

LIGHT AND MAGIC



Understanding and using light

Light has properties and those properties have effects such that they can make your photographs dramatic, beautiful or seemingly real



Today We Will Talk About

The properties of light

The effects of light

The types of light

And – importantly – that a camera sees light differently than you do.

The Properties of Light

Light has:

Colour

Intensity

It can be hard or soft

It can come from natural
or artificial sources

It can be direct or scattered

Colour

Light itself has colour and the colour differs with the time of day, the altitude and the nature of the subject



Cold or altitude





Warm light



The Magic Hour



Colour from the Sky



Colour from the earth

White Balance

White balance is a computer adjustment (done in your camera or afterwards) which allows adjustment of the overall colour tone in the image.

THE IN-CAMERA MENU

The standard choice of color temperatures includes sunlight, cloudy, and shade, with artificial sources flash, tungsten, and fluorescent (the last approximated). These can often be further fine-tuned.



Option	Approximate color temperature	Description
Auto	3000–8000 K	White balance adjusted automatically
Incandescent	3000 K	Use under incandescent lighting
Fluorescent	4200 K	Use under fluorescent lighting
Direct sunlight	5200 K	Use with subjects lit by direct sunlight
Flash	5400 K	Use with subjects lit by flash.
Cloudy	6000 K	Use in daylight under overcast skies
Shade	8000 K	Use in daylight with subjects in shade
Choose color temperature	2500–10,000 K	Choose color temperature from list of values
White balance preset		Use subject, light source, or existing photograph as reference for white balance



Deliberately Choosing a White Balance Setting



Daylight



Shade White Balance





Oops, Wrong White Balance



Light relates to the time of day





intensity

Light can be hard or soft. Hard light is harsh and associated with mid-day

The Dreaded Mid Day

Light at mid-day can be very intense. The sun's rays are directly overhead and the light is scattered. The effects ..





Soft Light

- ▣ Soft Light is very important. It is created by:
- ▣ Diffusers, including cloud
- ▣ The effects of mist or rain
- ▣ The fact that the sun is gone
- ▣ By physical tools the photographer uses
- ▣ Including bouncing light



Soft Light







The Right Light Choose Your Time

But What If I Have No Choice

Let's say you are travelling and you have to take pictures in the middle of the day. What can you do?



