsterdam, Netherland

One of my favorite landscape photography techniques is, "First look, then feel, then shoot." After my body arrives, I always take time to arrive mentally. I also try to find out what makes me fascinated by the scenery. Is it the color in the landscape or some structure? Is it a dynamic change of elements, such as a roaring waterfall or dramatic cloud movement? Am I fascinated by the vast ocean, or do I find a specific detail interesting? Only when I know all this can I see what I want to shoot and how to shoot it. Then, at the earliest, I opened the camera package. Then, you will not only come back from your photography trip, but you will be more relaxed and impressed. You will also be surprised at how good your photos will be.

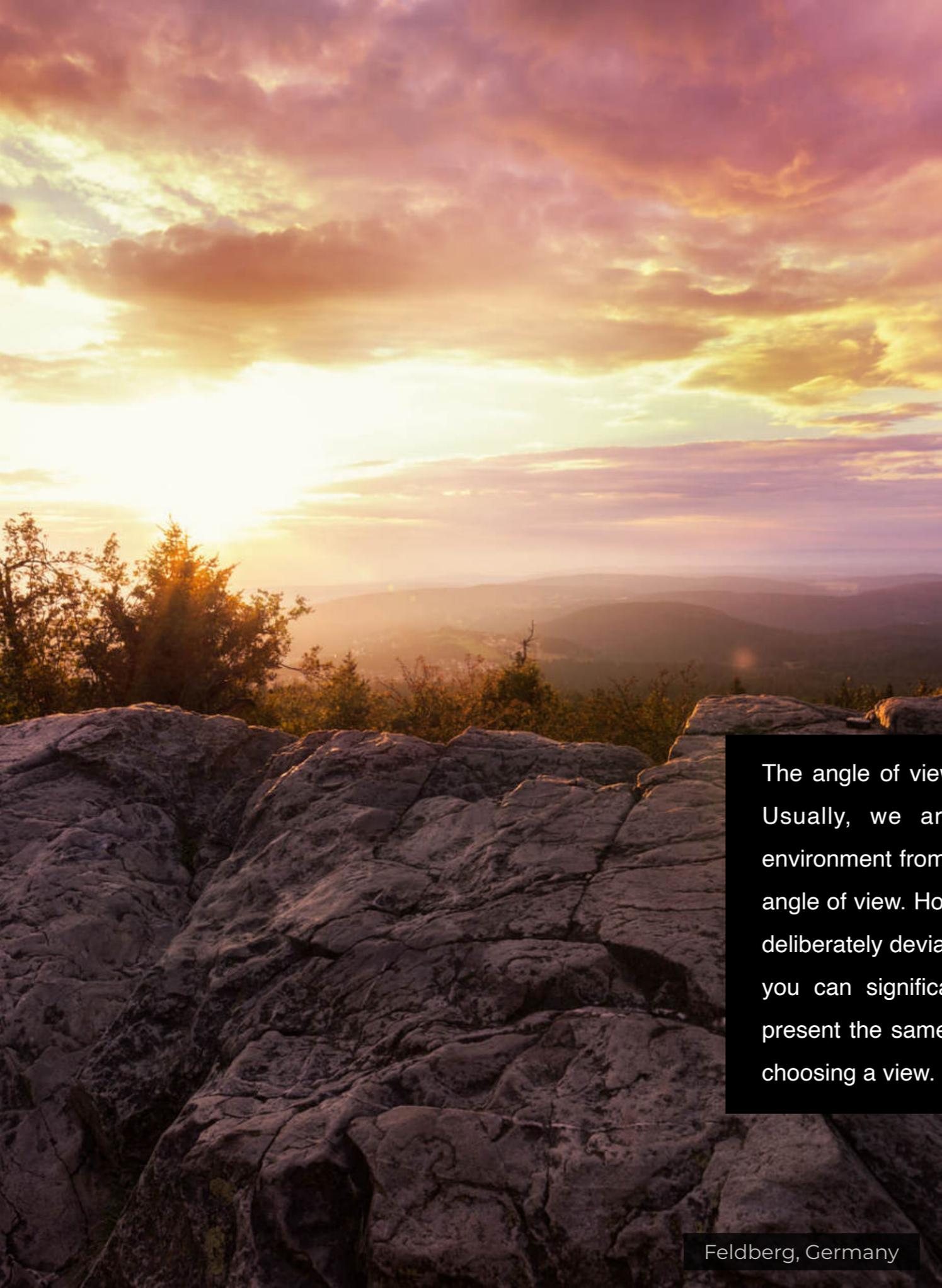
# Find an ideal photo location on site

The mistake most novice photographers make is simply taking photos from where they are standing. Although this is convenient, it is usually dull. The first possible position is usually not the best. If you want more than just snapshots, do better. Walk around, consciously looking for exciting perspectives. Sometimes just a few steps are enough



15mm - F/8 - 1/400s - ISO 100

Santorin, Greece

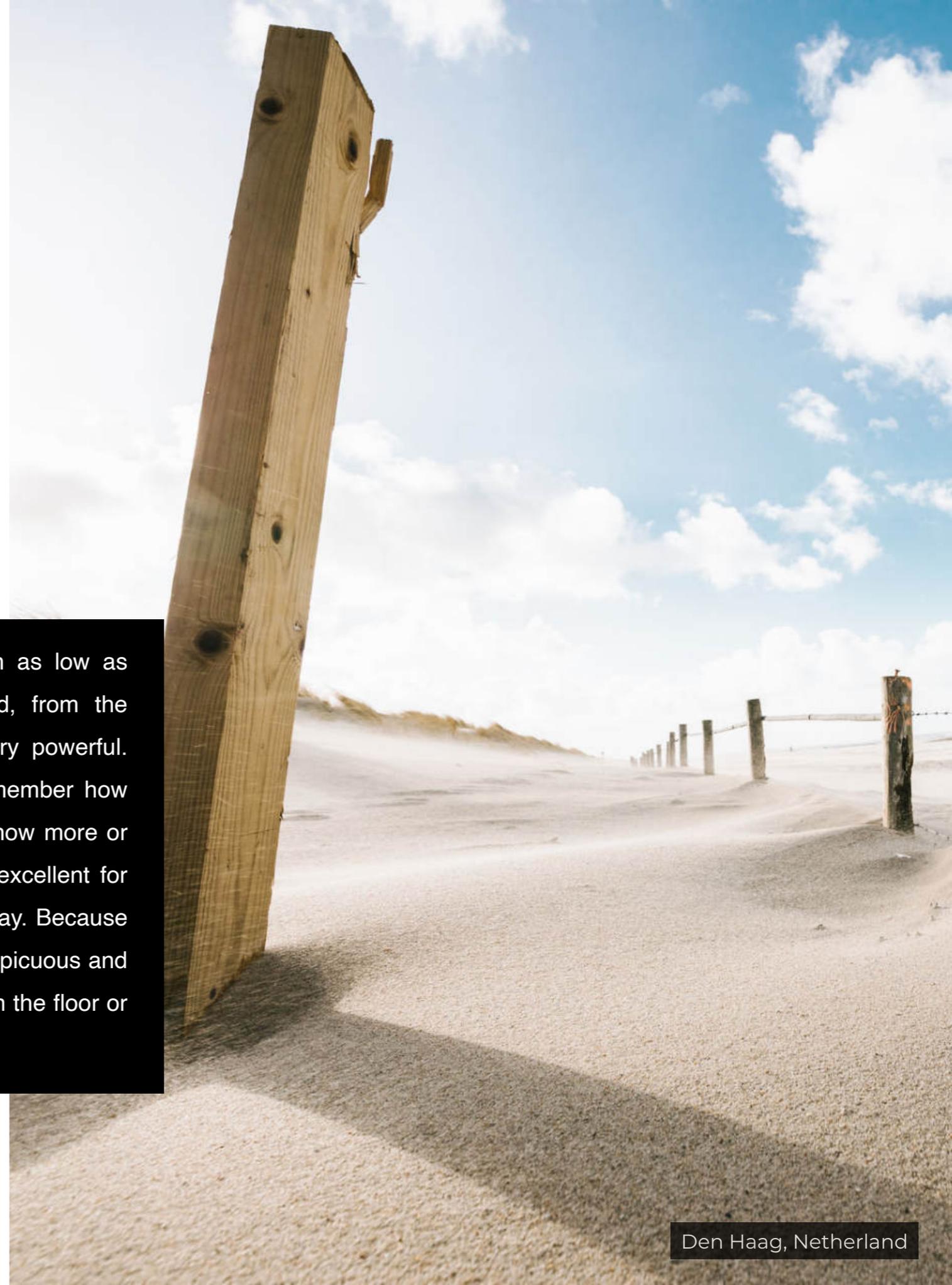


## A question of perspective

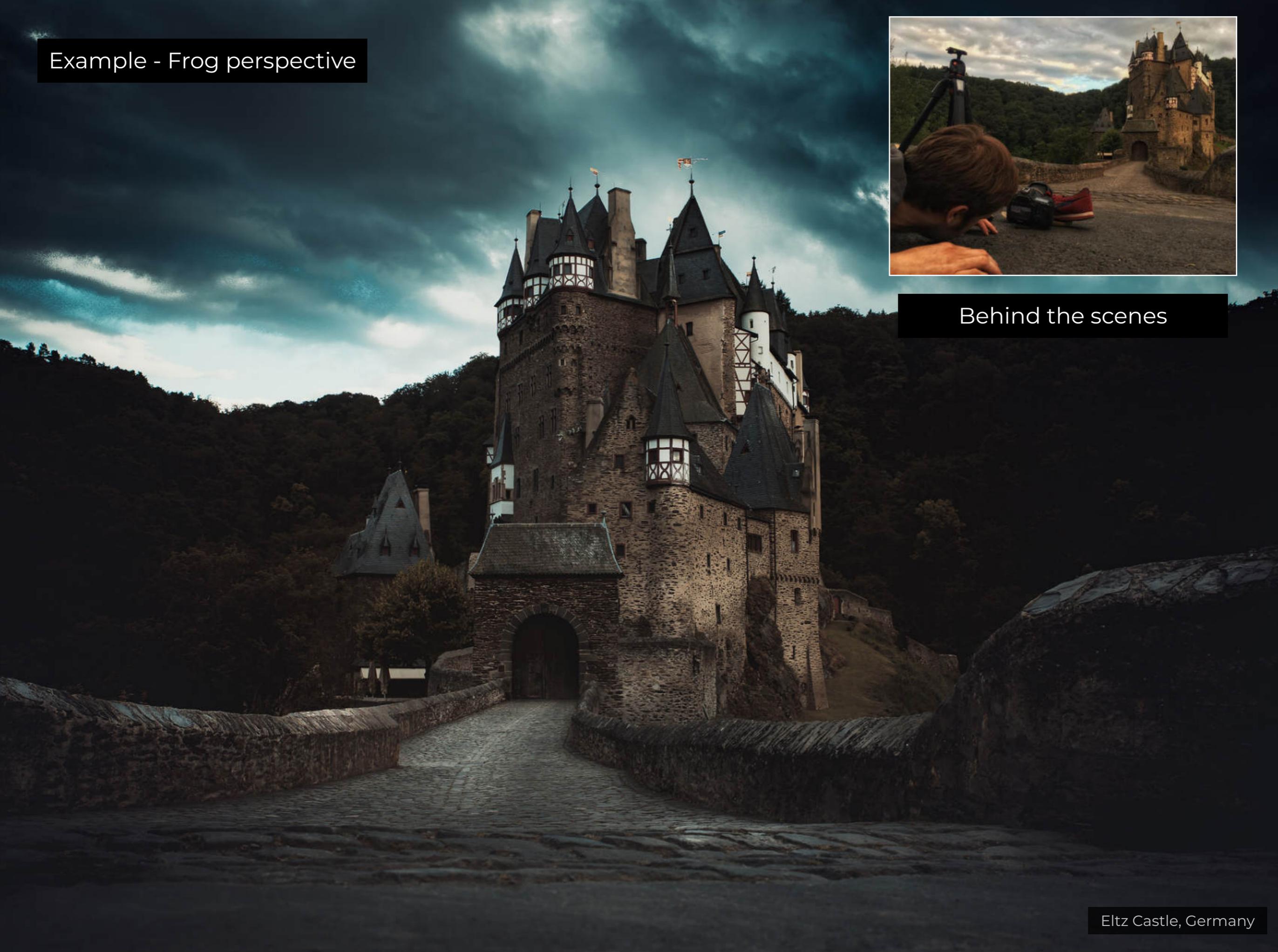
The angle of view is between you or your camera and the subject. Usually, we are accustomed to observing the surrounding environment from sight. In photography, this is what we call a normal angle of view. However, if you want to give your images extra drama, deliberately deviate from the daily perspective. Using unusual angles, you can significantly enhance the effect of the picture. You can present the same subject from a completely different perspective by choosing a view.

# Frog perspective

On the one hand, you can choose a camera position as low as possible below the line of sight. On the other hand, from the perspective of this so-called frog, everything looks very powerful. Maybe you still remember your childhood? Do you remember how vast and fascinating the world was to you? Then you know more or less all of it now. In addition, the frog's perspective is excellent for constructing your pictures in a very three-dimensional way. Because it is close to the ground, you can incorporate a very conspicuous and vivid foreground into your photos, such as a rock lying on the floor or a plant growing there.



Example - Frog perspective



Behind the scenes

## Bird's eye view

In the bird's-eye view, you can do the other way around. You are looking for an elevated photo location that is well above the line of sight. The bird's-eye idea is also beautiful because it shows the world from above from an unusual perspective. From this perspective, you can stagger the different levels of the subject in a particularly vivid way. The higher you climb, the more abstract and miniaturized the world below you.

