





Apply the enduring principles and techniques of black-and-white photography to digital imaging



Learn the most flexible and creative methods of converting a color image to black and white



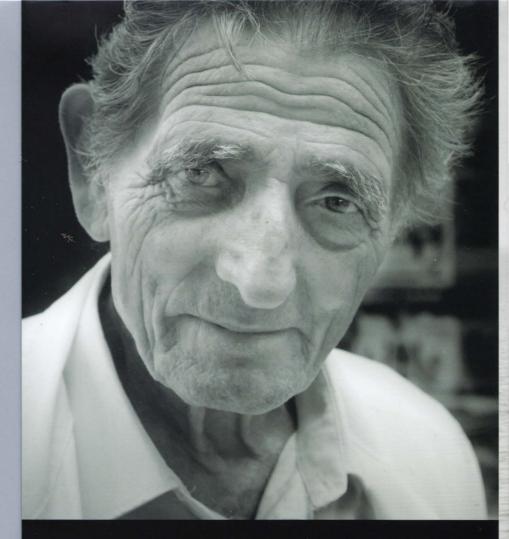
Fine-tune your image and achieve the richest possible tonal depth and balance in your photographs



Reproduce historic styles and darkroom processes using illustrated step-by-step workthroughs



Discover numerous monochrome special effects, and how to produce the highest quality black-and-white prints





>>> THE AUTHOR



John Beardsworth is a photographer and writer with a wealth of experience of shooting both digitally and on film. He is the author of Step-by-Step Digital Blackand-White Photography, Photoshop Blending Modes Cookbook, Photoshop Fine Art Cookbook, and Digital Photographer's Guide to Adobe Photoshop Lightroom.



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ADVANCED >>>> BLACK&

PHOTOGRAPHY

This book brings black-and-white photography into the digital age. Digital cameras may capture color images, but many photographers still love the rich tradition and unique graphic qualities of black and white, and sense there must be more to digital monochrome than simply throwing away the color in Photoshop. While many books cater for both ambitious newcomers and advanced darkroom enthusiasts, black and white is too often treated as an afterthought. It's relegated to a few pages of outmoded techniques, never explaining the special character of the black-and-white image and how it can be maximized and manipulated digitally.

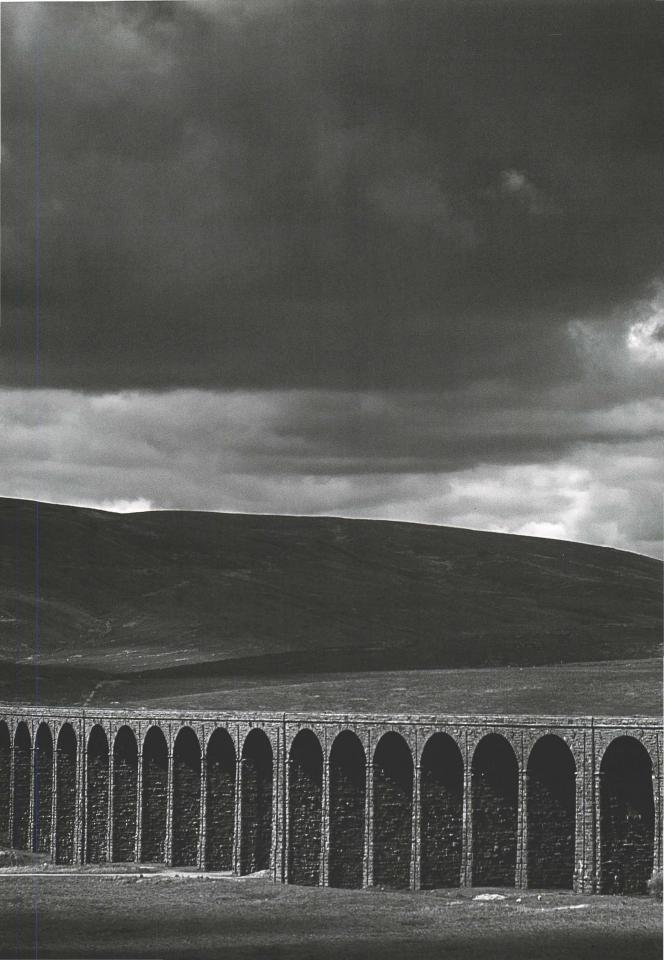
Taking full advantage of the latest features in Adobe Photoshop CS3, Advanced Digital Black & White Photography works at the frontier of black-and-white photography and digital imaging. You will discover the most creative ways to convert your picture to black and white, how to fine-tune the monochrome image, and how to emphasize your subject's qualities. With both quick solutions to common problems and flexible, non-destructive methods for finer control, this book will enable you to produce the finest, most expressive black-and-white interpretations of your pictures.

