

## Technical considerations

So far we have looked at the artistic - compositional - side of photography. The technical side can have as great an influence on the look of the final image. It is easy to think of the technical side of photography as being there just to get the thing in focus and well exposed, but as we will discuss later, photography has its own language separate from art. The technical side of the craft can be manipulated to creative and artistic ends.

### Media

The choice of medium has to be where you start applying the creative photographic thought process. What imaging technique would best suit the job and carry your message? If you choose to capture your image digitally what degree of post-processing will you use? How manipulated and adjusted will the image be? You could choose to shoot on film, which still has a characteristic appearance distinct from digital imagery, black-and-white film in particular.

### Focus

Let us look at some simple yet unique aspects of photographic technique. Lens-less photography - pinhole photography - has a following as it produces a unique look where everything is in focus from near to far. Lenses make photography unique - in particular their ability to focus and de-focus. This is one of the strongest techniques for holding and directing the viewers' attention.

### Depth of field

Controlling the amount of light entering the camera lens with an aperture brings with it the effect known as depth of field - best described as zones of apparent sharpness both in front of and behind the actual point of focus. Photographers use depth of field to reveal and conceal parts of an image.



#### Selective focus

You can move the viewer's attention by carefully choosing where you focus in an image. In this sequence, focus moves from the grey mask, to the red, then to the black.



#### Depth of field

Choosing how much of the image appears to be in sharp focus is one of the major photographic techniques. The top image shows the whole viaduct in focus, whereas the bottom image focuses on just the third pillar.

## Exposure

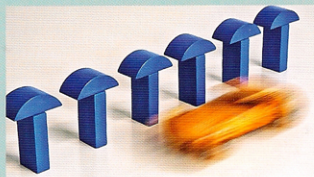
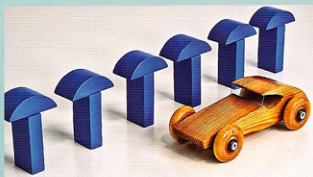
While there is a technically correct exposure, there is also a subjective choice of exposure that can darken or lighten an image with under or overexposure. The depiction of tones and their distribution in the image produces what photographers describe as tonality. 'Key' is the word used to describe overall tone. The key (main) light in a portrait sets the character or the mood of an image - hence the use of this word. A high-key image is predominantly composed of light tones - low-key refers to an image composed largely of darker tones; these are not the same as under- and overexposed images as both still have a full - if dramatically skewed - tonal range.

## Shutter speed

Aperture's partner in exposure is shutter speed, the choice of which gives the appearance of motion in an image: whether something is blurred or frozen in time (do not confuse blur from movement with something that is blurred by being out of focus).

### Shutter speed

By choosing a fast shutter speed you can make the moving car appear to be standing still; a long shutter speed will produce motion blur.





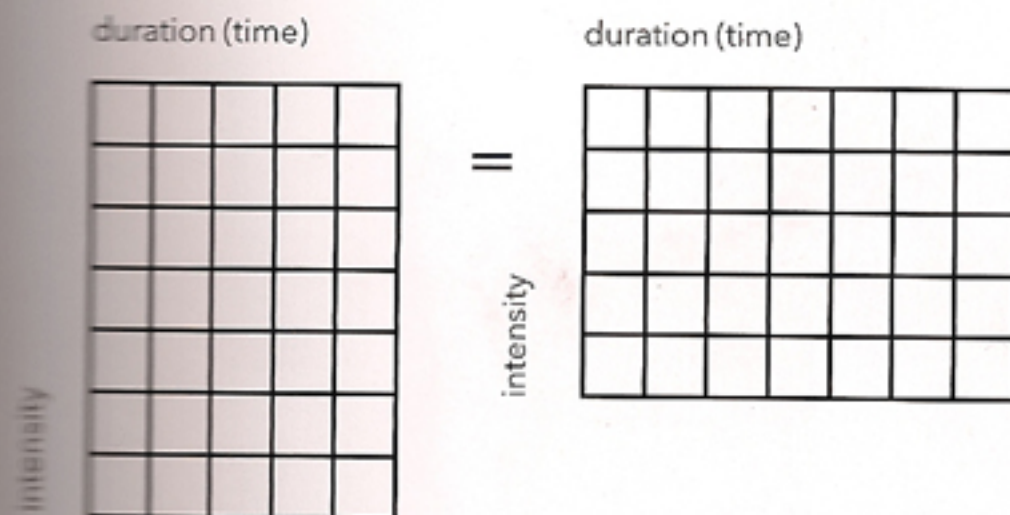
## Exposure and reciprocity

The key to understanding how all light-sensitive materials work - whether film, a digital sensor or a child's sun print - is the law of reciprocity. At this point, many people give up on understanding how photography works because they feel the language has become impenetrably technical. The ideas seem too complex to deal with, but not so. If you know how to make a piece of toasted bread - and who doesn't? - then you already know everything there is to know about photography's feared law of reciprocity.

To make a picture using something that goes black in the light, you can see that there are two effects at work. If you've ever made a sun print, you'll already know that some days are better than others for getting good prints quickly. The brighter the sun and the less cloudy the day, the quicker the prints come out. On a dull day, it seems to take forever for the image to appear and you never get a strong 'contrasty' print. Photosensitive materials need a certain amount of energy to change. On a dull day when the sun is less bright, they take a longer time to produce an image. Time and brightness both have an influence.

### Exposure

In terms of exposure, the same image can be made in a number of ways by combining intensity and duration.



### Variables

The three variables of exposure: intensity, sensitivity and duration.

### exposure