Example - Birds eye view

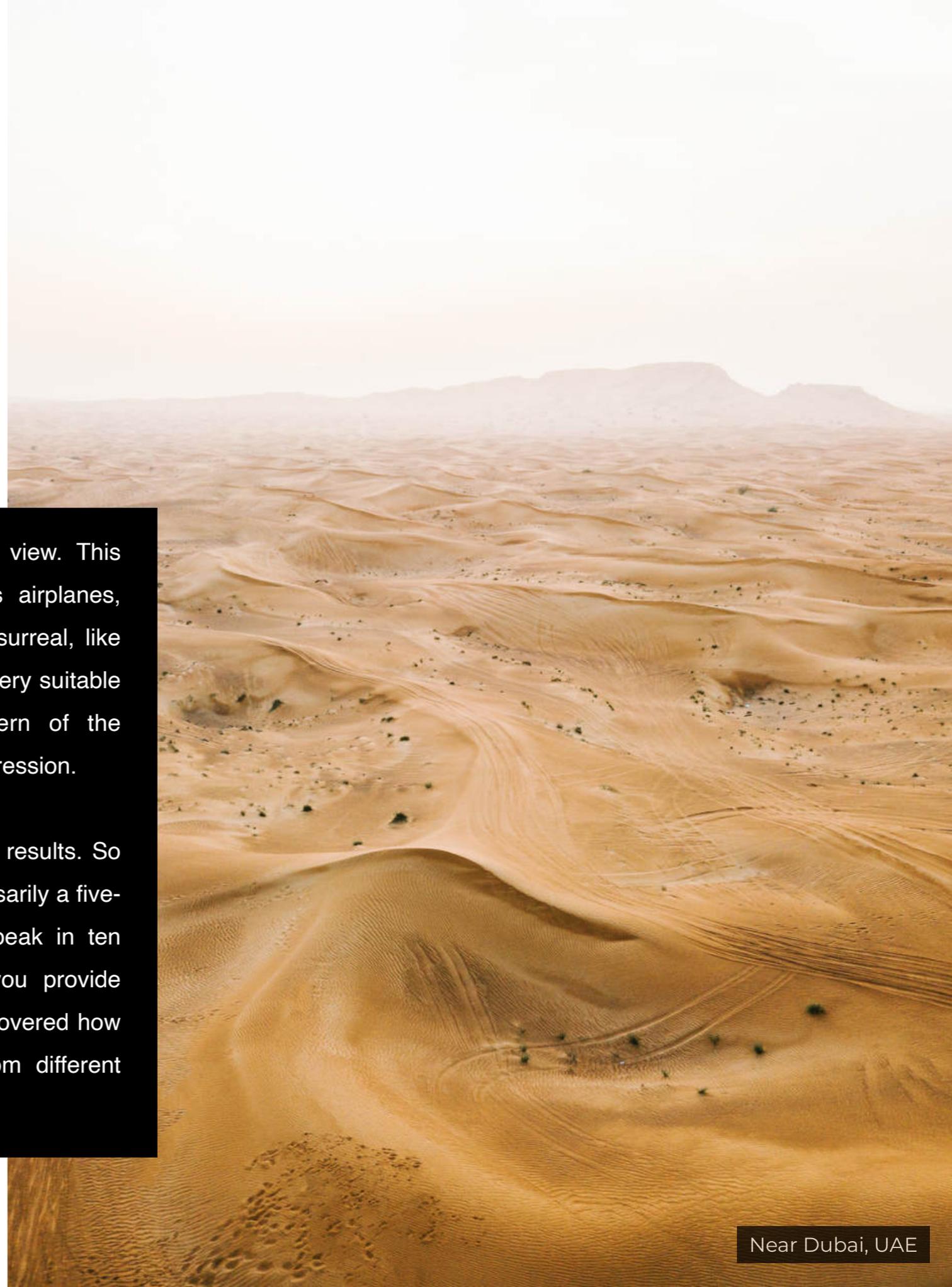


Raunheim, Germany

# Top view

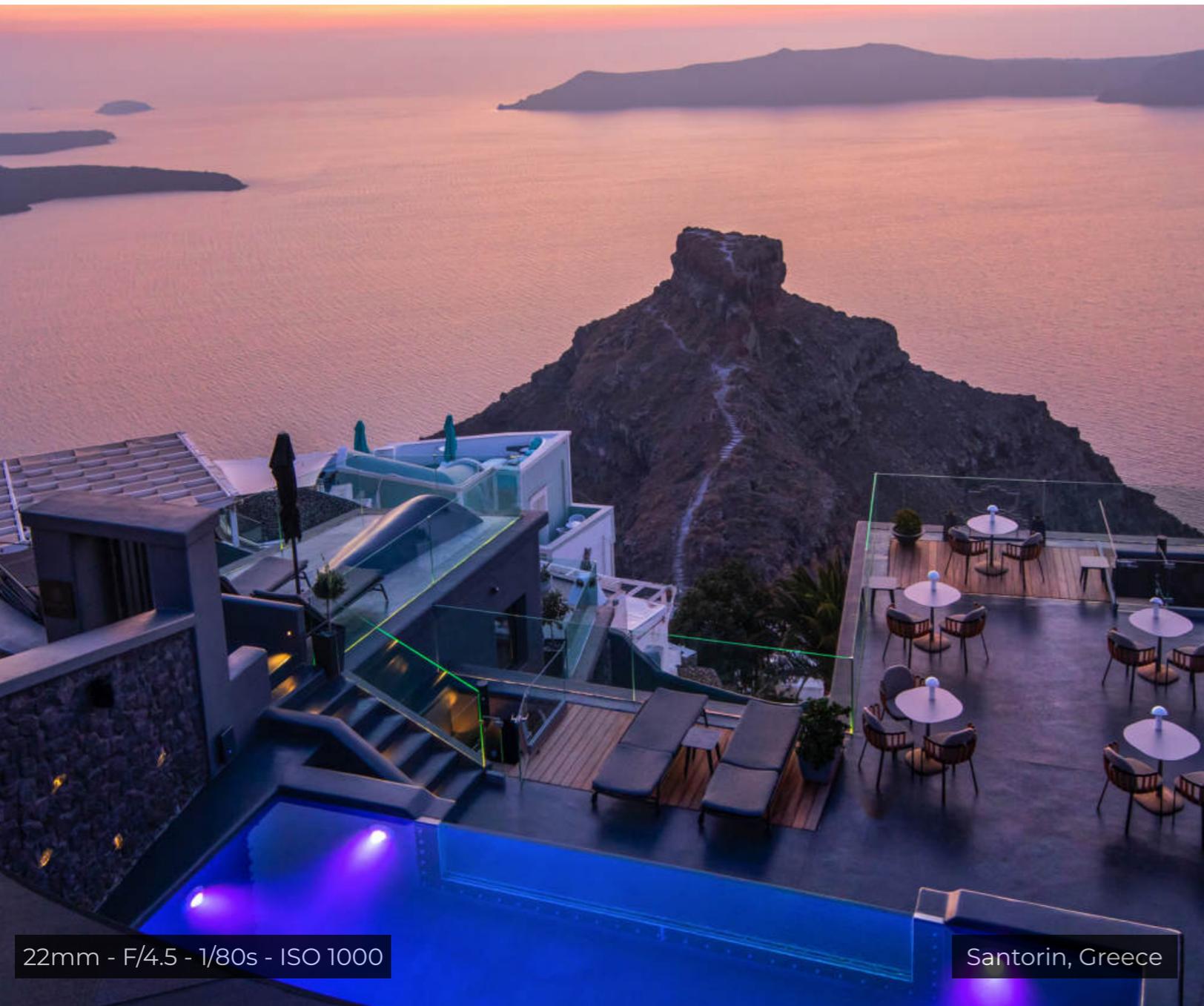
An extreme change in the bird's-eye view is the top view. This perspective is typical for aerial photography, such as airplanes, balloons, and drones. These images usually look very surreal, like paintings from another world. Therefore, such a view is very suitable for presenting the characteristic structure and pattern of the landscape or, if you like, a somewhat abstract natural impression.

Now you know how to use perspective to achieve great results. So just lie on the ground or climb somewhere. It is not necessarily a five-kilometer mountain. Usually, you can climb the next peak in ten minutes. A separate unusual view will ensure that you provide stunning effects to your photos. Once, I consciously discovered how the same subject exhibited utterly different results from different angles.



An aerial photograph of a mountainous landscape in winter. The foreground shows a rocky, snow-dusted slope leading down to a valley. The middle ground features a large, flat, snow-covered area with some small structures and a winding path. The background consists of rolling hills and mountains, some covered in snow and others in dense evergreen forests. The sky is clear and blue. A black rectangular box with white text is centered in the middle of the image.

## 5. Image Composition



## Become the director of your subject

You will need to become the director of the photo. Good photos should make the audience linger. If they fail to do so, it is usually because the image lacks depth and structure. Therefore, they really can't attract the audience. On the other hand, a compelling photo combines excitement and harmony, allowing the audience to understand the subject. It is what you achieve through conscious image design. Therefore, if you don't want to take unrelenting "snapshots" but want to take fascinating landscape photos, you should strive for effective image composition.

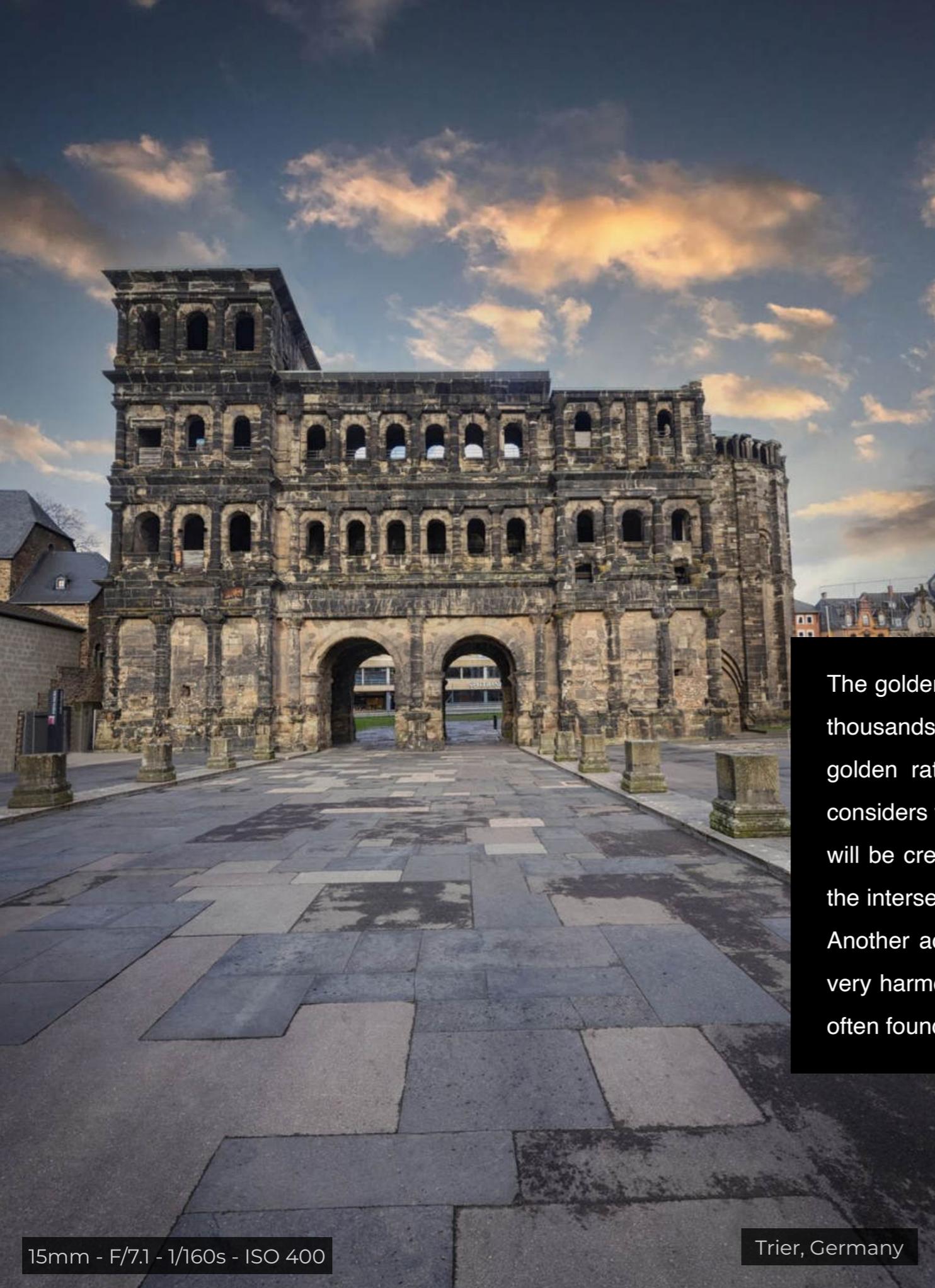
# Design Rules

The goal should be to create the depth of the space and guide the viewer's line of sight to direct it to the central theme. You need to carefully place this element and all other elements in the picture. It is called image composition. Simply putting the main subject in the center is common, but it is usually not a very good idea. Then, the composition looks very static and uninspired, and the piece lacks tension. It is best to follow standard art design rules, which are also familiar in other representative disciplines (such as architecture or painting).



15mm - F/8 - 5/1s - ISO 100

Ras Al-Khaimah, UAE



## The Golden Section

The golden ratio is a classic of aesthetic design. It has been used for thousands of years and can also be applied in photography. The golden ratio is to divide the subject by about  $1/3$  to  $2/3$ . If one considers the horizontal and the vertical axis once in this scale, a grid will be created. If the essential elements of the image are placed at the intersection, the viewer's line of sight will be subtly directed there. Another advantage is that such a picture composition is considered very harmonious in the subconscious because these proportions are often found in nature.

Example - The Golden Section



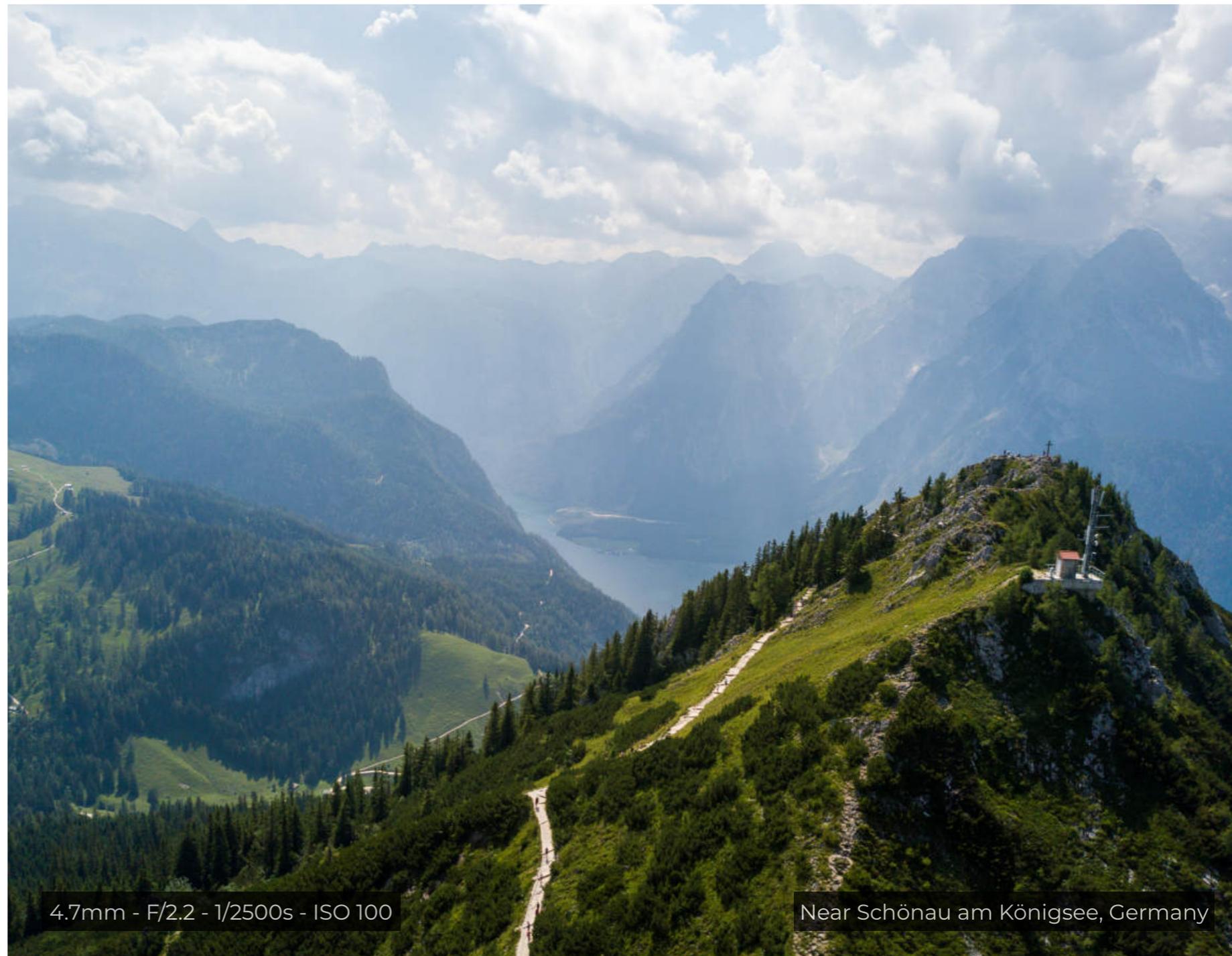
# The rule of thirds

The most popular and most straightforward is the rule of thirds, which is a variant of the golden section. Here, the image is divided into three equal parts, once horizontal and once vertical, by two vertical and horizontal lines at the same distance from each other. Then place the vital part or primary motivation of the image at one of the four external intersections to subtly direct the viewer's attention to this point. You don't even need the imagination to apply the rule of thirds on newer cameras. Today almost every model has a corresponding grid and guideline; you can show and hide them in the viewfinder or monitor.