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ADVANCED >>> B

DIGITAL BLACK& PHOTOGRAPHY

JOHN BEARDSWORTH

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INTRODUCTION

When my father heard I was about to begin a second book on black-and-white photography, he thought back a few years to his surprise at seeing the first one. After all, he had asked, doesn't everyone want color nowadays?

Just as the moving picture, even with the addition of sound, never succeeded in killing off still photography, decades of color haven't proved fatal to black and white. If anything, they made it seem more distinctive as an artform, crucially separated from the world of color. Artforms are not necessarily swept away by technological progress, but accumulate and happily coexist. In fact, the arrival of digital imaging seems to have given yet another burst of life to black-and-white photography.

But things do move on, thoughts develop, needs change. Over a period of just a few years, digital capture of images has become less the exception and more the norm, and the need is no longer for help in making one's way from the wet to the digital darkroom. We are in a period of reflection, and of maturing and establishing our digital photography skills.

This book's purpose is to offer an up-to-date approach to black-and-white digital photography while staying firmly within its rich tradition. It is aimed at the serious photographer, whether you're earning a living from your work or are an enthusiast who thinks carefully about your results. All you'll need is a basic familiarity with Photoshop and the desire to move forward.

The book's first section is about the picture-taking process and emphasizes shooting in color, not using your camera's built-in black-and-white settings. As well as keeping open the option to produce both color and mono versions of the same scene, the best starting point for a top-quality digital black-

and-white picture is the well-composed, well-exposed RAW image file, with all its color information intact. To paraphrase Ansel Adams, the digital color file is the score, and the black-and-white image is its performance.

The second part looks at converting those color files to black and white. There are too many alternative techniques to list here, and some are mentioned more so you may recognize them as old and obsolete when you see them advocated in web forums, in recycled magazine articles, or by the camera-club bore. Placing those methods in their historical context means you can then appreciate the

advantage of newer techniques that fully exploit the color image's data to produce the best possible black-and-white rendition.

The section's key objective is to show where you can exercise creative control during the black-and-white conversion. Once you start exploiting the color image's channel data, the specific choice of conversion method becomes a secondary matter. This step is less about overall image contrast, which can be resolved later, and much more about how a certain combination of channel values changes the picture's grayscale tones—and what that tells the viewer about its subject.





Left and Opposite: The choice of black and white can sometimes be rationalized, but it is often ethereal and subjective. I chose it for a project on 17th century historical re-enactment because I wanted the pictures to echo the World War II and Vietnam-era war photography that I'd grown up with. That meant observing Capa's dictum of "if it's not good enough, you're not close enough," but I also went for the sort of harsh monochrome seen in the work of McCullin or Baltermans. But thinking more about it, my vision of the period had always been in black and white. All my college books used contemporary lithographs and woodcuts to depict major events, real life, and ordinary people, and even Van Dyck's rich paintings of the aristocracy were reproduced in black and white. The medium suited the subject matter for a mix of cultural and aesthetic reasons, and a subsequent project on 19th century military re-enactors has been realized in purplish and sepia mono tones that alluded to that era's photographic heritage.

INTRODUCTION

The conversion step is all about tonal separation, distribution of grayscale tones, and image balance. Contrast is a separate step, and is discussed in the third section. As well as controlling overall image contrast, you may want to lighten or darken, or "dodge and burn" selected areas, and apply sharpening. But, as at the conversion stage, it is all very well to know the modern, versatile

equivalents of the wet darkroom's dodging and burning. Once you know what is achievable, then it is much easier to understand why you might deploy those techniques. The fourth part of the book shows a number of more creative effects. Nowadays it is hard to draw any



Right and Below: A great color capture is the best starting point for a great black-and-white image.

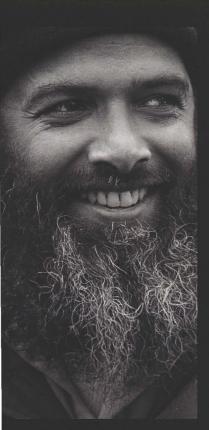


line on digital manipulation, but here the limit is broadly the canon of traditional darkroom work. Toning lies firmly within that scope, as does simulating lith prints, solarization, or pinhole camera effects. But one or two other techniques are also included, such as simulating infrared film photography and line art—nothing too weird or offbeat, however.

The final part of the book is about presentation and output. A black-and-white image can be damaged by highlights lying close the picture's edge, so this section covers borders and techniques such as edge burning. Sharpening, for print or web, is covered, as are specialized black-and-white inks and CMYK conversion. The section also addresses solutions for outputting entire shoots as black and white-

Aperture and Lightroom are now viable alternatives to Photoshop for high-volume work.

Some photographers only work in black and white, others only with color, but digital photography allows the rest of us to have the best of both worlds. If this book achieves even its smallest objective, it will convince you there's a lot of life in black and white. Why limit yourself to color?