Use a Polarizing Filter

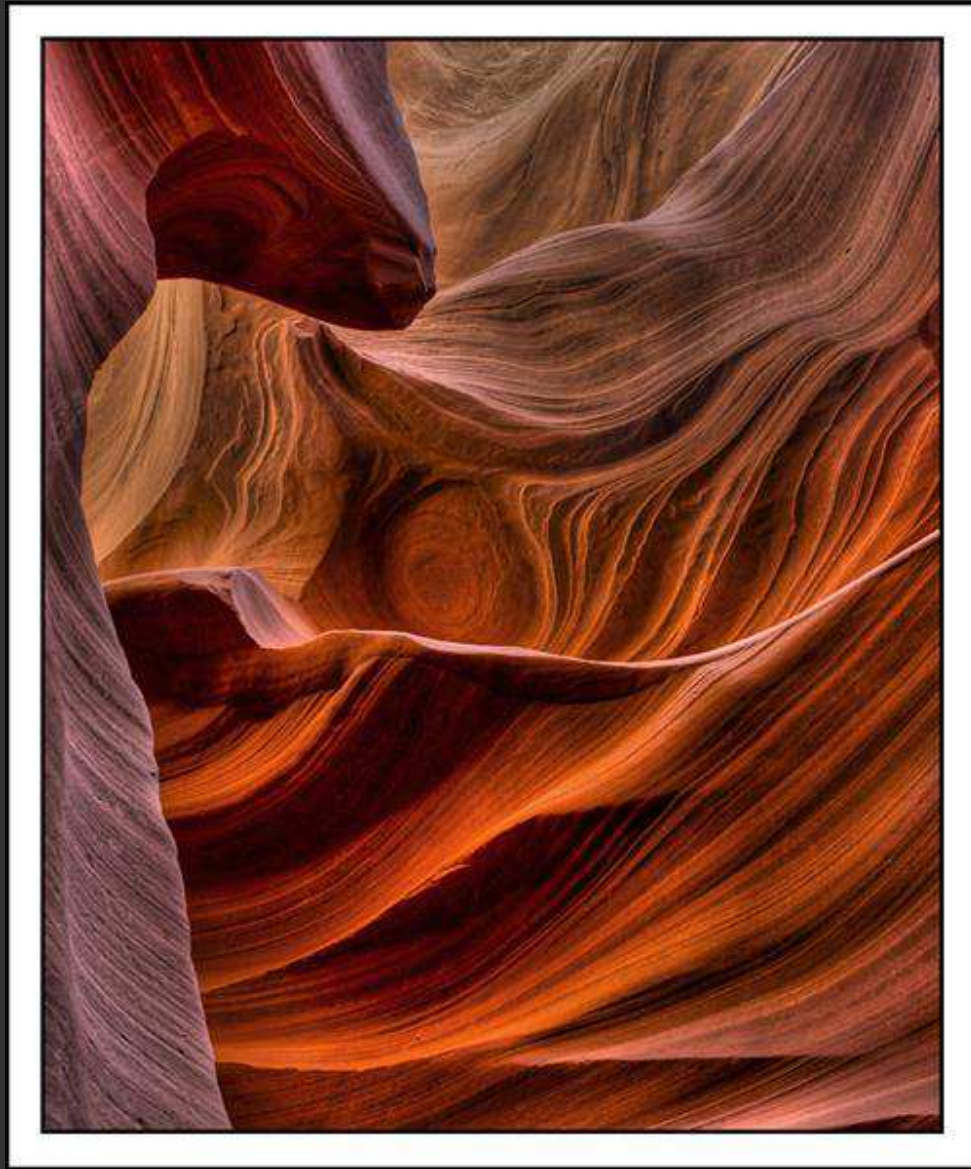


Or choose what to photograph





The Effects of Light

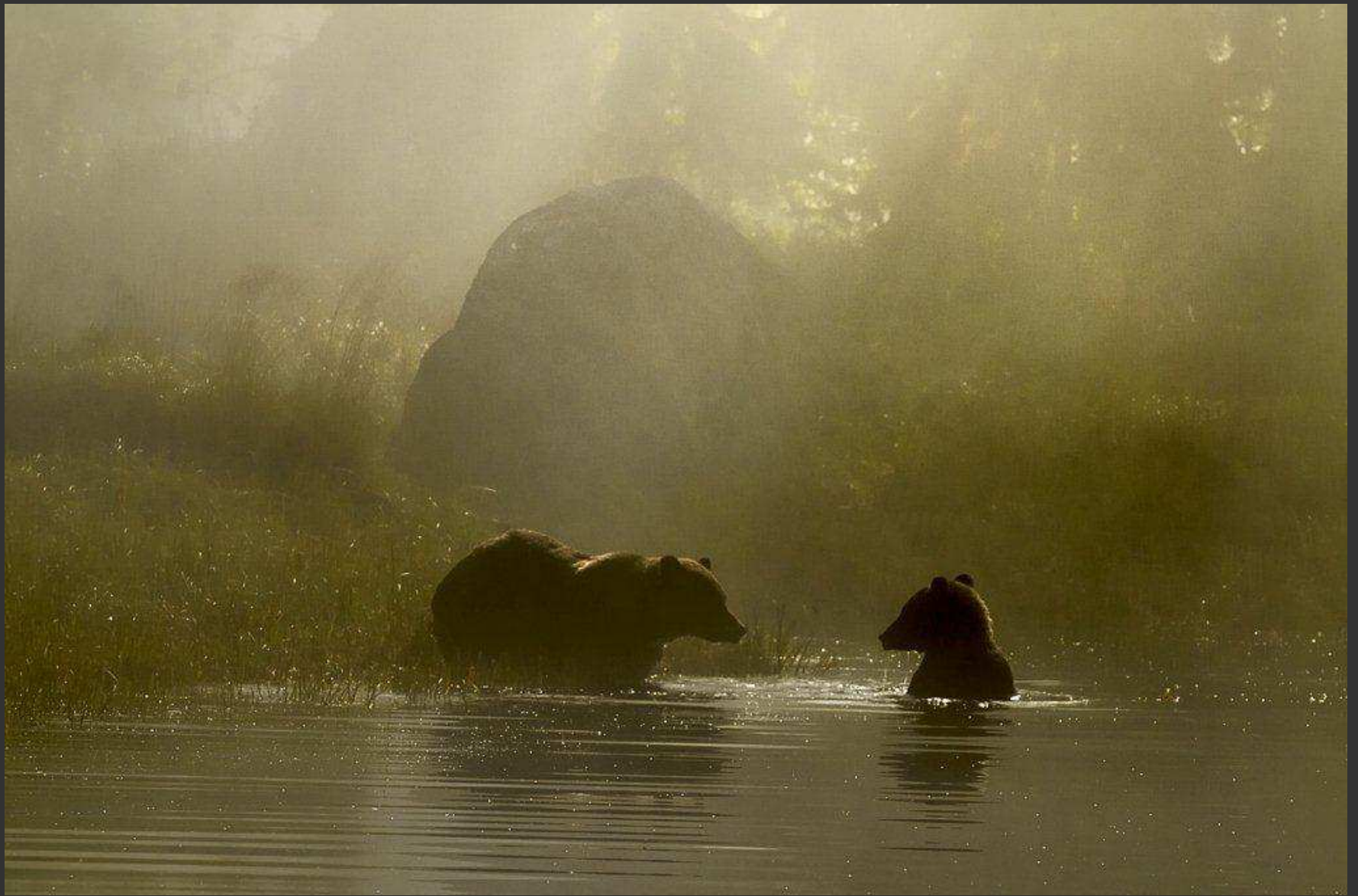


Drama



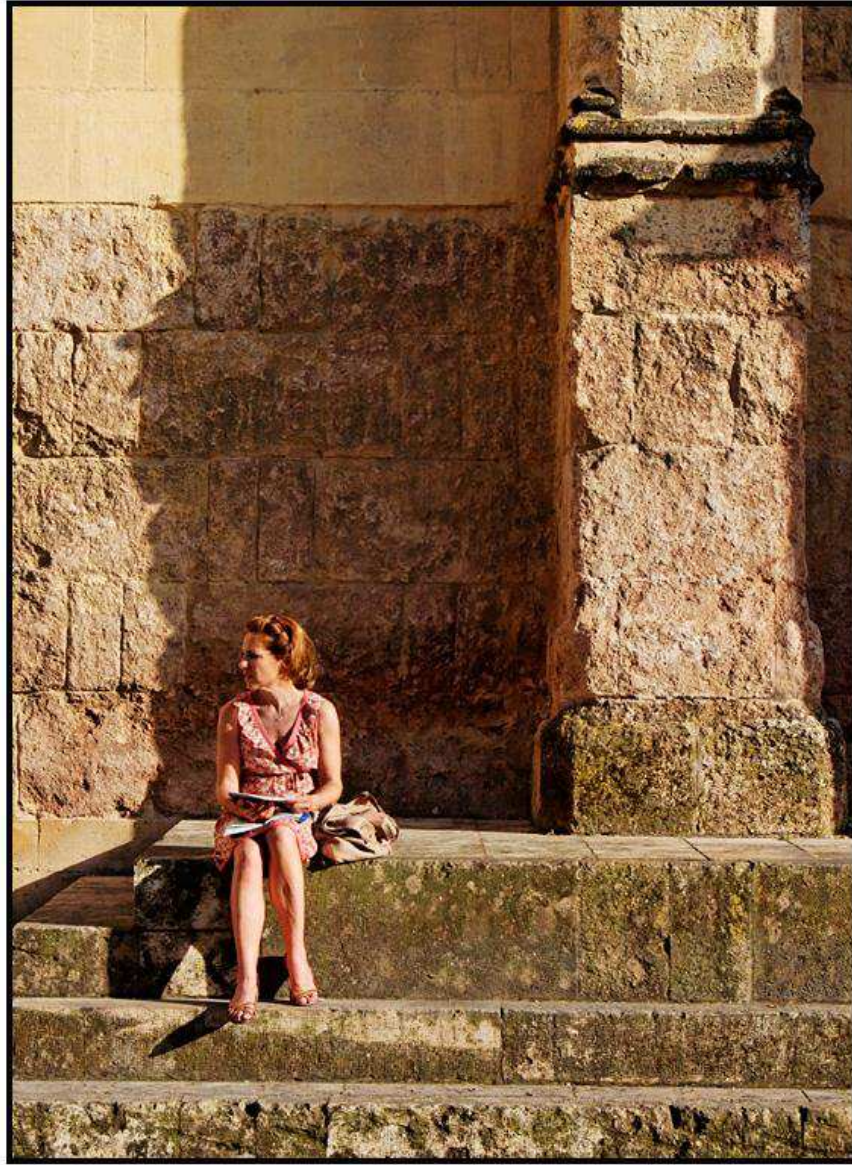