# The 1/3 - 2/3 Rule

Dividing an image into three is also great for emphasizing each part of the image. For example, if you place the horizon on the third line of the lower level, the sky will be highlighted (2/3 of the sky). On the other hand, if you place the horizon on the third line above, the landscape in the foreground will receive immediate attention (1/3 of the sky). You can take theatrical photos with a wide range of image details and guide the viewer's sight. The rule of thirds can be used to emphasize certain parts of the image.





## The triangle composition

The triangle combination is similar to the golden section-sorting and coordination functions. This design rule is prevalent outside of photography, especially in sacred works of art such as church paintings. The triangle exudes calm and balances, especially in the case of an isosceles triangle. They can appear multiple times in the image or align the main object with a single imaginary triangle.



Netherland near German Border

# Symmetrical Composition

If you want to shoot symmetrical subjects, the centering direction best conveys the harmony that these subjects often emit. Typical examples are reflections on lakes, cone-shaped mountains, and volcanoes or evenly growing trees. For symmetrical patterns, you should make sure that the image is not too crowded so that the effect of contemplation can be better developed.

# Lines and Diagonals

The line guides the eyes of the viewer, so it is another style of installation of the spatial image. They work best when they "pick up" the viewer from the bottom of the image and then tilt his eyes into the image towards the main subject. Therefore, you should look for lines and diagonals and use them consciously for image composition. These forms appear in nature, such as snow trails, coastlines, fallen tree trunks, diagonally extending mountains, or general natural patterns and structures. But the line can also be artificial, for example, in the form of roads, trails, or pedestrian bridges. By the way, the lines are not necessarily straight, and they can also be S-shaped lines. These have the effect of literally "screwing" the viewer into the image, which is particularly effective. A typical example is a river or serpentine in a mountain. The top line here is the bank's route.



Castle Auerbach, Germany

Example - Lines and Diagonals



## Create spatiality with layers

The exposure time represents when the camera's shutter remains open to allow light to shine on the sensor. Therefore, it is also called shutter speed, which is decisive for whether your image is correctly exposed. Exposure time also indirectly affects sharpness. The darker the subject and the higher the number of apertures used, the longer the exposure time required. You should know that even if your hand is stable and under bright lighting conditions, you can only hold the image with your bare hands for a fraction of a second. Then it will be blurred; that is, it will be out of focus. If you do not use a tripod, the longer the exposure time, the higher the risk of blurring.

## Frame

To guide the viewer's sight, it is also a good idea to use natural or artificial frames that can be found on site. Typical examples are broad branches, rock edges, stones, tree trunks, or fences. The borders on one or both sides of the picture create structure and help the viewer think about how to enter the picture.

## Repetitions

Another style device is repetition. For example, these can be structures, patterns, and shapes that appear multiple times in succession in a picture. Similar to lines, they bring the viewer into the picture, conveying depth and plasticity. In addition, repetition always has a specific "hypnotic" effect and draws the audience into the image.

Example - Frame



Example - Frame



48mm - F/5.6 - 1/250s - ISO 100

Lindau, Germany

Example - Repetitions



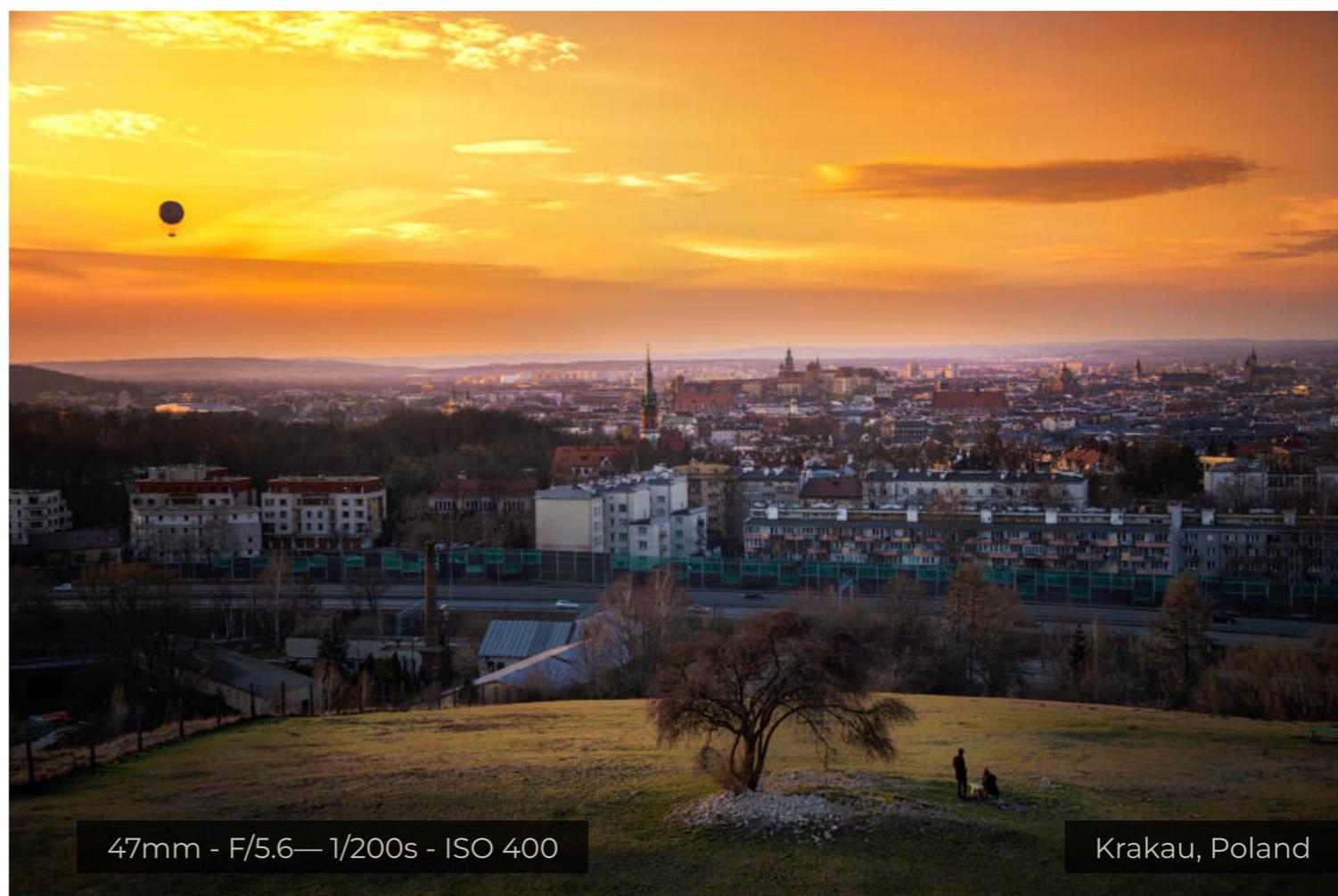
Example - Repetitions



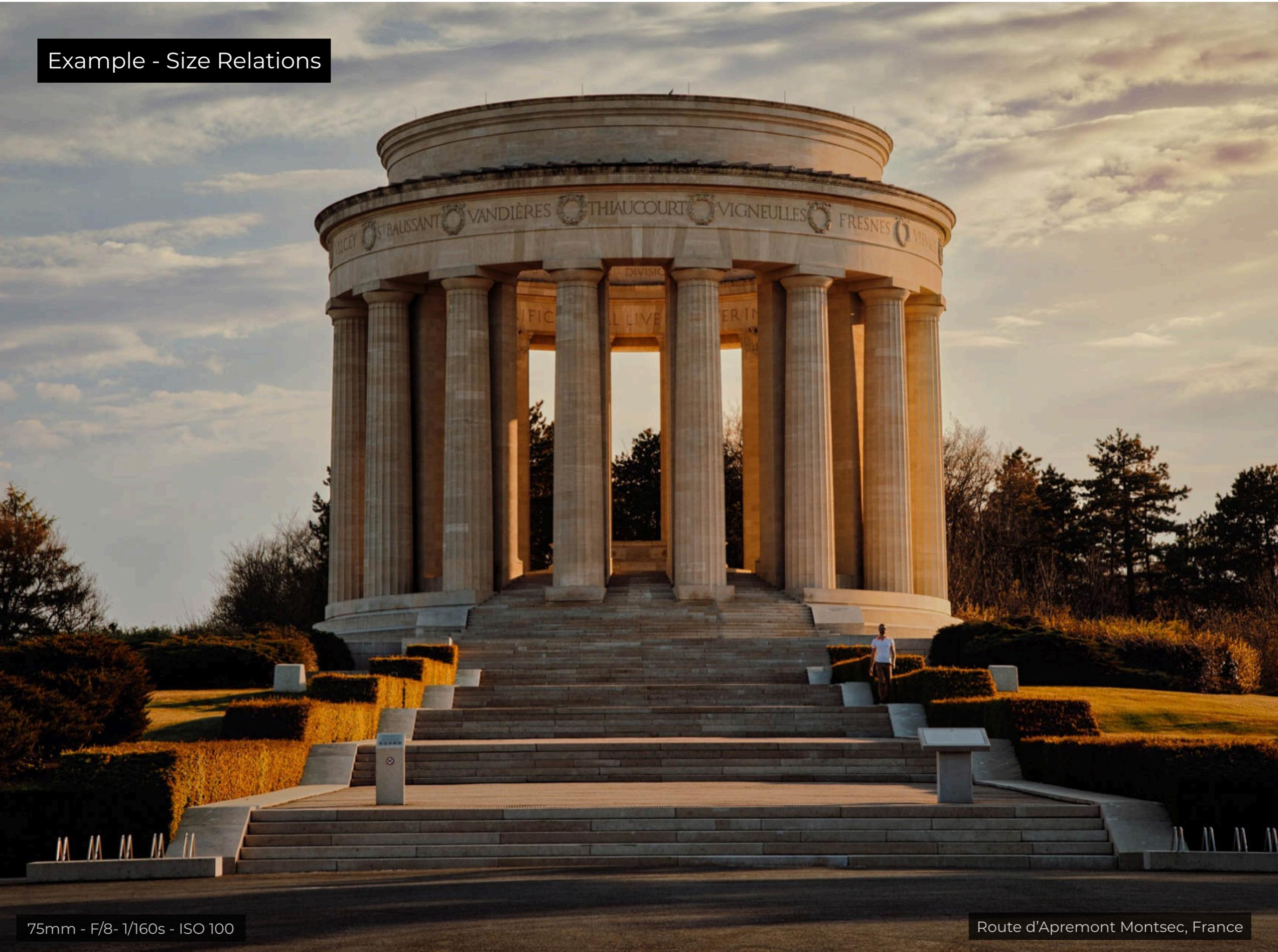
# Size Relations

Have you already experienced this situation? You stand in the middle of a breathtaking landscape, and you are at a loss. But then, in the photos, the size and magnificence of the scenery just didn't want to "encounter." But why is it so? When you stand in the center of the landscape, you will perceive it from three dimensions, feeling its grandeur. But, in addition, you can perceive the landscape visually and through all other senses. Maybe a breeze blows through your nose, or you hear echoes in the mountains? But photos are purely visual, with only two dimensions. That is why it is difficult for a viewer to imagine the actual proportions, let alone the style of this place, if he has never been there themselves.

A simple technique to solve this problem includes what the viewer's eyes already know in the image. It can be people or animals, cars, trees, houses, or even your tent. With this reference object, it is easier for the viewer to imagine the dimension of the subject in the subconscious.



Example - Size Relations



# Contrasts

The contrast in nature is mainly reflected in color, shape, and texture. Therefore, if you want to inject more vitality into your image, look for contrast and opposition: light and dark tones, cool and warm tones, complementary colors (yellow-purple, blue-orange, green-red), angular shapes, And round, matte and shiny surfaces, moving and stationary objects. For example, the typical color contrast is orange dunes under a bright blue sky. Likewise, the circular lake under the steep jagged mountains will be a contrast in shape.

# Dynamics

The landscape is usually composed of static elements. Therefore, your outdoor photos will be beautiful when you deliberately add moving elements such as rivers, waterfalls, the sea, or flowing clouds. Effects such as the silky soft water structure visualize the movement in the photo. It makes the photos look lively and creates an exciting contrast between static and dynamic. These images are usually created using a gray filter.

# Selection

The mistake that amateur photographers often make is trying to put too much content into a photo. It is understandable when you are fascinated by the stunning background. You want to make it immortal in all aspects of the picture. However, the full details often explain the scenery better than a panoramic lens. If you are not careful, the audience will quickly lose their way. Successful landscape photos usually flourish due to a certain degree of reduction.

So don't just shoot wide-angle, but deliberately pick out exciting and representative details in the landscape. You can use a telephoto lens because a long focal length can "condense" the landscape and bring it closer to you. For example, if you want to emphasize the characteristics of a mountain range, choose a single mountain instead of shooting the entire mountain.

## Panoramas

However, sometimes it makes sense to get as much scenery as possible in the opposite way in the photo. Think of endless mountains or valleys. The solution is to take a panorama. This type of image is characterized by a wide viewing angle, which can reach a 360-degree Omni-directional viewing angle in extreme cases. Even with the best wide-angle lens, it is impossible to fit such a part into a single image. You need to take multiple individual photos side by side and then stitch them together in image processing.