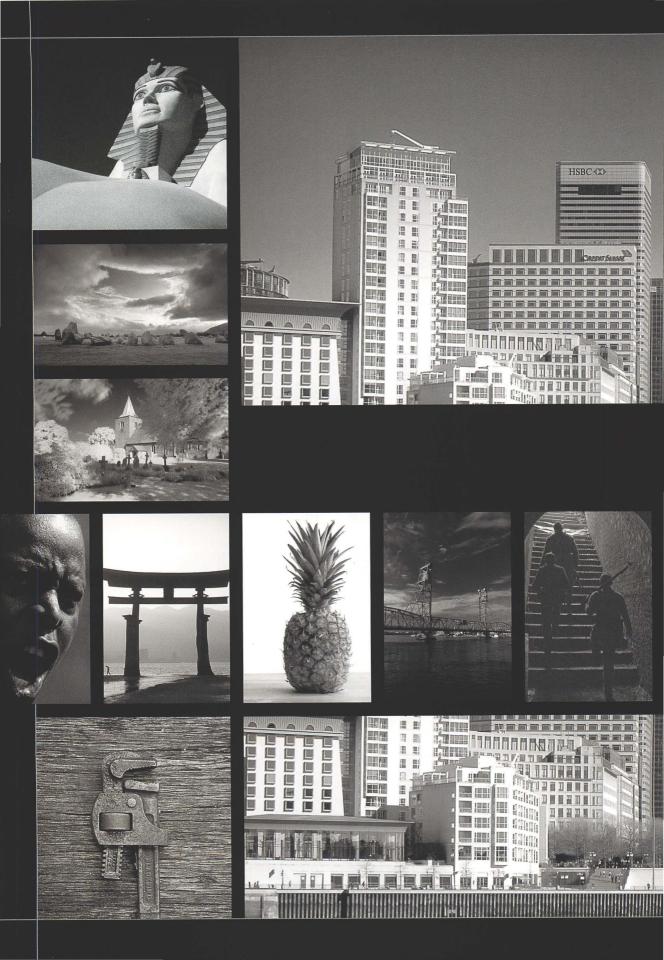


Above: The "best" black-and-white conversion is not just an objective measure of the range of tonal values, but a subjective one. What should the black and white say about its subject?



TIP

To download example versions of the images in this book as layered PSD files, check the URL on page 4.





CAMERA WORK CAPTURING THE BLACK AND WHITE IMAGE





BLACK AND WHITE MODES

There's a very obvious way to make black-and-white pictures with your digital camera: choose its black-and-white mode. Not all digital cameras have such a feature but the number is increasing all the time, and it's now unusual to see a new camera model that ships without monochrome settings. More sophisticated options, like filter and toning presets, are also being added and these provide the photographer with another level of creative control.

While such options are nice to have, they shouldn't be the decisive factor in your choice of a new camera if you want to concentrate on black and white. More important are core picture-taking features like the ability to override automatic exposure settings, the range of ISO sensitivity, and even a small, on-camera flash. They are however useful if you need to deliver black-and-white versions quickly, and the results can be very good.

THE SACRIFICE OF CONVENIENCE

You can manage perfectly well without these built-in black-and-white modes, and there are some pretty good reasons why, at least most of the time, you might choose to avoid them.

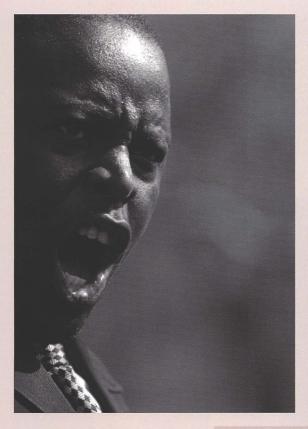
One relates to file format. If you set your camera to a blackand-white mode and save your pictures in JPEG format, you are losing forever a lot of valuable image information. Most enthusiast and all professionallevel cameras can save pictures to the memory card as either RAW format files or as JPEGs. RAW is the camera manufacturer's proprietary file format and contains every bit of raw data captured by the sensor, while JPEG is a "lossy" format that is designed to minimize file size. While it can be read with no special software, and is ready to print straight from the memory card, JPEG's small file size comes at the price of losing "unnecessary" image data.

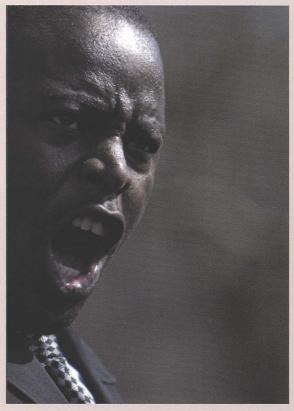
So when you choose the JPEG-only option and set a monochrome mode, your camera processes the raw data and outputs a black-and-white JPEG, discarding all the megabytes of color information. You can never make a color print from a black-and-white JPEG. While some may be willing to accept this loss of



versatility, that discarded color information is actually even more valuable than you might at first think. With it, you would almost certainly have been able to produce a better black-and-white image later on your computer. For the black-and-white photographer, that's a heavy price indeed.







