

# Using a Wide-Angle to Distort Reality

By Jim Zuckerman

Many photographers buy a wide angle lens thinking its primary purpose is to take sweeping panoramas, to get the entire scene into the frame. It definitely does that, of course, and if you stand on the rim of the Grand Canyon with a 14mm lens, you will encompass most of this giant chasm.

However, I think the real power of a wide angle -- as evidenced by the pictures in this article -- is to distort reality. The word distortion has a pejorative connotation, so let me rephrase. I will say it this way: A wide angle lens is most effective when it (1) exaggerates perspective, (2) makes the foreground disproportionately large compared to the background, and (3) makes the background seem much further away than it really is.



The picture above of the driftwood on a beach in South Carolina near Charleston is an example. The wood seems huge compared to the background, and this occurred simply because I placed my 14mm lens very close to the wood. In this case, the camera was about 18 inches

away from it.

Of course, our eyes never see images like this. So what? No one ever said a camera must capture what we see. Sometimes it does and sometimes it doesn't. We are dealing with a visual, artistic medium, and a wide angle lens is a tool at our disposal to create some extremely unique images.



The wider the angle, the more extreme will be the distortion. I took the picture of the costumed carnival participant in Venice, above, also with a 14mm lens, and the portrait of a curious cow was shot with a 16mm focal length (the Canon 16-35mm). I was lying on the ground shooting a landscape in Switzerland when he walked right up to me, so I rolled on my back and took this picture (next page) looking up at her.

If you shoot with a less-than-full-frame digital camera, then the power of your wide angle lens is reduced. For example, a 20mm focal length becomes a 32mm wide angle with Canon and a 30mm lens for Nikon (Canon lenses must be



was also about two feet away from her. That's why she seems unusually large in comparison to the background.

The flowers below that I found in the Swiss Alps didn't seem this large compared to the sky when I stood there looking at them, but a 16mm focal length lens placed about three feet away from the foreground flowers created this type of look. The formula, so to speak, for achieving this style is: (1) use a wide angle lens, and the wider the better, (2) place the camera very close to the foreground (between 2 and 5 feet), (3) use a small lens aperture for complete depth of field, and (4) use a tripod.



multiplied by 1.6x, and Nikon's lenses have to be multiplied by a factor of 1.5x to know what the actual focal length will be).



I used the same technique when I photographed a 1st century B.C. megalithic head from Mt. Nemrut in Turkey with a 14mm lens (next page). Even though wide angle lenses have extensive depth of field, I still used a tripod and a small aperture, f/22 in this case, to make sure I had sufficient depth of field.



The closer you place the lens to the foreground, the more distortion you'll see. The large leaf in front of the waterfall I shot in Costa Rica, above, was only about two feet away from my lens. The photo at the top of this newsletter shows my wife in a pool in Budapest, Hungary, and I

A fisheye lens is a unique wide angle in which the vertical and horizontal lines are bent. If you shoot something round, however, such as the round chandelier and the dome of a mosque in Istanbul, Turkey, you can't make it 'more round' by bending the lines because they are curved already. Therefore, it looks virtually undistorted. I was literally lying on the floor, hand holding the camera (this is one exception where I couldn't use a tripod because no tripods were allowed) when I took this shot. The chandelier was six feet above me, and this is farther than I suggest in the above formula for using wide angle lenses. However, in this instance I wanted to include the entire periphery of the light fixture.



Fisheye lenses have limited use, but I was glad I had it in this situation. I was leading a photo tour here, and several of the Canon users borrowed the fisheye to take this same shot once I showed them how incredible it was.