## Portrait

Most photographers take photos in landscape format. It is just because it fits our daily viewing habits. Whether it's a TV, a computer screen, or an open magazine—they are all in landscape format. On the one hand, it creates a certain essential tension because it deviates from the "normal" point of view. But, on the other hand, it is more suitable for spatial image structure with foreground, middle part, and background than landscape format. The reason is simple and obvious. In the vertical direction, there is only more "space" to develop the depth of the picture, and the audience is pressed into the picture.

## Not a crooked symphony

If the horizon is tilted, no one will pay attention to your subject. Therefore, when taking photos, hold the camera as straight as possible. Today, most camera viewfinders or displays have built-in guides, grids, or electronic levels. You can usually also display these contents in real-time. If your camera doesn't have them, then no problem. Then look for landmarks in the landscape to align your photos, such as horizontal lines and vertical lines such as trees, telephone poles, houses, etc. Even better: use a tripod. Then, you can align and repair parts of the image at your leisure.

Example - Panorama



Soma Bay, Egypt

Example - Panorama



Saarschleife, Germany

An aerial photograph capturing a serene sunset scene. A wide river flows through the center, its surface reflecting the golden light of the setting sun. The sun is positioned low on the horizon, creating a warm, orange glow across the sky and the landscape. On the right side, a large, multi-story building with a dark, gabled roof and several prominent domes is visible. The building's windows are dark, and its architectural details are highlighted by the low-angle light. The surrounding area is lush with green trees, and a small town or village is visible in the background. The overall atmosphere is peaceful and picturesque.

## 6. Work with Natural Light



19mm - F/8 - 6/1s - ISO 100

Santorin, Greece

## Painting with light

**"Photography is painting with light."**

Is a quote often used in photography. It is not a coincidence because the decisive factor for every successful photo is whether the amount of light reaching the sensor is correct; the exposure is proper, not too bright or too dark. Furthermore, light and its attributes (light quality) also determine the appearance and mood of the image. Therefore, light is the most important creative tool in photography.

Example - Painting with light



60mm - F/9 - 1/100s - ISO 250

Dubrovnik, Croatia

# Light quantity

The essential requirement of a perfect photo is the correct exposure. But what does "correct" mean? We usually attach importance to balanced exposure and high dynamic range in landscape photography. This means that we want as many light and dark nuances as possible in the photos, and our photos are close to what we see on the spot.



Werkeiland Neeltja Jans, Netherland



# Exposure Metering

Your camera can use different methods to measure exposure, suitable for other light conditions and lead to entirely different results.

29mm - F/8 - 1/100s - ISO 160

Dublin, Ireland

# Matrix measurement

Matrix metering is usually set at the factory. There are good reasons because most shots are successful. Here, many camera metering fields determine the exposure of the entire image and then set an average direction in which as many exposures as possible are correct. No aspiring beginners should select this mode.



# Center-weighted integral metering

Center-weighted integral metering also measures the entire image, but the central area is more weighted. The background assumes that the most critical part of the image is in the center.



## Spot measurement

Spot metering works just the opposite. It only measures in a small dotted area and ignores the rest of the image. So it makes sense if you want to expose a particular part correctly, darker or brighter than the rest of the picture. You often use this mode when you want to integrate a light source (such as fire, moon, sun, or light reflection) into the photo.

## Selective measurement

The working principle of selective metering is similar to spot metering, but the measurement radius is more significant. It is because the central area of the image is heavily weighted, and the rest of the image is ignored.



# Check exposure

Exposure meters usually work reliably. However, you should not believe it blindly. There is nothing more annoying than finding that the photos are entirely over or underexposed and the electronic trash can at home, mainly if you have traversed half of the earth. It is why you should get into the habit of checking the exposure of your photos directly on the spot. A common mistake is to judge the direction based on the camera display. The brightness or darkness of the shot depends on the display settings and ambient light. For example, the photo looks much brighter at night than it is. If you want to check whether the exposure is correct reliably, modern digital cameras provide three valuable tools: light balance, histogram, and exposure warning.



Germany



15mm - F/8 - 16/10s - ISO 100

Frankfurt, Germany

# Histogram

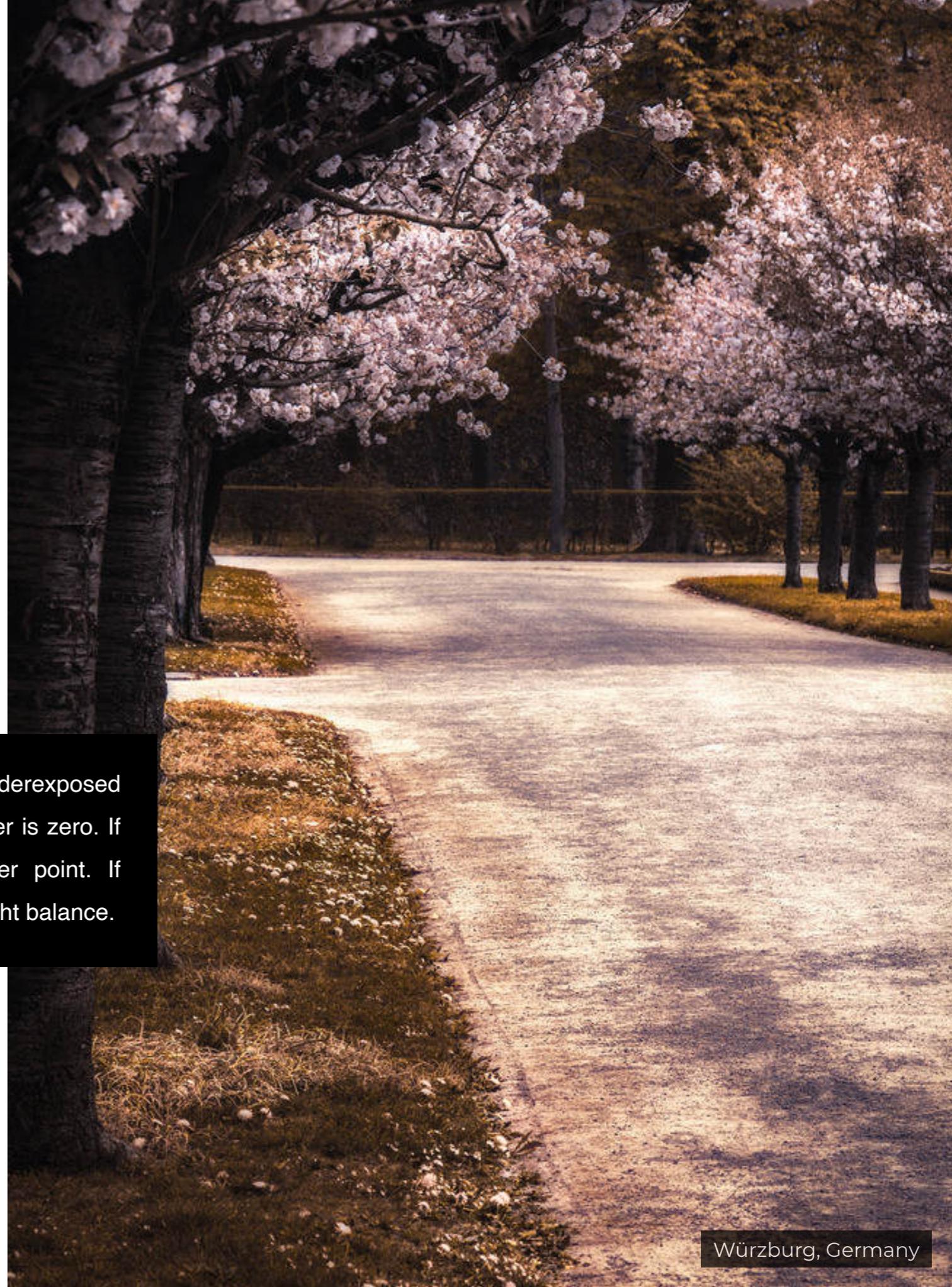
The histogram is a graph that shows the light distribution on the horizontal axis and the frequency of light values (bright/dark) on the vertical axis. The farther to the right of the graph, the brighter the photo, and the farther to the left, the darker. If the chart extends beyond the right edge, it means overexposure. In pictures, this will appear in unsightly white areas (burned-out highlights) without drawing. The left-heavy curve indicates underexposure; on the photo, these are entirely black areas. Our goal is to have no uniform distribution of outliers on the left, right, or above in landscape photography.



Ibiza, Spain

# Light scale

The light balance shows whether the image is over or underexposed on a horizontal scale. If it is exposed just right, the pointer is zero. If underexposed, the pointer is to the left of the center point. If overexposed, the pointer is on the right. Histogram and light balance.



# Exposure warning

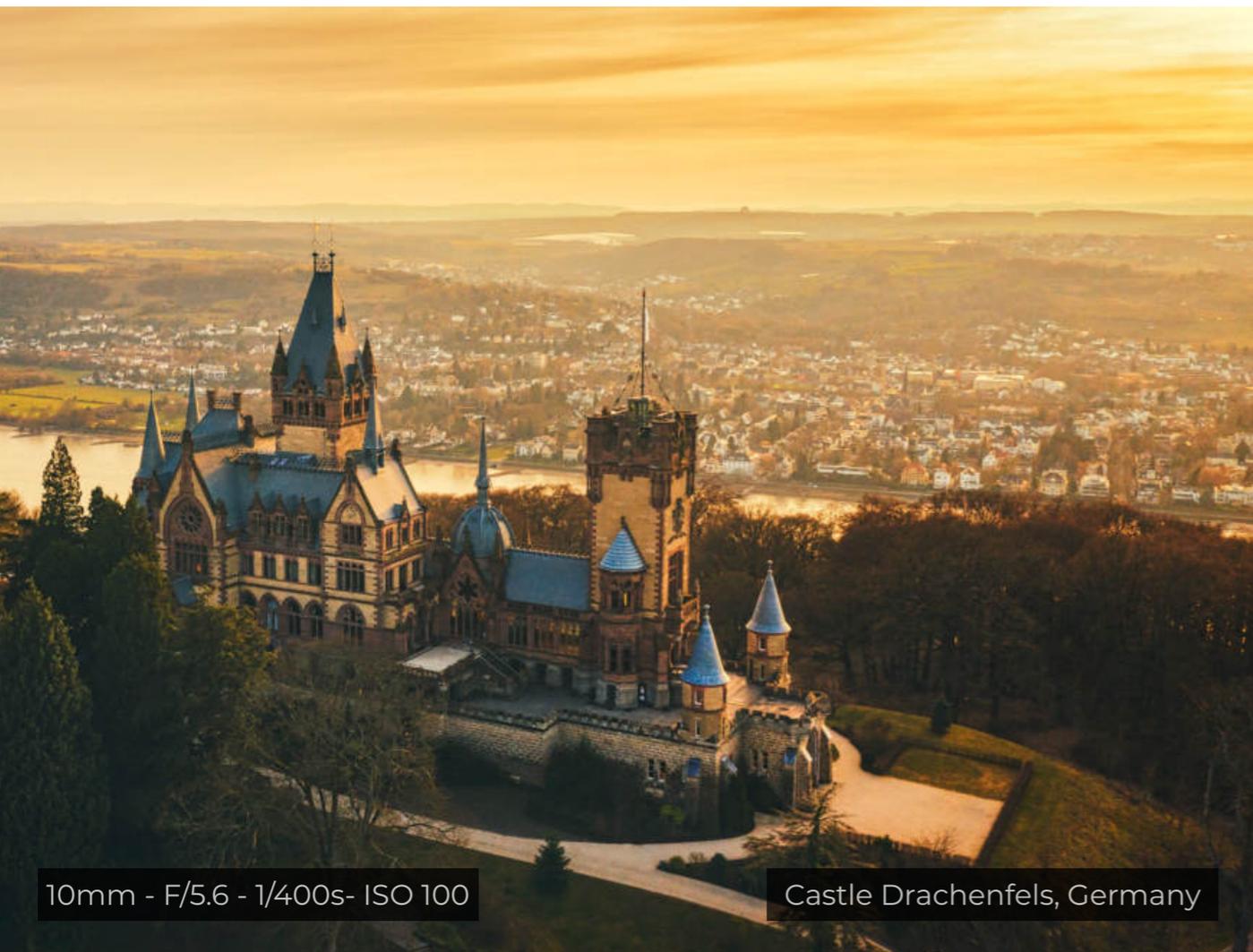
Exposure warnings are also very helpful. These are flickering areas and indicate underexposure and overexposure on the camera display.



Dubrovnik, Croatia

# Exposure compensation

If the exposure determined by your camera is inappropriate, you can take corrective action at any time. The easiest way is to use exposure compensation. There is usually a separate button labeled "+/-" for this purpose. You can instruct your camera to deviate downward or upward by a specific light value from the measured exposure. In most cases, you can set it in 1/3 steps. But you can also change the settings you made. For example, if your photo is too bright, you can reduce or lower the ISO value. Alternatively, you can also use the gray filter.



10mm - F/5.6 - 1/400s - ISO 100

Castle Drachenfels, Germany

# Bracketing and HDR

A gray gradient filter can be used but with some disadvantages. Another method of controlling the difference in image brightness, which I use most often, is an internal function of the camera called exposure bracketing. It involves taking multiple subjects in rapid succession, each with a different exposure. You will usually find it under "Bracketing" in the camera menu. You can also set the number of photos to be taken and the distance between the exposures here. Usually, three to five images taken at a length of one aperture/light value are sufficient. All other shooting parameters must remain unchanged. You can then easily combine this exposure series into a single image in later image processing, such as Lightroom. This image is also called HDRI (High Dynamic Range Image), which combines all the tonal values in a single photo. It is close to what your eyes see.

To this day, even the most modern camera sensors cannot keep up with the vision of the human eye. Even in the most challenging lighting conditions, our eyes can easily perceive all the light and shade nuances (tone values). Still, the camera sensor is overburdened when dealing with objects with very high contrast and can only image a limited spectrum of light.



# Overexposure/underexposure

Usually, in landscape photography, our goal is an evenly exposed image. However, you can also deliberately "wrongly" disclose photos for artistic purposes. Again, the easiest way is to use exposure compensation.

Due to overexposure, the bright parts of the image are deliberately "tipped off." As a result, it produces a very bright, overexposed image. It is particularly effective in backlighting. You can fade out various image elements, such as the sky, to draw attention to the main subject. You can also achieve the fancy, warm retro look that has been very popular in recent years. Overexposure is also helpful for creating light effects around contrasting edges (such as branches or leaves opposite the sky), especially for fog and haze. Overexposure is also often used in icy and snowy landscapes to emphasize this landscape's pure and bright features and highlight individual details such as rocks or trees.

In the case of underexposure, you will do the exact opposite, let the dark part of the image "run" into black. It allows you to emphasize lighter landscape details, such as light reflections. These images usually look very dark and mysterious. Another stylistic use of underexposure is for photos with a silhouette look. Then you expose the sky correctly, and the shot in the foreground is underexposed. In this way, the landscape element stands out as a silhouette of the sky. It is especially effective for landscapes with characteristic shapes, such as jagged mountains or eye-catching trees.