Above: Setting your camera to shoot in black and white is great when you are need to send JPEGs to clients or friends quickly. But even though the JPEG+RAW option doubles the number of files you have to manage, retaining the RAW file's color data means you will always be able to produce color and black-and-white versions.

Mode Options

JPEG Records a standard 8-bit image from your camera, default on

many compacts

Black and White JPEG Processes the image in the camera to Black and white,

discarding all color information. It is likely to be a simple

conversion.

RAW Saves a 16-bit color image with all possible image information

and additional camera setting details

Raw + JPEG Saves both a processed JPEG for speed and a Raw file with

all the data described above.

Black and White Raw Saves all the data of an ordinary Raw, including color, but displays

> a simple black and white conversion as a preview. It is still allows all the fine tuning possible from a standard Raw.

SHOOT RAW AND IN COLOR

For all the convenience of digital cameras' black-and-white modes, the best choice for today's black-and-white enthusiast is to shoot in color. The principle is simple: color images—and especially RAW files—contain the maximum amount of information, so why limit yourself to any less? Never throw away in camera what you might need later.

Even if you rarely make color prints, there's an obvious advantage to keeping your options open so you can make color or mono versions when you please. If you set your camera to a black-and-white JPEG-only mode, that chance is gone forever because no color information is saved. The camera will process the image virtually instantly and save only a grayscale image to the card.

THE BENEFITS OF RAW

If you like your camera's black-and-white mode, try setting it to the RAW option. A RAW file contains all the raw data captured by the sensor and is consequently much larger than a JPEG. You will still see a black-and-white image on your camera's screen or when you transfer the pictures to your computer, but this is only a preview thumbnail that the camera adds to the RAW file, along with one or more larger previews. All the raw data remains in the file so you can process in mono or color.

Quality is every bit as important as flexibility, and the way to produce the highest quality black-and-white print is to shoot in color, using RAW mode, and then convert the picture in the digital darkroom.

We are not talking Photoshop or computer wizardry here. It is vital to keep emphasizing that there is so

Caption: Using the RAW option in your camera's black-and-white mode gives you a standard grayscale preview image, concealing the color information.





much more to the art of black and white than turning down the color saturation and making a grayscale image. The same color photograph can have many black-and-white interpretations, all resulting from creative choices made when you see the picture on your computer screen and exercise control over how it is converted from color to mono. You might decide to apply certain conversion settings because you like how they heighten the contrast, or moderate it; or how they darken the sky, lighten a skin tone, or change where the shadows and lighter midtones are situated in the frame. Some choices are deliberate, while others may be accidental—at first-and happen to work out well. Not surprisingly, a large part of this book is devoted to showing exactly how that can be done.

By shooting in color, or saving in RAW format, it is you and not the camera's designer who can control exactly how your color images look when converted to black and white. Below: Using RAW means bigger files and more post processing work, but a single adjustment layer in Photoshop can almost always produce a better monochrome result than your camera's black-and-white setting.



WHAT WORKS IN BLACK AND WHITE

Even the most experienced and dedicated black-and-white photographers often question themselves about what works best in black and white. After all, does the black-and-white enthusiast really think differently when he or she looks through the viewfinder and presses the shutter release? Is it possible to see in black and white at that point? It's a highly contentious question, and—if you'll forgive the obvious pun—it's one to which there are no black and white answers.

At the extremes, some pictures are inherently monochrome while others are all about color. A colorless, wintry scene is inevitably black and white, while a sunset's glory is all about the sheer beauty of warm colors. But the vast majority of scenes and almost all subject matter lie between those points. Would Cartier Bresson's pictures have been any less arresting if they had been in color? Or Mapplethorpe's nudes any less striking? Perhaps, but the point is certainly arguable. Indeed, thinking of the latter, near the end of his life Mapplethorpe produced beautiful studies of flowers, some in color and some in mono, and deciding between them is a very tough call. And thinking back to that imaginary wintry landscape, might its strength not lie more in its composition than in its absence of color? In short, a well-composed picture, with interesting subject matter, will be great in black and white, if that's what you prefer.

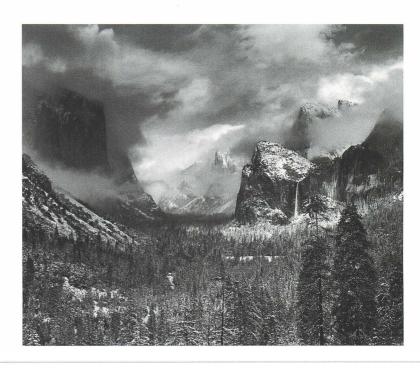
Taking the point further, think of Ansel Adams's Clearing Winter Storm. It is a glorious black-and-white image, with a complete range of tones, and superbly printed to emphasize the storm and reveal interesting detail

throughout the frame. It's perhaps the black-and-white icon. But you can now park your car close to Adams's viewpoint, and many photographers have produced fine color versions of exactly the same scene.