Modelling and Mystery





Mood

Types of Light



Side Lighting



Late afternoon for long shadows



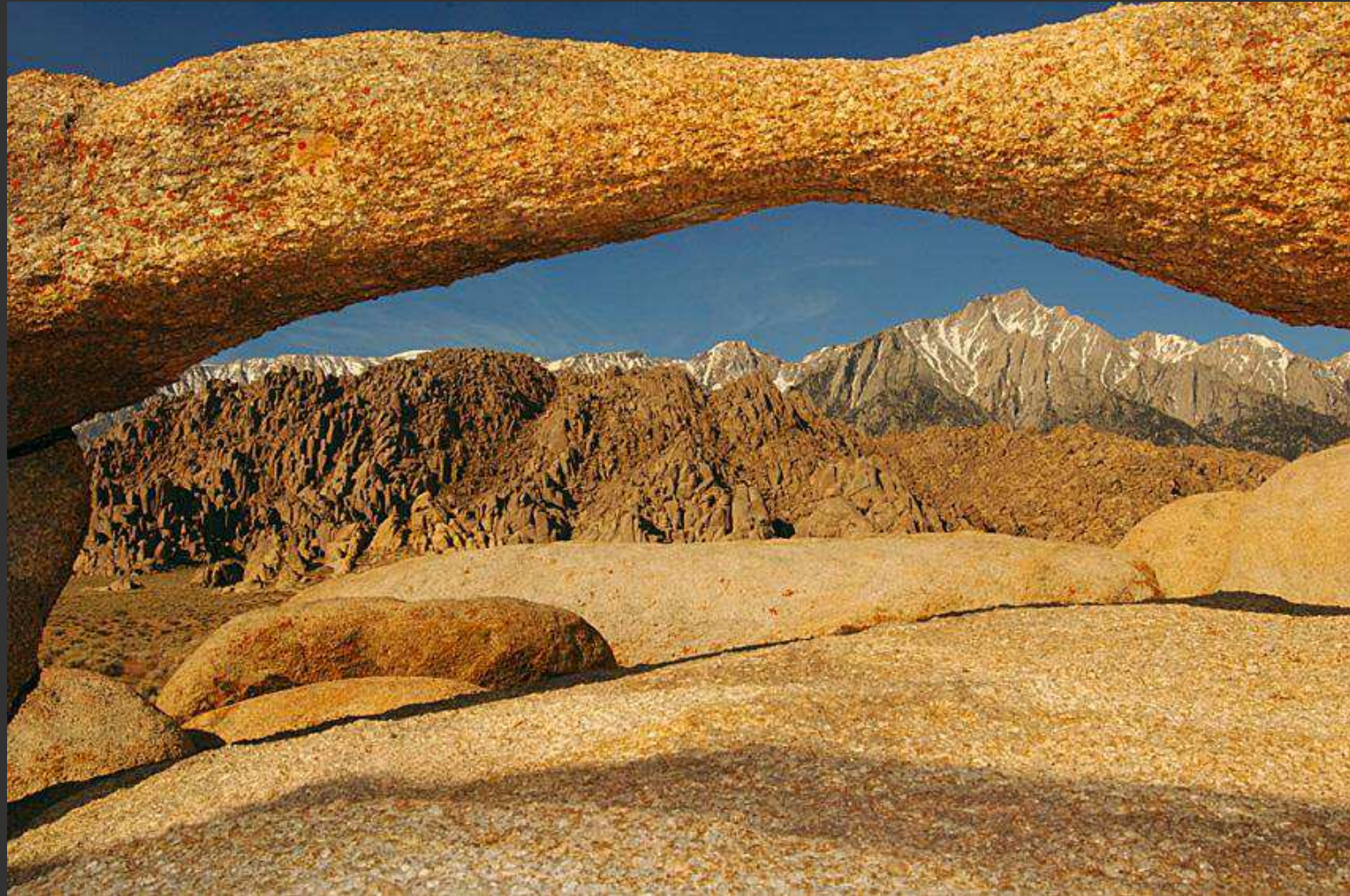
Rim Lighting





DavidJamesWilliams.com