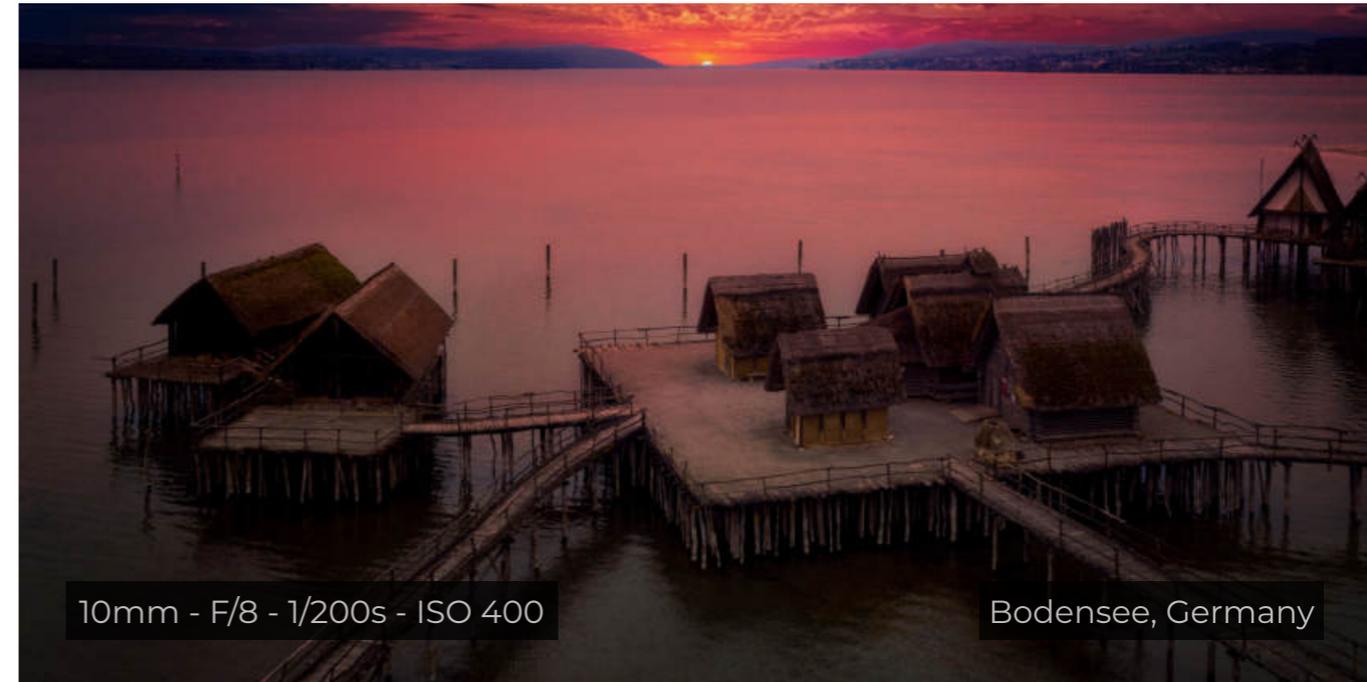
By the way, I almost set a slight underexposure between -0.3 and -1 by default. It helps bring more structure and contrast to the brighter parts of the image, such as the sky or clouds, and avoids overexposure that matrix metering tends to happen.

# Light quality

In landscape photography, we use natural light and sunlight in most cases. However, we cannot simply affect natural light at will, just like a studio photographer uses his flash equipment. On the contrary, we rely on the whims of nature and must adapt to it. Therefore, it is vital to understand the effects of natural lighting conditions on the subject and how to dedicate light attributes to photos.

## Properties of light (quality of light)

- **Color temperature**
  - (warm/cold/neutral, measured in Kelvin)
- **Light Direction**
  - (lateral, from behind, from the front, directionless)
- **Brightness**
  - (light/dark, high/low contrast)



These properties depend on the light source and its location. But weather, seasons, and time of day also have a decisive influence on the appearance of light. Therefore, one of the most influential landscape photography techniques is that you should be in the right place at the right time. It requires proper planning. Then, not everything goes as expected, but it dramatically increases the chances of taking spectacular photos.



15mm - F/8 - 1/320s - ISO 100

Cliffs of Moher, Ireland

## Time of day

The worst time to take pictures is at noon or when the sun is high. The light is bright and dazzling, and the colors in the photo look white and blue. Without shadows, the image lacks depth. If you are shooting in the sun, unsightly spots and curls will usually appear, the so-called lens flare. In addition, the tonal range, the difference in image brightness, is too high for your sensor and usually leads to overexposure.

It is best to set your photo time in the early morning or evening. Then the light is nice and soft, and the scenery shines with lovely colors. Shadows and light reflections give the image plasticity. In addition, you are very likely to be alone with the picture at this time, and no one crosses the screen. However, evening or early morning is still a viable period in winter and autumn. We landscape photographers like the time around sunrise and sunset the most.

When the night turns into daylight, the color of the light changes from night blue to light blue and then to a warmer and softer tone. It is called the blue hour. This twilight creates a mysterious atmosphere. A few minutes before the sun appeared from behind the horizon, the sky and clouds began to glow with colorful light. Later, the higher parts of the landscape, such as mountain peaks, are bathed in intense morning red (alpenglow).

The sunrise finally heralded the dawn and golden hour. The entire landscape is illuminated in dreamlike warm red, orange, and yellow tones. Long shadows provide three-dimensionality. As the sun's position increases, the light becomes more neutral and brighter, and until the end, at the latest two hours after sunrise, it is usually too bright to be photographed. Then, at night, the lighting procedure is repeated in reverse order.

# Season

The season is also essential for successful photos. Think of a waterfall or small mountain lake that dries up in the summer. Some Scenes can be shot at any time, but they will produce completely different effects depending on the season. Which season best suits your theme also depends on your personal preferences.







Den Haag, Netherland

# Weather

# Clouds

A common mistake beginners make is only taking pictures when the sun is shining, and the weather is good. However, the image often lacks gloss. Because of the extreme brightness differences, they cannot be adequately exposed. If you have seen stunning outdoor photos, you will notice that they are rarely taken when the sky is blue. The "Wow" feeling usually involves dramatic clouds. These Beautiful clouds add something special to any landscape setting. In addition, the alternation of the sun and clouds casts vivid light and shadow into the landscape, which is beneficial to the entire photo. If the clouds are imposing, you can also highlight them as the main subject in the image.



Side, Turkey



Switzerland

## Overcast sky

If the sky is uniformly gray and unattractive, it is best to avoid it entirely in your frame. Nevertheless, the camera does not have to stay in your pocket. Cloudy days are best for shooting details in the landscape, such as rocks or plants. In this kind of weather, pictures of forests or waterfalls are also much better because there are very few differences in brightness.

Example - Clouds



10mm - F/6.3 - 1/320s - ISO 100

Dubrovnik, Croatia

Example - Overcast sky



10mm - F/9 - 1/240s - ISO 100

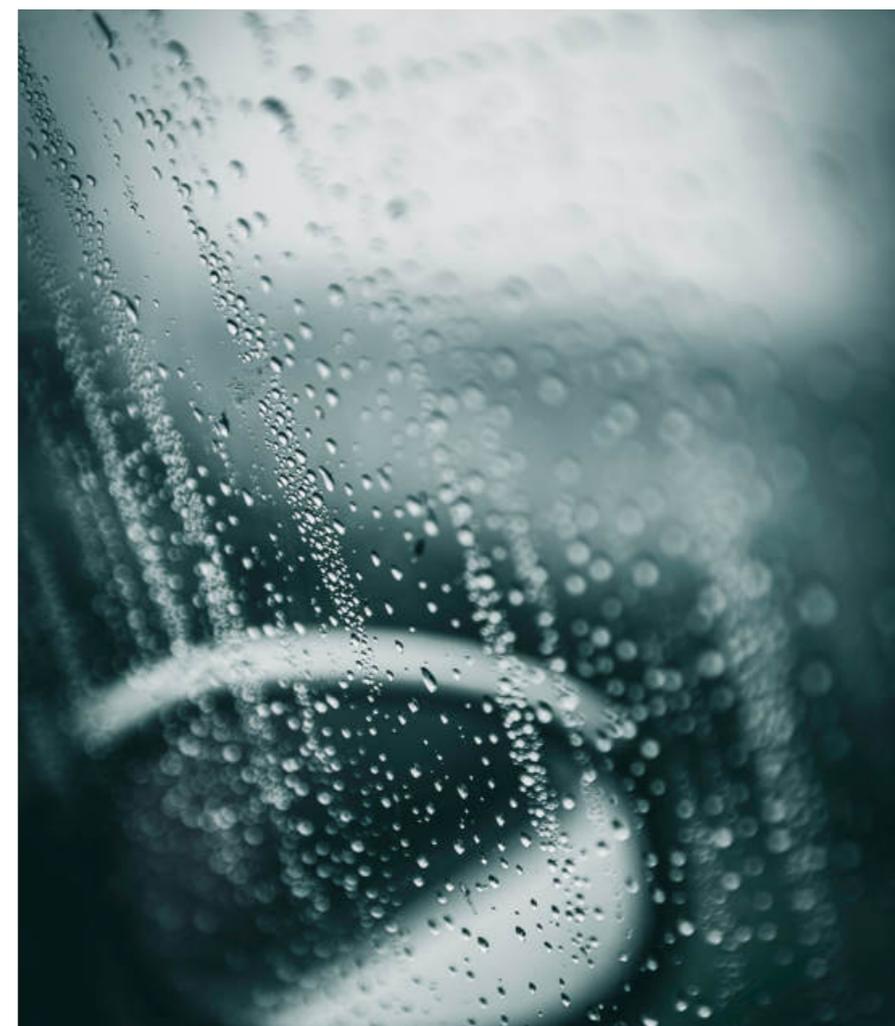
Bamberg, Germany

# Rain

The gray sky turned into rain, and the long-awaited sunset threatened to fall into the water? Usually, it pays to stay confident and go out or be prepared. It is well known that there is sunshine after rain.

I noticed that the sky often reopened before sunset during countless hours outdoors. So patience is worth it—waiting results in spectacular colors, dramatic skies, or rainbows.

If you find a place protected from rain, you can take pictures in it. Or, you can put the camera under a big umbrella. Then, you can use the unique stand of the Umbrella to fix it on a tripod, so you can free your hands from taking pictures. If you use a longer exposure time, you can even capture raindrops and raindrops in the picture.





# Rainbow

Rainbows usually occur when the sky clears quickly after rain, and the low sun illuminates the leaving precipitation. In Central Europe, these conditions typically occur in the evening and after warm thunderstorms. In addition, rainbows can also be observed in the jets of moving water bodies (such as waterfalls, rivers, and waves). It would help if you slightly underexpose to shoot rainbows and use polarizing filters to increase contrast and enhance colors. Ideally, find a vantage point where you can photograph the entire arch in the landscape. Dark backgrounds where the rainbow stands out are particularly suitable.

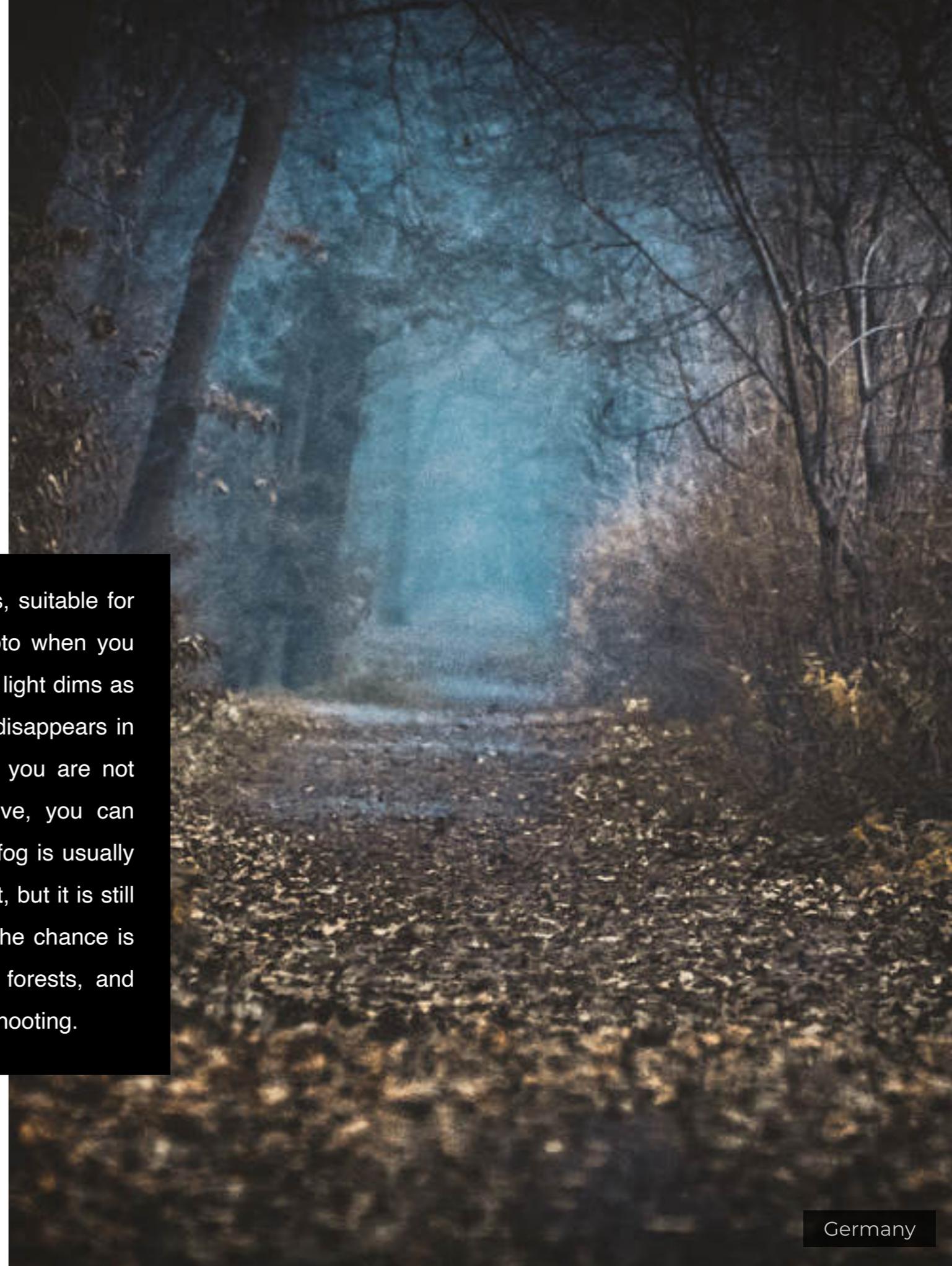
# Thunderstorm

The challenge here is that the flash only lasts about 50-100 milliseconds. Therefore, the trick is to time it properly. Of course, you can try to trigger once per second in the entire storm and hope to succeed in thousands of images. A little smarter than principled opportunity is a simple technique for prolonged exposure. From a photographic point of view, the few minutes before and after the thunderstorm are particularly meaningful. Usually, you will experience very spectacular and colorful clouds.