Alternatively, consider Steve McCurry's equally memorable color photograph—a picture so iconic one barely needs to say it's the one of the Afghan girl from the *National Geographic* cover. The picture works partly because of the wonderful green of the girl's eyes, the complementary reds of her shawl,

and the greens showing through its holes and in the background. But those eyes look no less haunting, and nor is the photograph any less perfect, in black and white.

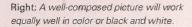
Below: Clearing Winter Storm by Ansel Adams

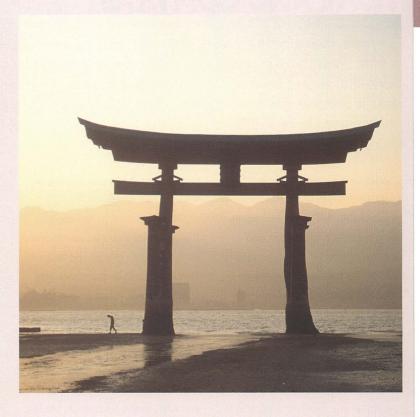


COLOR OR BLACK AND WHITE?

For today's digital black-and-white photographer, shooting in color means you are no longer restricted by the type of film that happened to be in your camera when you raised it to your eye. You can consider the picture at leisure on your monitor and-by quickly cycling through the color channels—present yourself with three often widely differing grayscale interpretations to help you decide if your picture works in black and white.

It's not an avoidance of responsibility to doubt that there's any real answer to what work works best in black and white, nor to question whether one can really "see" in mono. It's actually more liberating for those whose preference happens to be black and white. As I have already said, a well-composed picture, with interesting subject matter, is perfect for black and white. Just go out, shoot those color images, and set aside philosophical niceties.







Above: A classic gritty subject for black and white.



TONE AND CONTRAST

For more than a century, black and white was how we depicted our world and recorded events. First through photography, and then reinforced by film and television, we have learned to accept black and white as being realistic. Of course, it isn't—reality is color, at least it was the last time I looked. Once you shake off any idea that the black-and-white image needs to be faithful to the scene your eyes observed, it's not a big jump to treating it as simply a composition in grayscale tones.

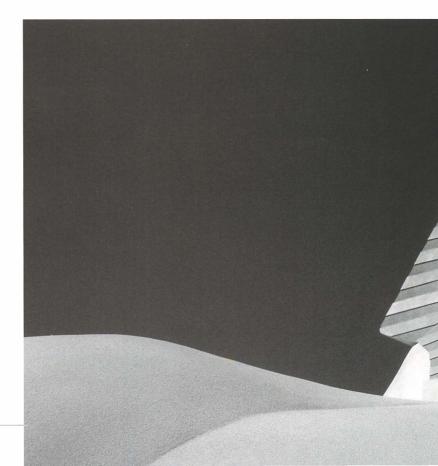
Shades of gray are all that is available in black and white, so much of the skill lies in managing the grayscale composition and positioning blocks of similar tone around the frame. Film users do this before pressing the shutter, placing colored "contrast control filters" over the lens. One filter may darken the sky, perhaps too much, while another may balance the sky and key landscape detail. In the digital era, those manipulations of tonal or brightness values now happen on the computer, but you are guided by the same principles.

With only grayscale tones at your disposal, contrast plays a greater role than in color photography. Overall image contrast is obviously something that confronts you the first time you see your color picture in black and white, either working on it on your computer or, if you used the camera's black-and-white setting, when you review the capture on its LCD screen. The last thing you want to see is a mass of indistinguishable shades of gray, while high contrast can be so harsh and unflattering that the result is more like a graphic special effect than a photograph. Acceptable contrast usually contains true

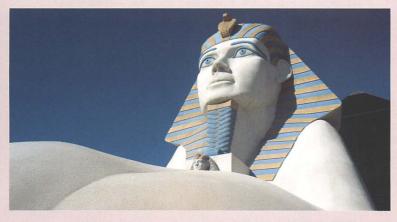
blacks and whites and a range of tones in between.

Tonal contrast in key areas of the picture is every bit as important as the image's overall appearance. This local tonal contrast requires special attention and an eye for detail. Two neighboring image areas may have had very different colors in reality, but may look identical in black and white. That may be desirable, for example if you wish to show fewer skin tones.

or it may diminish the information the picture conveys about its subject. Shooting in color means you can fine-tune the black-and-white conversion, and exploit the color differences so the image areas are represented in distinct grayscale tones. Tonal separation, both overall and local, is just one of the ways in which the black-and-white conversion becomes less a routine, and more a key part of your creative process.