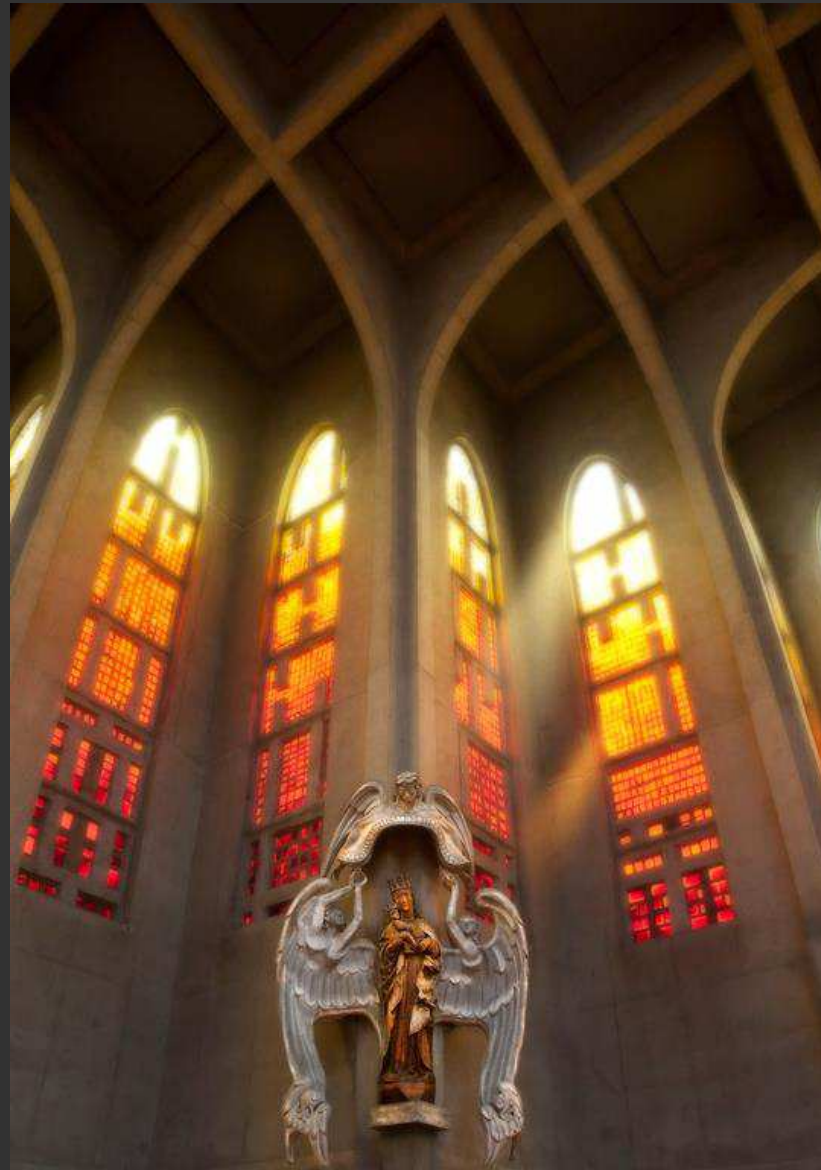


Frontal Lighting



Back Lighting





Spot lighting



Indirect Light



Silhouette



Portrait Lighting

Portraits demand attention to lighting. For most of us, that means natural light. We need to pay careful attention to where we place the subject in relation to the light source and the kind of light. The results can be very different.