# Fog

Foggy atmospheres always have something mysterious, suitable for mysterious scenery. There is no direct light in the photo when you stand in the fog. The fog is like a giant diffuser, and the light dims as it passes through a curtain. The far part of the image disappears in the fog. Ground fog or high fog makes it attractive if you are not standing in your position. From a different perspective, you can effectively use it for your photos. A good time to shoot fog is usually early morning in spring or late autumn. It is cold at night, but it is still warm during the day. Especially if there is night frost, the chance is great. Fog usually forms in depressions and valleys, forests, and higher mountains. Fog is very suitable for atmospheric shooting.



# Be prepared for the weather

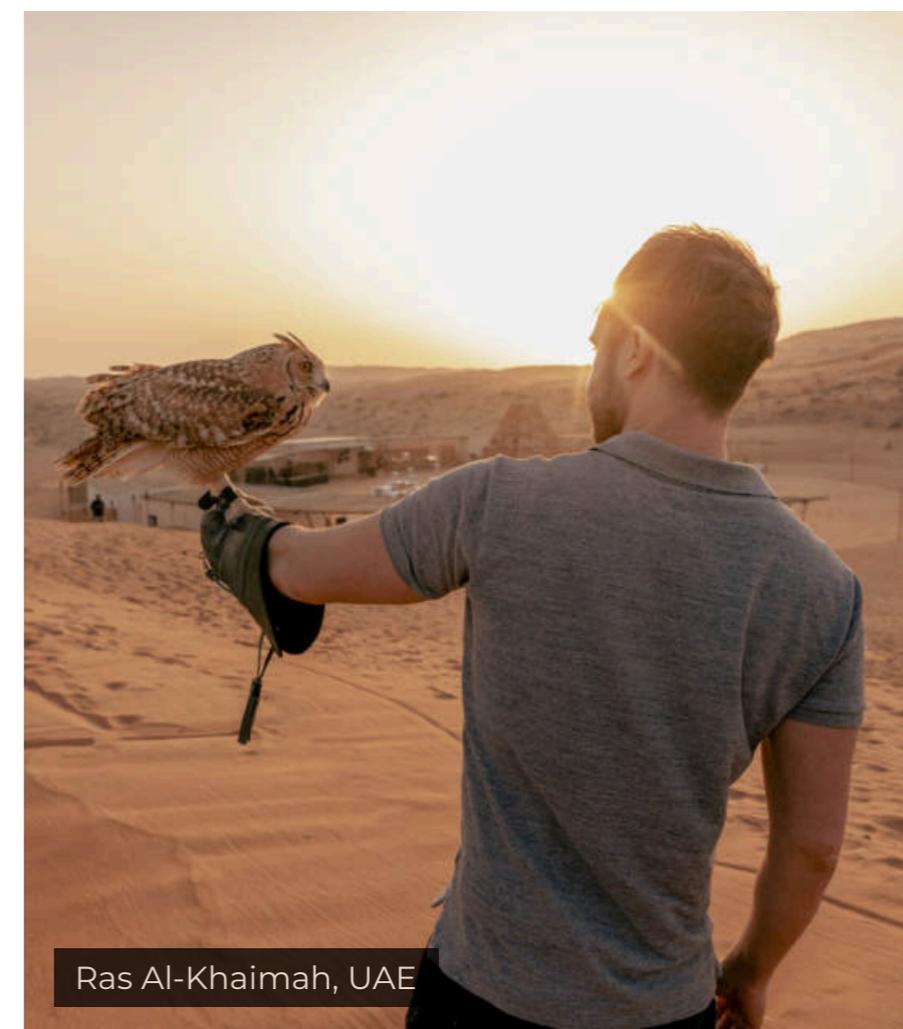
As the saying goes, "There is no bad weather, only the wrong clothes." Therefore, protect yourself and your equipment from cold, wind, and rain. Prepare waterproof and windproof functional clothing, which is best worn according to the onion principle. You can also consider preparing a rain cover for your camera backpack.

Your safety comes first. If a thunderstorm or storm is approaching, you should quickly find a sturdy shelter or get in a car. But, most importantly, stay away from trees, water, and power lines. No image is so vital that you should endanger your health for it.

Despite your preparation and patience, the weather can still affect your work on some days. If you can try to record the subject you want the next day again, that would be great. Many of my photos are just great images because I came back a few times. I have developed the habit of staying for at least two days in the natural scenery I want to shoot. It is especially true for places where I have to travel far or well-designed because there is nothing more annoying than being able to take a beautiful photo after traveling halfway through the earth to reach the destination.



Obertauern, Austria



Ras Al-Khaimah, UAE



Karlovy Vary, Czech Republic



## Light Direction

The direction of light plays another essential role in your image effect. Depending on the angle at which natural light sources illuminate the image, the same subject may produce completely different results. In addition, the light in each direction has additional requirements for the photographer and his settings. Therefore, you should always understand the source of light, and it is best to have it taken into account in your plans.

# Backlight

The light source (usually the sun) is behind you when using a backlight. The scene in front of you will be evenly illuminated so that the subject's exposure is balanced, especially in the morning and evening. The shadow that enters the picture gives it depth. In addition, there is no danger of sunlight reflection. Therefore, the backlight is most suitable for beginners to obtain demonstrable effects quickly.



If you use backlighting at dusk, you should ensure that there is no shadow of yourself in the photo. To avoid this, crop or enlarge the image accordingly. You can also adjust your position so that your shadow disappears in the shadow of larger objects (such as trees or rocks). The backlight is the most compatible with the matrix metering described above.

# Stripe / side light

In the morning and evening, the contrast between light and dark is sharp, and the shadow effect is noticeable. The surface structure and individual landscape elements, such as mountains, trees, or stones, are emphasized by the light coming in from the side. The disadvantage is that the brightness in the image fluctuates wildly, and it may not be possible to reproduce them in an image from the camera sensor. In this case, you can help yourself with the exposure series. You should also make sure that no light enters the lens from the side to avoid sunlight reflections and fade. You can handle this problem well with a parasol.



Example - Side Light



10mm - F/5- 1/240s - ISO 100

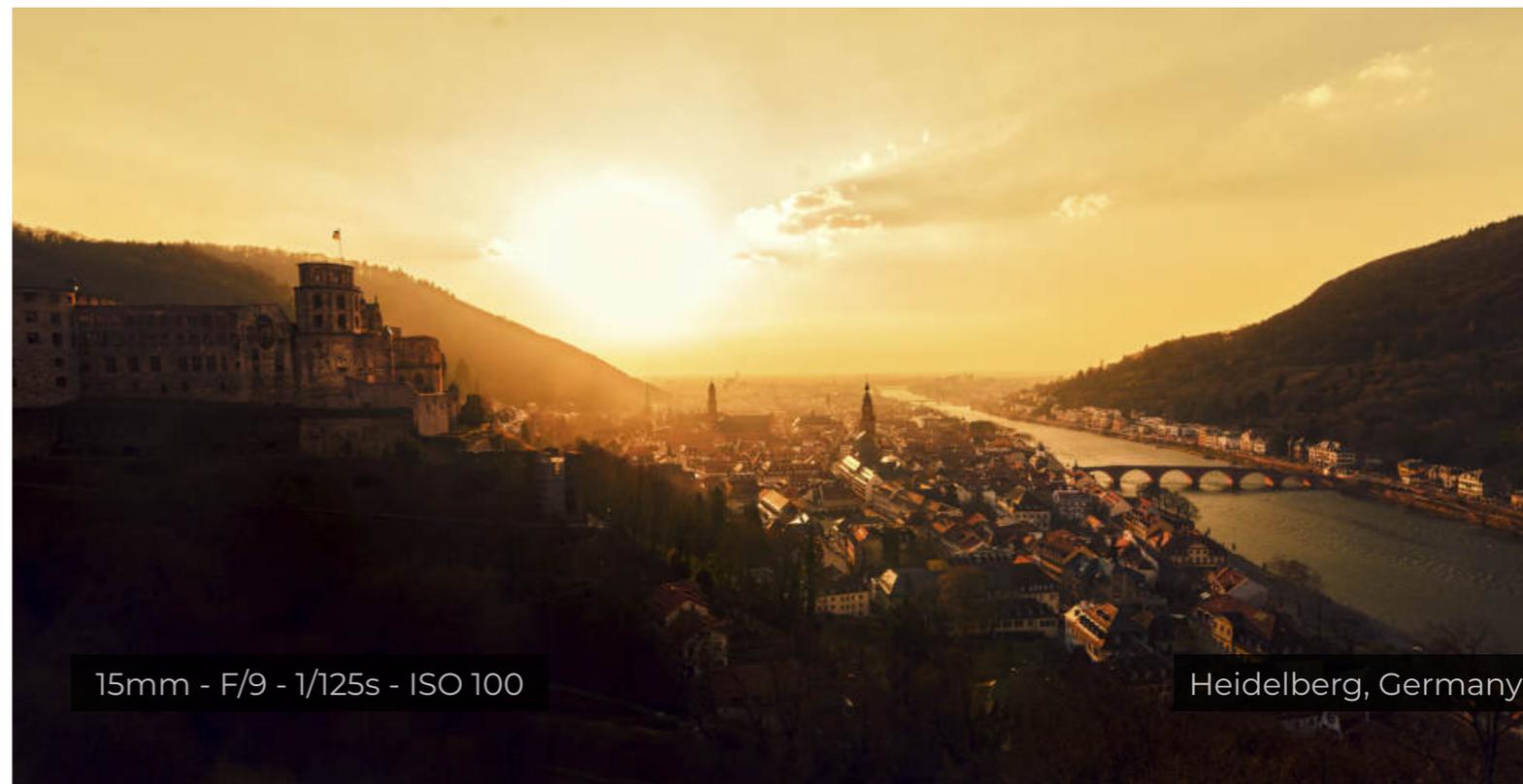
Route d'Apremont Montsec, France

# Direct Light

With direct Light, the light source is in front of the photographer. In extreme cases, you can even see the sun directly in the picture. The challenge of direct light shooting is the drastic difference in brightness, making it impossible to combine the entire dynamic range in a single photo. If you want everything to be exposed correctly, you typically have to use an exposure stand. It is best to measure the brightest point with spot metering for exposure. Or, you can use overexposure and underexposure as artistic effects.

You usually have to see the sun's reflections (flares) in the image when backlit, even if the sunshade is open. Small particles and dirt on the front lens will significantly enhance this effect. Therefore, you should ensure that the lens is clean and not use filters when taking backlit photos. You can then remove interfering spots in image processing. However, this is not always effective and time-consuming. You can also create a virtue according to your needs and use reflection as a style device. For this, you should observe precisely how the flare in the image works before taking the picture and choose the image composition accordingly.

Another important note for your safety: Do not look through the optical viewfinder when taking backlit photos with a DSLR camera. The lens system can focus the sun's rays like a magnifying glass, causing irreversible damage to the retina. Therefore, when using DSLR for backlight shooting, use live view.



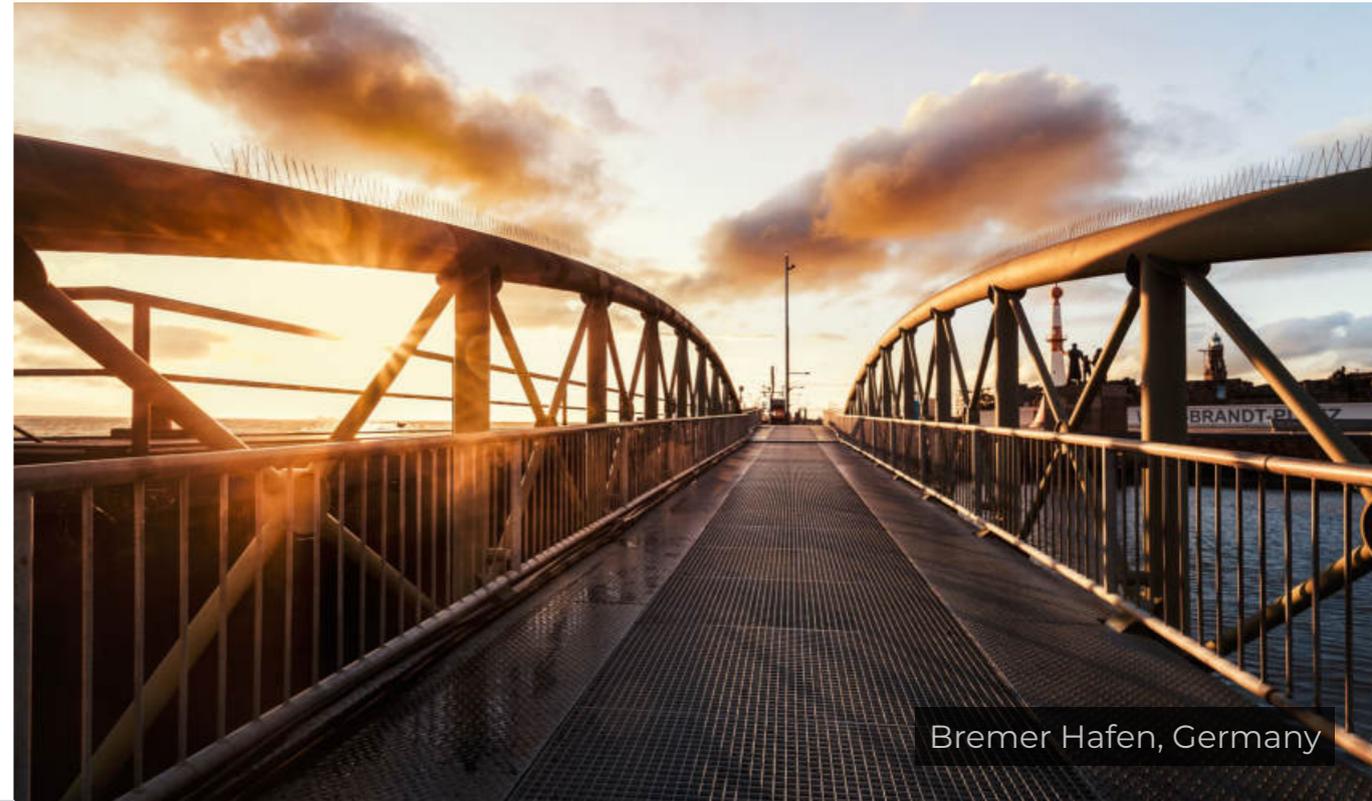
Example - Direct Light



Santorin, Greece

# Sun stars

When the sun is low, you can shoot certain things by placing the sun completely behind larger objects such as trees or rocks. Then the object's edge shines like an angel, and the image presents a mysterious atmosphere.



Bremer Hafen, Germany



23mm - F/8 - 1/125s - ISO 100

Reserve Naturelle des Ballons, France

Another creative option is to photograph the sun stars. To do this, cover most of the sun with objects (trees, rocks, etc.). You should only see the smallest part of the sun. Then you weaken strongly. The refraction of light at the aperture blade creates a light effect around the sun in the photo, which is why this phenomenon is correctly called the aperture star. For example, this is also most effective when the sun is low on the horizon and then sets behind the mountains.