USING THE HISTOGRAM

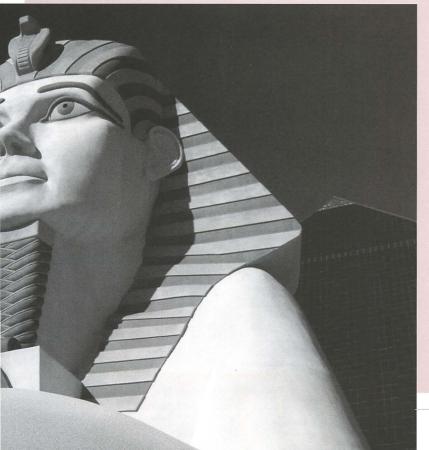


needs to be considered in overall and in local area terms. This version's overall contrast may be acceptable, but look at the sphinx's headdress. Its yellow and blue stripes are identical grayscale tones.

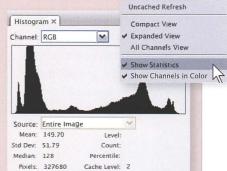
Below: Image contrast

Above: The color image is partly about composition, tone and form, but is also about color. Here a deep blue sky is a key part of this image.





Left: There are many ways to make a picture black and white. This version has a lot of punch, and the viewer now understands that the headdress contains different-colored stripes.



Above: Photoshop's histogram shows statistics about the image's brightness and contrast. Here, standard deviation shows how widely brightness values are dispersed—in other words, indicates contrast-and can be used as an indication when you are preparing a set of images.

DIGITAL BLACK AND WHITE EXPOSURE

How do you determine the correct exposure for digital black and white photography? Black-and-white film users often speak of "exposing for the shadows," which ensures that printable detail is recorded in the negative's lightest areas. Film usually has sufficient dynamic range to capture highlight detail, too. Digital exposure, for color or for black and white, is the other way round, more akin to shooting color slide film where you make sure you expose the highlights correctly, leaving the shadows to resolve themselves. Known as "exposing to the right," from the shape of the image's histogram, this ensures that detail is recorded in the most valuable part of the tonal range.

One can only rely so much on modern metering systems and cameras' auto settings. But digital capture brings the ability to check your exposure in the field. There are times when checking the LCD screen makes you miss the action, but on the whole it is an enormous advantage for the photographer. As well as confirming that you pressed the shutter at the right moment and got the shot, it also lets you check that you set the right exposure. Just as Polaroid instant film was used to assess and correct exposure, so you can review the digital capture on site, make adjustments, and reshoot. This instant feedback can also speed up the learning process, so the next time you are in tricky lighting situations you get the exposure right first time.

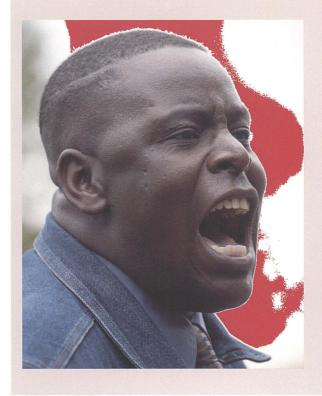
HIGHLIGHT CLIPPING WARNING

Most digital cameras' LCD screens have two main tools that help you set the correct exposure. The highlights alert is usually an optional setting that makes burntout image areas flash on screen. While it is a great quick way to see where large areas of the picture are so overexposed that no usable image data has been captured, it doesn't give you an accurate idea of how much to reduce the exposure. But that

quick indication is valuable enough that many experienced photographers keep this setting activated all the time.

Opposite: There are plenty of exceptions where the shot is not harmed by blown highlights. Sometimes it's more important to capture the action.

Below: Digital cameras often have optional highlights alerts that flash to warn you when image areas may be overexposed.



HISTOGRAM

Right: A single thin spike on the far right of the histogram indicates lots of pure white pixels and areas that lack any detail. It's not necessarily damaging, but is a valuable warning of potential problems.







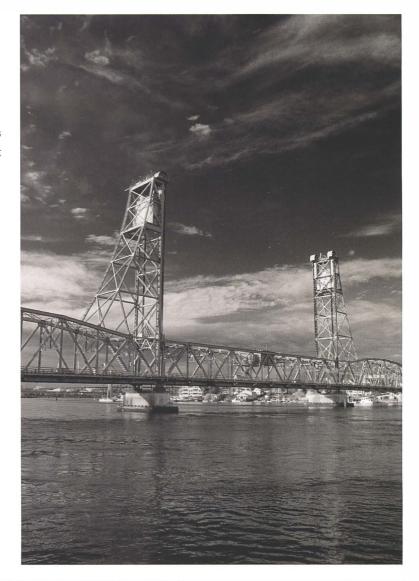
Above: Where they appear deliberate, large expanses of white need be no more distracting than the paper on which the picture is printed. Studio shots may well benefit from a completely overexposed background.