Let's see some examples...



Facing the light



Frontal Three Quarter



Back lit – Three quarter

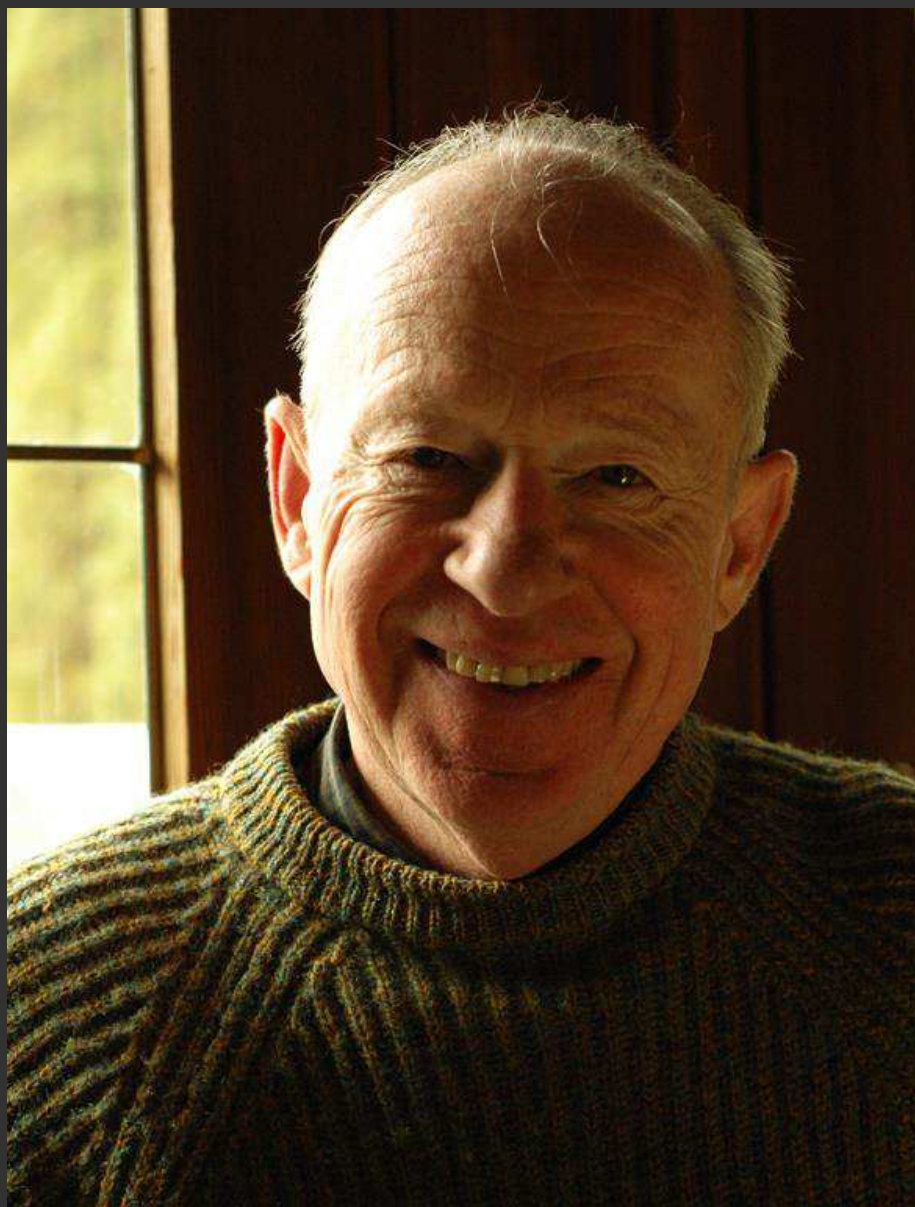


Shade frontal – rim light



Shade – face on

Available light – from a Window





Fill Flash

The little pop up flash on your camera is not too powerful and has limited uses, but it is good for some things. It is especially useful for portraits where shade is a problem.