# Light Rays and God Rays

A unique form of light is the so-called light cluster. Because of their otherworldly appearance, they are also called "God's Light" among photographers. They have similarities with the sun stars but belong to different physical phenomena. They are caused by fine water and dust particles blocking the sun or scattering light. This kind of spectacle most often appears on the cloud, from which a few broad beams of light are emitted. But in the morning, in foggy waters, forests, and high rugged mountains, you can sometimes observe such light. A similar effect also occurs in the gaps between clouds. However, the sun's rays then propagate downward in a cone and set an effective light spot on the earth.

The best way to capture the spectacle of light is to use spot metering to avoid overexposure.

# Night Photography

Most landscape photos are taken during the day and use sunlight. However, if you want your photos to have extraordinary charm, please photograph them at night. Therefore, landscapes shot under the moonlight, twinkling stars, or dancing aurora are always unique. You can also use artificial light sources to achieve great results, and you can usually leave all the photo points to yourself.



Frankfurt, Germany



Paris, France



## 5 Rules in Night Photography

1. Tripod In addition to the camera, a stable tripod is also required. Eventually, the exposure time will be so long that you can no longer shoot it freehand.
2. Remote Publishing Because of the shutter release itself, the remote shutter release is the first choice for preventing camera shake. Also, the remote shutter release is the best way to shoot in bulb mode. The camera will continue to expose for as long as you press the shutter button in this mode.
3. Focus Autofocus can be used if there is still enough light. After that, however, autofocus was turned off, so nothing changed or changed. At this point, the lens' image stabilizer is also turned off to avoid even the slightest blur. The same applies to the camera's internal image stabilizer, IBIS. If the light is too low, the camera will focus manually. To do this, go to live view and use the magnifying glass function to focus.
4. ISO values First, set a fixed value of ISO 100 or 200. Why is the value so low? The higher the ISO value, the greater the risk of the image being grainy and noisy. Therefore, choose a lower ISO value.
5. White Balance While there are still rules for taking photos during the day or in artificial light, at night, white balance can be used to create ambiance. Try what the mood is like at 3000 Kelvin because the picture is pretty cool there. At 6000 Kelvin, you'll get a warmer image.

Example - Night Photography



Example - Night Photography





## 7. Control Sharpness



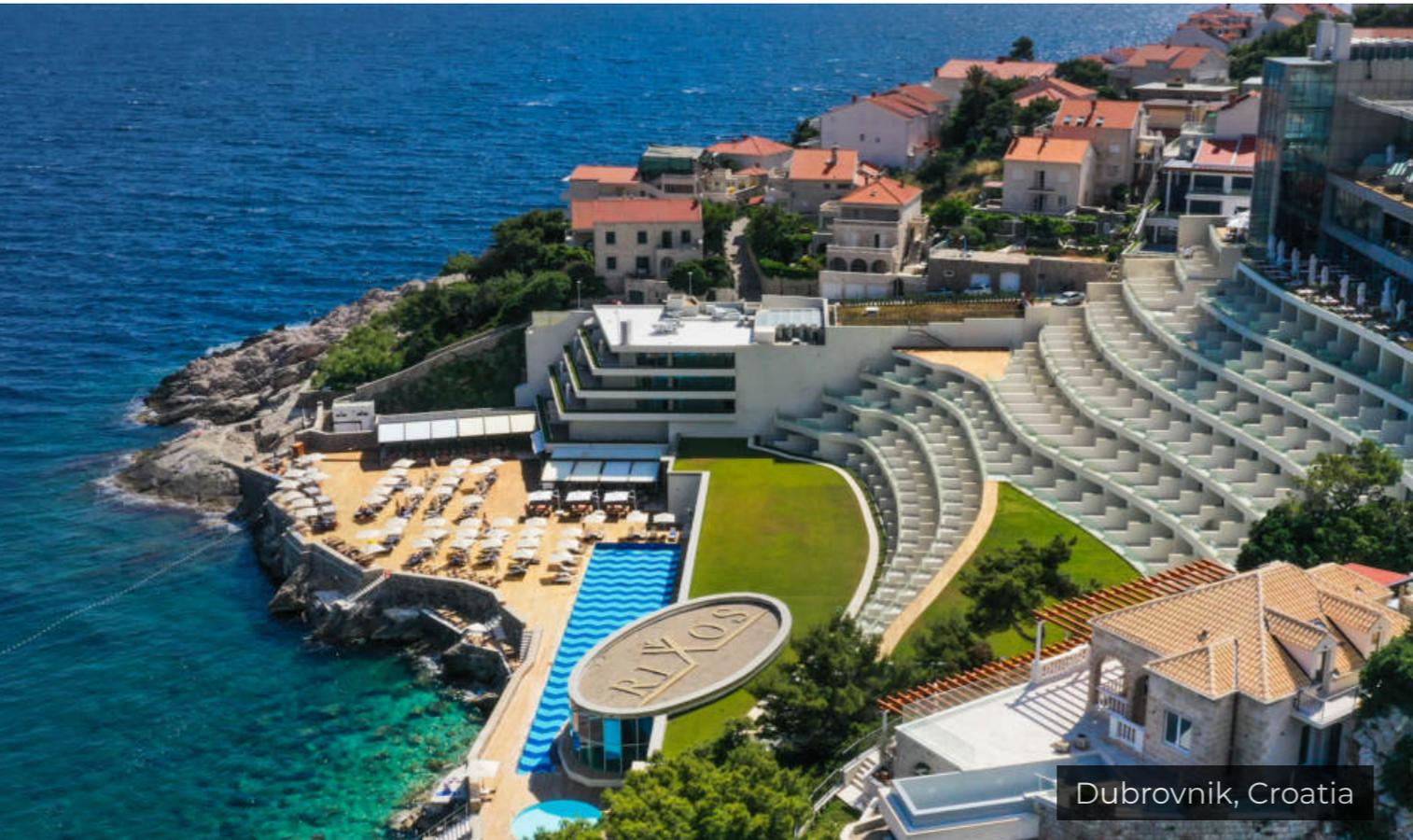
Santorin, Greece

## The secret of crisp images

In landscape photography, we usually pursue the maximum sharpness of the image. Sharpness means that as many details as possible are displayed clearly and distinctly in the picture. Ideally, when you view the photo in full size on the monitor, you can still see minor nuances, even if you zoom in or print it out in a large format. However, you also want everything to be clear and sharp from front to back most of the time. From the small rocks in front of your feet to the mountains in the distance on the horizon. It is the so-called depth of field. There are a few things to keep in mind to get the best clarity in the image.

How sharp your photo becomes and how the sharpness is distributed in the image depends, in simple terms, on five factors:

1. Camera Settings
2. Focus Point
3. Stability during shutter release
4. Equipment
5. Re-Sharpening



## Camera settings

The light source (usually the sun) is behind you when using a backlight. The scene in front of you will be evenly illuminated so that the subject's exposure is balanced, especially in the morning and evening. The shadow that enters the picture gives it depth. In addition, there is no danger of sunlight reflection. Therefore, the backlight is most suitable for beginners to obtain demonstrable effects quickly.

## Focus Point

The focal point is the point-shaped area in the image where the camera focuses. First, you must know that the lens can only focus on one distance (focus). The farther the objects in front or behind it are from the focus, then they will become blurred. The area where everything is still clear is called the depth of field. It is divided into an area of about 1/3 in front of the focus point and about 2/3 behind it. In landscape photography, we usually want the most significant possible depth of field, so we must pay attention to the correct position of the focus.



# Understanding automatic focusing

There are also various autofocus functions on your camera, which is an excellent thing for us modern and comfortable people. Just press the button, and the clear picture is ready. It is the manufacturer's promise to us. There is no doubt that automatic systems usually focus reliably. The only question is what exactly is the focus. Autofocus is brilliant, but it cannot read what you think (for now). Instead, the camera focuses on what it "thinks" that it must focus on the foundation of the internal database. But this is not important to you. First of all, you need to know that your focus usually has two parallel basic automatic systems, the effect of which is not apparent to many photographers.





10mm - F/8 - 1/320s - ISO 200

Ireland

# Focus automatic/ autofocus measuring field control

The autofocus system uses its subject recognition and internal database to determine which point in the image should be focused on. It then controls the point through its measurement field. It is why it is also called AF point control. If you want to be the master of your clarity, you should first turn off autofocus. Then you no longer leave it to the camera to focus. Next, move the focus (usually a tiny cross or square) to the position you want to focus. For this purpose, there are usually arrow keys or small joysticks. For some cameras, you can also set the position via the touch screen.

The general habit of turning off autofocus and then simply leaving the viewfinder cross at the default setting in the center of the image is not very useful. It is because the autofocus always focuses on the center. But if the main subject or the desired focus is not there, you will not be satisfied with the sharpness afterward.

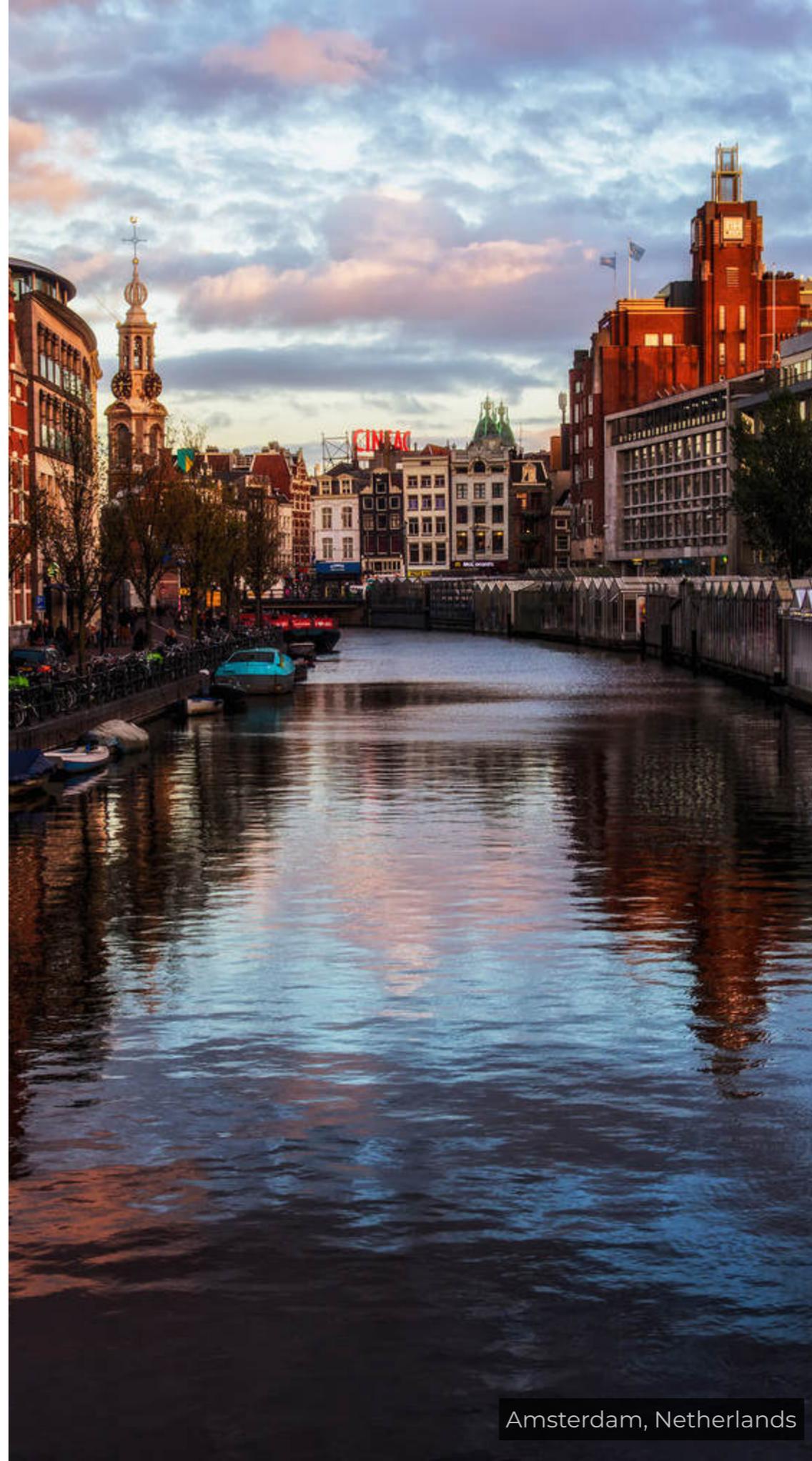


10mm - F/9 - 1/240s - ISO 100

Würzburg, Germany

# Autofocus

Autofocus is responsible for actual focusing, you used to or today have to select manual mode to focus through the distance/focus ring on the lens. Since autofocus is usually much more precise and accurate than us humans, I recommend that you use it in principle. Manual focus is only needed when autofocus is not working correctly. It is the case in low-contrast situations, such as fog, dusk, or night. Then manual focus through the focus ring is best done through Liveview. Then, you should check the focus set before releasing the shutter. It turns out that it is helpful to zoom significantly in on the view in Liveview. Current cameras sometimes have an additional function called focus peaking or edge enhancement.