The second tool, the histogram, is found not just on the camera's LCD screen but also in Photoshop, and at many other points in the digital workflow. It shows the distribution of brightness values in the picture—black (or 0) is at the left, and white (or 255) is at the right. "Exposing to the right" means that the histogram's far-right extreme will just touch the chart's far right. In other words, only the very brightest pixels in the image are pure white, which means the sensor has recorded plenty of detail throughout the highlight areas. In general, you are aiming to avoid spikes at either end of the scale. A spike at the left would indicate lots of pure black pixels and underexposure, while one at the right would mean that the capture contains large areas of featureless white and may be overexposed. It doesn't necessarily tell you precisely how much you may want to adjust the exposure, but you can easily see whether you might need just a small amount or something much more significant like a couple of stops.

EXPOSING TO THE RIGHT

Black-and-white photography has always involved what we now call "shooting for post processing." The color film or slide enthusiast usually tried to get it right in-camera, and may well have objected to subsequent manipulation. However it has always been fundamental to the craft of black and white that the picture will be fully realized in the darkroom and that your first straight prints are not expected to be the finished article. This means the black-and-white photographer often exposes pictures not for how they appear straight from the camera, but in anticipation of what can be done in the darkroom. This principle now applies to digital color too, especially to RAW, so you set the exposure to capture as much important image data as possible, thinking ahead to how you will be able to use it later on the computer. In this sense, not much has changed since Ansel Adams wrote of the negative being the composition, and the print being the performance.

Nowhere is this truer than with the highlight tones and the concept of "exposing to the right." This is a well-regarded way of judging your exposure by using the histogram on the camera's LCD screen. So you take a shot, check the camera's alerts and the histogram, and adjust the exposure. The aim is to get the histogram as close as possible to the right side but without making the highlights indicator flash or causing a spike at the 255 brightness value. This maximizes the number of brightness values recorded by the sensor, means more light readings are being used to record shadow detail, and so keeps digital noise to a minimum.



Right: The properly exposed final image provides the viewer with visible detail in the shadows and the highlights.

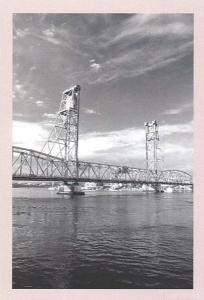
USING THE HISTOGRAM

The key to this technique is to capture all the highlight detail. Sometimes this means you need to increase the exposure and so make the overall picture look too bright on the LCD. While this is easy to correct when you examine the pictures on computer, it does mean more post processing work, a burden which you may or may not want to shoulder. Overexposing also means keeping a close eye on the shutter speed-the slower shutter speed increases the risk of camera shake or might blur the motion of moving objects.

When the highlights alert flashes on the LCD screen, or the histogram's right edge is a spike, it is an indication that you may want to underexpose to

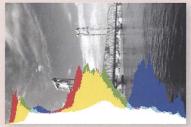
protect your highlights. Again, this will mean the picture's overall appearance looks wrong, in this case too dark and with shadows dense and blocked up. It also means committing more time to post processing. Levels and Curves adjustments can stretch out the shadows, and working in 16-bit mode may help deal with any posterization (uneven gradations in areas of smooth tone). There is also a greater risk of digital noise. The benefits, though, are that underexposure means a faster shutter speed—and most of all, you retain all that valuable highlight detail.



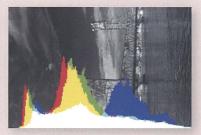




Top and above: A spike on the left of the camera's histogram indicates underexposure and potential loss of interesting detail in the image's shadow areas.



Top right and above: A spike on the histogram's right indicates that the brighter areas of the image are overexposed. The clouds behind the bridge are areas of pure white and contain no visible detail.



Above: "Exposing to the right" means the histogram just touches the right side.

THE SHADOWS

Ideally, an exposure should capture detail in the brightest highlights and in the deepest shadows, and give the viewer a full range of tones. But digital sensors do not yet match the dynamic range of film, let alone of black-and-white film, and scenes frequently exceed the range of brightness that sensors can capture. When it's a choice between retaining highlight detail and sacrificing the shadows, there's only one loser—you do what it takes to keep the highlights from burning out.



Left: Until recently, war photography was mainly black and white, and harsh and grainy, too. Here, a purplish tone echoes 19th century print colors.

DIGITAL NOISE

When preserving highlight detail means you have to underexpose, other problems can creep in. The more you underexpose, the worse the signal-to-noise ratio becomes and the more likely it is that random noise will become visible, particularly in the shadows. Like grain with faster film, noise is the price you pay for taking the shot in poor light.