Other Use of Fill Flash

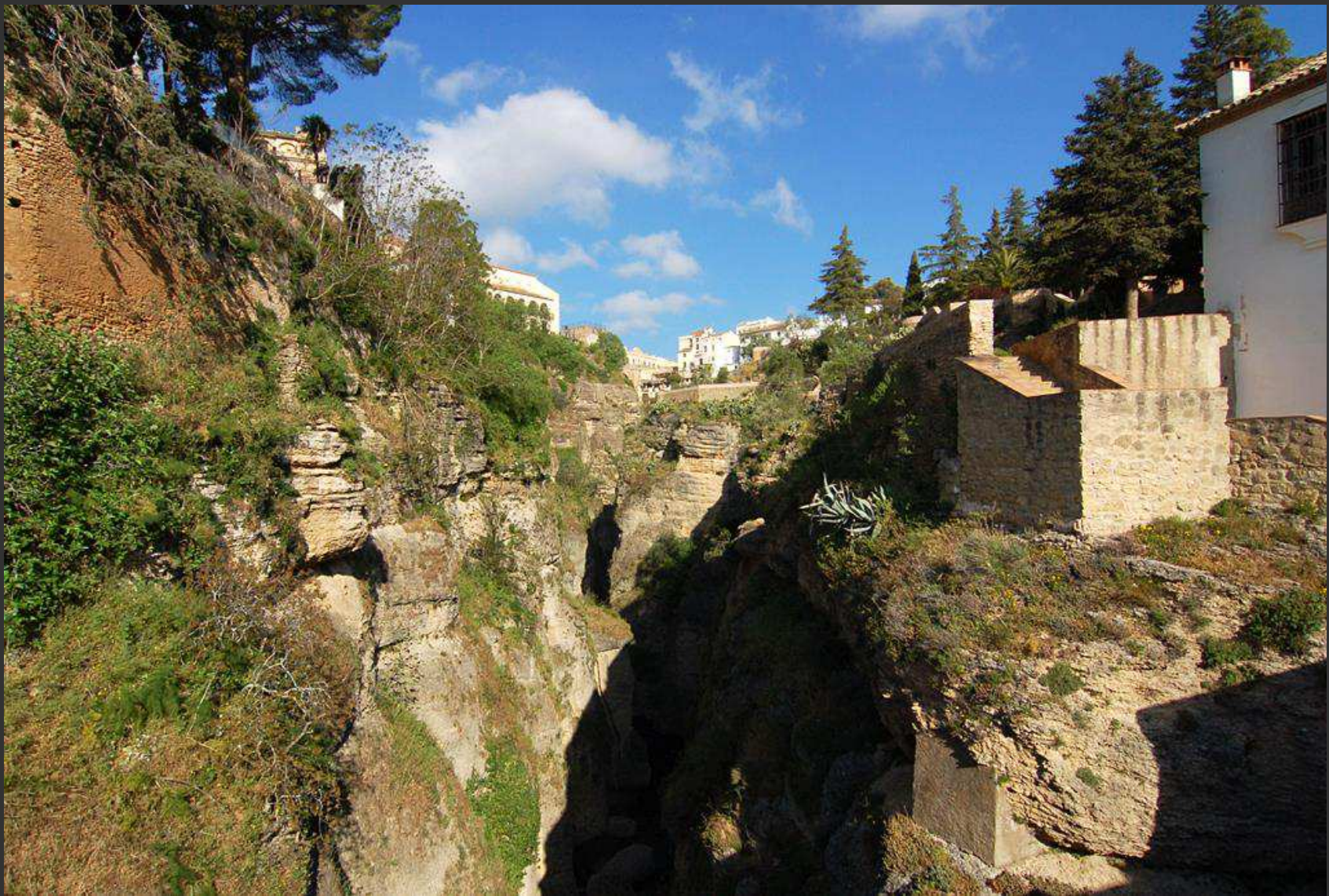
You can use the pop-up flash in some situations