Amsterdam, Netherlands

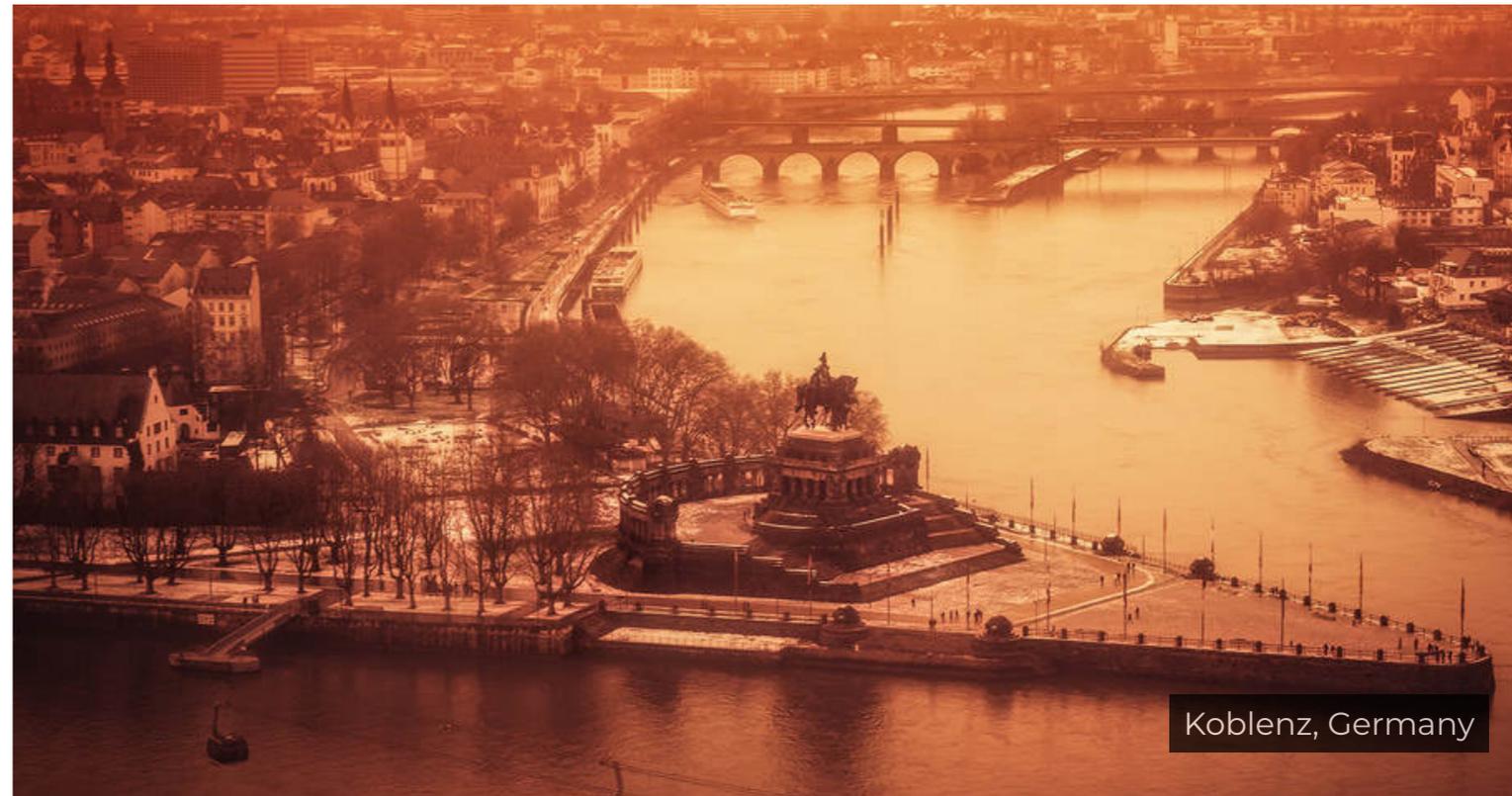
# Single and continuous autofocus

Your camera usually has different autofocus modes. Single-mode (AF-S) is suitable for static subjects. Continuous shooting mode (AF-C) tracks the focus of a moving subject. There is usually another mode that can be automatically selected from one of the two settings. You should keep in mind that dynamic focus tracking consumes a lot of battery power, but it also makes no sense if your photo subject is not moving. Since this is usually the case for landscape photography, always select the AF-S mode.



# The hyperfocal Distance

For simplicity, the hyperfocal distance is the distance from this point to the object at which all things at infinity are focused. As mentioned earlier, the depth of field is distributed before and after the focal point. The precise depth of field range is exactly from half of the hyperfocal distance to infinity.



Suppose you shoot with a full-frame camera, 14mm wide-angle lens, and f/11 aperture and focus on a tree at 1 meter. Then calculate the hyperfocal distance to be approximately 60 cm. With your settings, your depth of field ranges from about 30 cm ( $60 \text{ cm}/2$ ) to infinity. You should make sure that there is nothing less than 30 cm away from you in your frame; otherwise, it will lose focus. Since your little tree stretches into the abyss and is one meter away from you, not only will you become sharp, but other things behind it will also become sharp.

Impressive depth of field, isn't it? If you take a few steps towards that tree, say within half a meter, and then focus on it, it will still be sharp. But the background can only be apparent at 2.6 meters. Everything behind it, such as rock formations or mountains, will be out of focus. So you will give up a lot of depth of field in the image. And all this is because you are a few centimeters away from the hyperfocal distance.

In the past, you had to calculate complex formulas. Today, related mobile applications or programs can easily do it for you. For example, I recommend the free Apps, Photo Tools, and HyperFocal. Or, you can search for "depth of field calculator" in Google or Appstore.



## Release stability

If you don't want to use a tripod, you can still reduce the photo blur rate. You can ensure that your lens or camera has an optical image stabilizer. This function effectively prevents motion blur, at least to a certain extent. However, on a tripod, you should turn it off. Otherwise, it will try to compensate for non-existent movement, which will cause vibration.

Whether a photo is clear or not depends mainly on the stability of your camera when the shutter is released—the more stable the camera, the more precise the image. When you take photos with your bare hands, you should know that your hands are always moving slightly. Even if you are a perfectly balanced person, as cool as Bruce Willis, you can't maintain exposure for more than one-hundredth of a second.

One way to shorten exposure time is to choose a larger aperture to draw more light on the camera sensor. Another option is to increase the ISO value. However, as we all know, the higher the ISO, the lower the image quality. Therefore, the best solution is to place the camera on a sturdy tripod and stabilize it. Then, you can also use a low ISO value to get the best image quality, separate the camera from your body movement, and make it mainly immune to ground wind or vibration.



You can look for a "natural tripod," preferably a stable and exposed surface, such as a tree trunk, a rock outcrop, or your backpack, as a cost-neutral emergency solution.

However, image synthesis will be very tricky. The same applies to so-called bean bags offered in stores as a lighter alternative to tripods. I don't recommend these anyway because they are heavy when complete, so you'd better carry a decent tripod.

If you are shooting on a tripod, you should not touch the shutter release button; otherwise, pressing the button will cause movement again. So it is best to use a remote shutter release or use the Self-timer Function with a delay of at least 2 seconds.

If you are shooting with a digital SLR camera, you should also activate the mirror lock function to prevent the mirror from turning over before shooting to avoid blurring the shot. Working on a tripod is an essential landscape photography skill.

# Equipment

In addition to the tripod, other parts of the equipment also impact sharpness. For example, the higher the resolution of the camera sensor and lens, the more details you will be able to see in the image.





# 8. Image Editing

# What is the purpose of image processing?

Image processing is now an indispensable part of modern landscape photography; it is hard to imagine without it. Its primary purpose is to make your photos play the best results while also accounting for the lack of camera technology and technical errors. If your goal is genuinely perfect landscape photos, you should also deal with this topic.

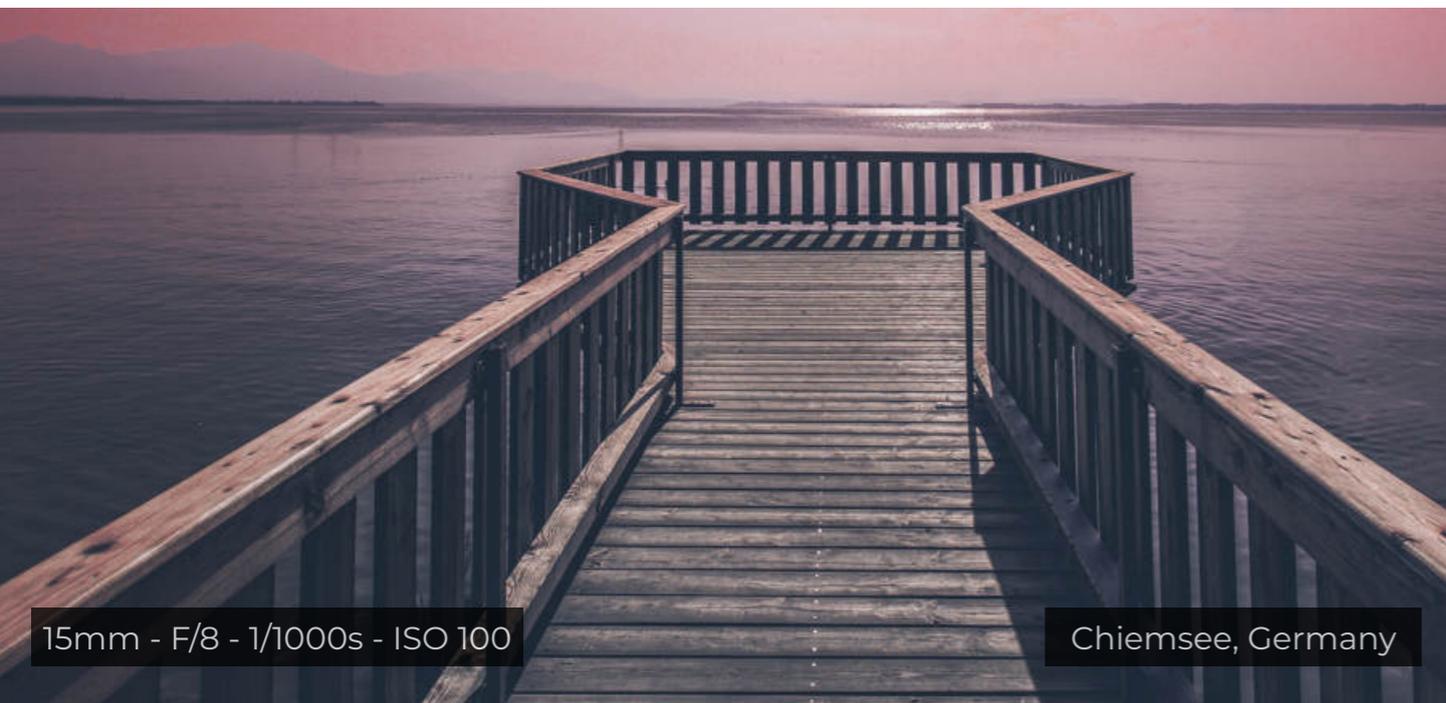


London, UK

# Is image editing essential?

Maybe you are now asking yourself whether image processing is not only for stubborn freaks but is necessary. Isn't the camera already processing the image? Wasn't it done when it came out?

Yes and no. When you shoot in jpeg mode, the camera does some processing. But remember, the camera only makes some basic settings, and you can hardly control them. The camera doesn't care about specific tasks, such as removing sensor stains. In addition, all edits will be permanently and irreversibly written to your image file.



15mm - F/8 - 1/1000s - ISO 100

Chiemsee, Germany



Cologne, Germany

In addition, the jpeg format has some qualitative shortcomings. The goal of this format is to obtain the smallest possible file size. It requires compression, which is achieved by combining pixel and tone values. Therefore, optimizing the file size will always bring you a loss of detail and quality. To be fair, many cameras today produce excellent jpegs. Therefore, if you don't want to do any post-processing, you can use the jpeg format. However, you cannot get the best results from the photos. It will be a pity if you do your best to get the perfect shot first and then let the last step be taken away from your hands and are only satisfied with the fragments of the picture. Therefore, if you want the best quality and are willing to invest a few minutes in image processing, I strongly recommend taking photos in RAW format.

# What is the RAW format?

A The English "raw" means "raw" or "unprocessed." The camera does not process or compress the image's "digital film." It means that you can use all the information recorded by the sensor without restriction, such as the full tonal range and color space. It, in turn, provides you with the best starting point for digital editing. You no longer leave the processing to the camera but do it yourself. In this way, you can fully control your photos and get the best final result.



## Re-sharpening

If you use JPEG format instead of RAW, the camera has sharpened the image according to the settings during recording. Therefore, sharpening image processing programs should be avoided whenever possible. The easiest way to sharpen an image is to use the automatic sharpening feature in many image editing programs. Also, some better software (like Adobe Lightroom) allows sharpening with options that will enable you to fine-tune edge detail. Subsequent sharpening of image footage is part of the classic process, especially when working with RAW format. With this step, more details can be seen in post-processing. Sharpening an image isn't the only way to bring out more image information - it's a combination of global contrast, sharpness, and sharpness that make it picture-perfect.

# Sharpen in Lightroom

Four properties play an important role when sharpening in Lightroom:

## Amount

This value determines how much the artwork should be sharpened. When this slider is set to zero, no sharpening is applied. Over-sharpened images can be identified by hard edges and noticeable sharpness.

## Radius

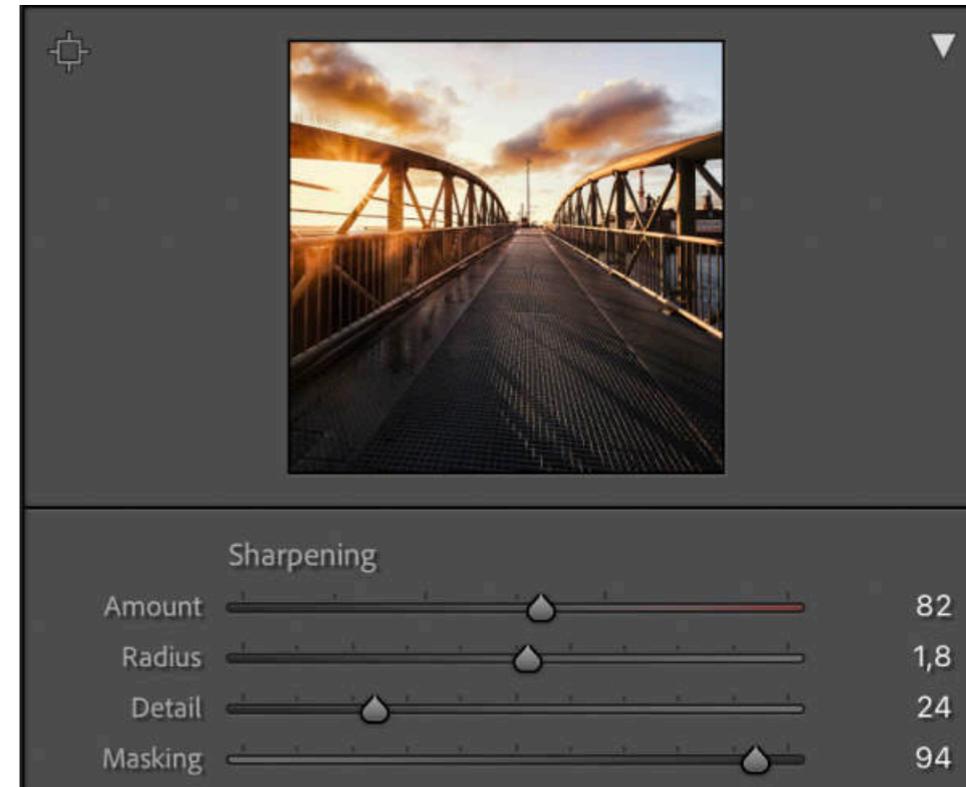
The radius determines which area around a single pixel the microcontrast should be increased. The smaller the image structure, such as small fish scales, the smaller the radius must be set.

## Detail

The Details setting determines how far the image handler should search for existing structures, such as scaling edges. The higher the value, the more edges are processed.

## Masking

This function creates a mask that determines which areas of the image will apply sharpening and which areas will not. If you move the mask slider while holding down the ALT key, the mask is displayed in a black and white view. If this mask is activated, larger structures are searched and refined with higher values. The brighter the image area that appears now, the stronger the sharpening here. On the other hand, black image areas are excluded from sharpening.



Patrick Schmetzer

# What does successful Landscape Photography mean?

Do you enjoy landscape photography, but find you're not satisfied with your images? Or simply don't know where to begin? This book will show you how to use the right equipment, simple techniques, and correct settings to improve your images significantly.

You will find out that landscape photography is more than just pressing the shutter button. It is also not rocket science but a craft that anyone can learn. You don't have to invest in expensive professional equipment or study photography. You will soon go home with stunning photos



ISBN