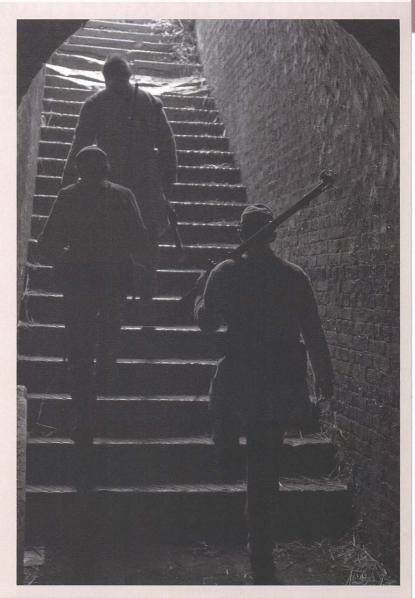
That's not to say there is nothing you can do. Some cameras have an optional noise reduction setting which applies special processing before writing the image to the flash card; this can be most useful with long, tripod-mounted exposures.

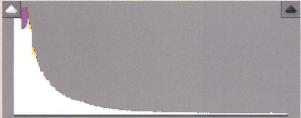
Once the picture is on your computer, RAW converters like Adobe Camera Raw have noise reduction options—Luminosity sliders are most likely to make the biggest difference and there are specialist programs and plug-ins like NoiseNinja and NoiseAware that can target noise in the shadows and ignore it in other tonal ranges.

Sometimes you may simply decide to let the clip the blacks a little more aggressively than usual in Photoshop. In the end, shadows can obscure all sorts of sins.

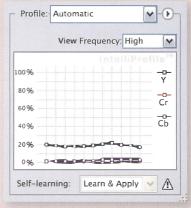
Right: There is an immediate loss of impact when a picture has no true blacks.

Below: Shot deep inside a 19th century fortress, a test shot showed I would need to underexpose by a stop to hold any detail in the highlights.





Right: If you do a lot of low-light photography, consider getting a specialist noise reduction program such as NoiseWare, which offer more sophisticated features than Photoshop's filters.



DRAWN TO THE BRIGHT LIGHTS

Highlights play a huge role in black-and-white photography. This isn't just due to technical concerns about absence of detail in image areas, it is a result of behavioral factors in the viewer. It's all about how we typically examine the black-and-white image.

While blacks and shadow tones "anchor" the image and give it "body," they are often overlooked. It is only the trained eye that tries to distinguish their subtleties and any detail they may hide. Usually,

and particularly in black and white, the eve lands on the picture's shadows, but is then drawn straight to its brighter tones, as this is where one expects to find what is interesting about the photograph.

Failure to record the highlights in the original capture, or losing them in the digital darkroom, is usually very obvious. Blown highlights are featureless white holes in the picture, attracting the eye and immediately telling the viewer that something is missing from the original scene. It often causes a lasting loss of confidence in the picture's veracity.



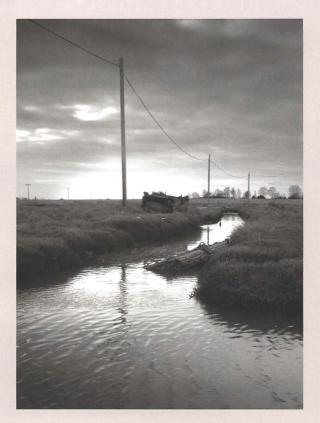
Left: The final image makes use of its bright areas without being overpowering. Additionally an image border, and judicious cloning has removed the harmful distraction of burnt-out highlights.

GETTING HIGHLIGHTS RIGHT

From the moment you release the shutter, to the time you send the picture to the printer, you need to remain sensitive to potential problems. Getting it right in-camera—"exposing to the right"—is a great way to start and encourages good habits such as checking your camera's histogram. You also need to take care throughout the post processing work. Try to develop routine working practices such as checking for any clipping in the Levels and Curves adjustments by holding down the Alt/√ key when you drag the white-point triangles.

Well-rendered highlights also have powerful compositional value in black and white, leading the viewer around the frame. In the picture shown here, the eye tends to move along a zigzag-shaped path, starting from the foreground and then following the stream into the distance and to the horizon, before noticing the brighter areas of the sky. Sometimes this introduction of movement is subconscious, simply how you happen to observe the scene, but it is also something that can be exploited as part of the composition.

There is another reason why the positioning of highlights around the frame is particularly important in black and white. A highlight will be especially noticeable and potentially harmful if it lies close to the picture's edge. Paper is also white, and such bright areas can easily blend into the surrounding paper. making the picture look as though notches have been chopped out of its rectangular shape. The eye may follow such highlights and be led out of the frame, so one solution is to add a black border or mount the print in a black matte. You can also clone away or burn in these damaging patches of brightness, or crop the picture more tightly. Most of all, do a final review of the image before sending it to the printer.



Above: The eye is immediately attracted to blown out highlights, and interprets the image accordingly. This scene is no longer about a grim marshland landscape, but confuses the viewer—there may be an explosion on the horizon, or a strangely positioned sunrise.



Above: Highlights guide the eye around the frame.



Left: Even very small areas of blown highlights may damage the image when they are positioned close to the edges. Here, a bright area of sky is like a notch chopped out on the picture's left side.