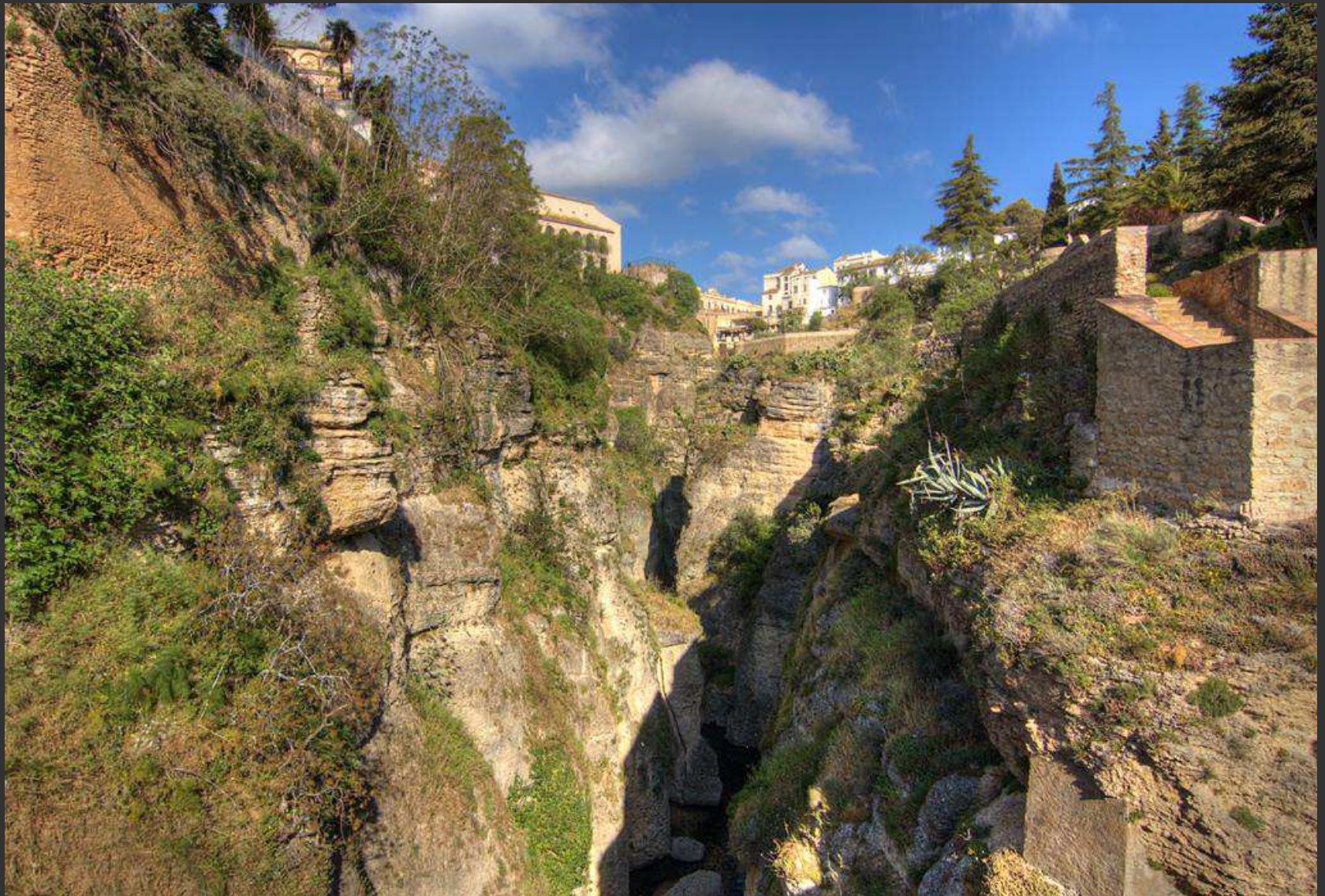




How The Camera Sees Light

The camera sees light quite differently than we do. This is because the human eye has a huge dynamic range.







So There in Magic in Light



The SLR camera has all the potential to capture what you saw and what you felt when the light was glorious.



And how good is that,
when you were there
at the moment when the
light was so fantastic



The End