

TACK SHARP

A STEP BY STEP GUIDE TO NAILING FOCUS

PREVIEW



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ABOUT ME AND THIS EBOOK

I LOVE ICED TEA, CHIPOTLE AND MY WIFE KRISTIN (BUT NOT IN THAT ORDER).

ABOUT ME

My name is James Brandon and I'm a photographer and writer living in Fort Worth, Texas with my beautiful wife Kristin, our soon to be born baby Isaac and two dogs (Kylie and Kensie). I give full credit for any talents or abilities I may have to Jesus Christ because without Him I'd be nothing! As far as photography goes, I specialize in both travel and portrait imagery and I have an insatiable desire to travel the world and see new things. I have a [blog](#) that I update often and you can always find me on [Google+](#) or [Twitter](#) so be sure to follow me and say hi! I'm also a writer for [Digital Photography School](#) where I write photography related articles, reviews, tutorials and more.

ABOUT THIS EBOOK

This eBook is a step by step guide for any photographer who has ever struggled with getting sharp images. While the first part of the book is geared towards beginners, things get somewhat advanced toward the end and will cover topics that some of you may not know about. The secret to a sharp image isn't just *one* thing, it's an *entire process* and every situation is different. I should also point out that I'm a Canon shooter. Therefore, when I give examples or settings, it will be from a Canon point of view. All of this stuff is easily interchangeable but it may require that you open up the user manual and decode what I'm saying if you're a Nikonian or if you simply have a different camera model.



ON FOCUS

You'd be surprised to know just how much actually goes in to getting consistently sharp images. It isn't rocket science or physics or anything like that but there are definitely steps and processes involved that the majority of photographers probably don't know about (even some professionals). Some of these steps are easy and you'll be able to implement them right away without a problem if you so choose. In fact, some of you have probably even heard of or already used some of these techniques. If that's the case, simply move on to the next one. On the flip side, some of these tips may be more difficult, and will require a bit of practice and time to really get down and develop into rote. I encourage you to at least try out each tip and work hard at mastering each one. Don't just give up because it's so different from what you're used to!



I've always laughed at the saying that "Pro photographers still take blurry images, they just don't post them online." I certainly make a conscious effort to only post my best work for the world to see but I can also definitively say that I take far less blurry/soft images than a lot of the photographers I've shot with throughout the years. This isn't because I have a better camera or better lenses (although that can help), it's because of techniques I've developed and/or learned from other pros in the field that have completely changed the way I used my camera.

Focus is one of the most important parts to a good image, right along with composition and exposure. Combine all three of these and you're sure to have an incredible image. Take any one of these out of the equation and you're well on your way to having a new file in your 'trash' bin.

FOUNDATIONS IN FOCUS



If you're going to become a master at getting sharp images, you had better become a master at how your camera works first. If you are unsure on any level at how these basic settings determine how an image looks, be sure to pay attention!

APERTURE

Aperture is often the first decision you will make when deciding how to capture a scene. There is no right or wrong aperture to use, it just depends on what you are trying to accomplish with your vision.

Your camera's aperture determines how much light will make it to the camera's sensor. It also affects the depth of field in your image at the same time. This is a constant trade off that you have to make. If you have a 50mm f/1.4 lens then your maximum aperture is f/1.4. That setting will allow the maximum amount of light into the sensor and will also produce the most shallow depth of field the lens can produce. As you increase the aperture it gets smaller, therefore letting in less light. By doing this you also create a larger depth of field in your image which allows more of the scene to be in focus.

Trust me, I know this can be confusing, but just give it time if you are having trouble.

An aperture is a set of blades inside your camera that open and close to a predetermined diameter to let in the amount of light needed for the correct exposure.

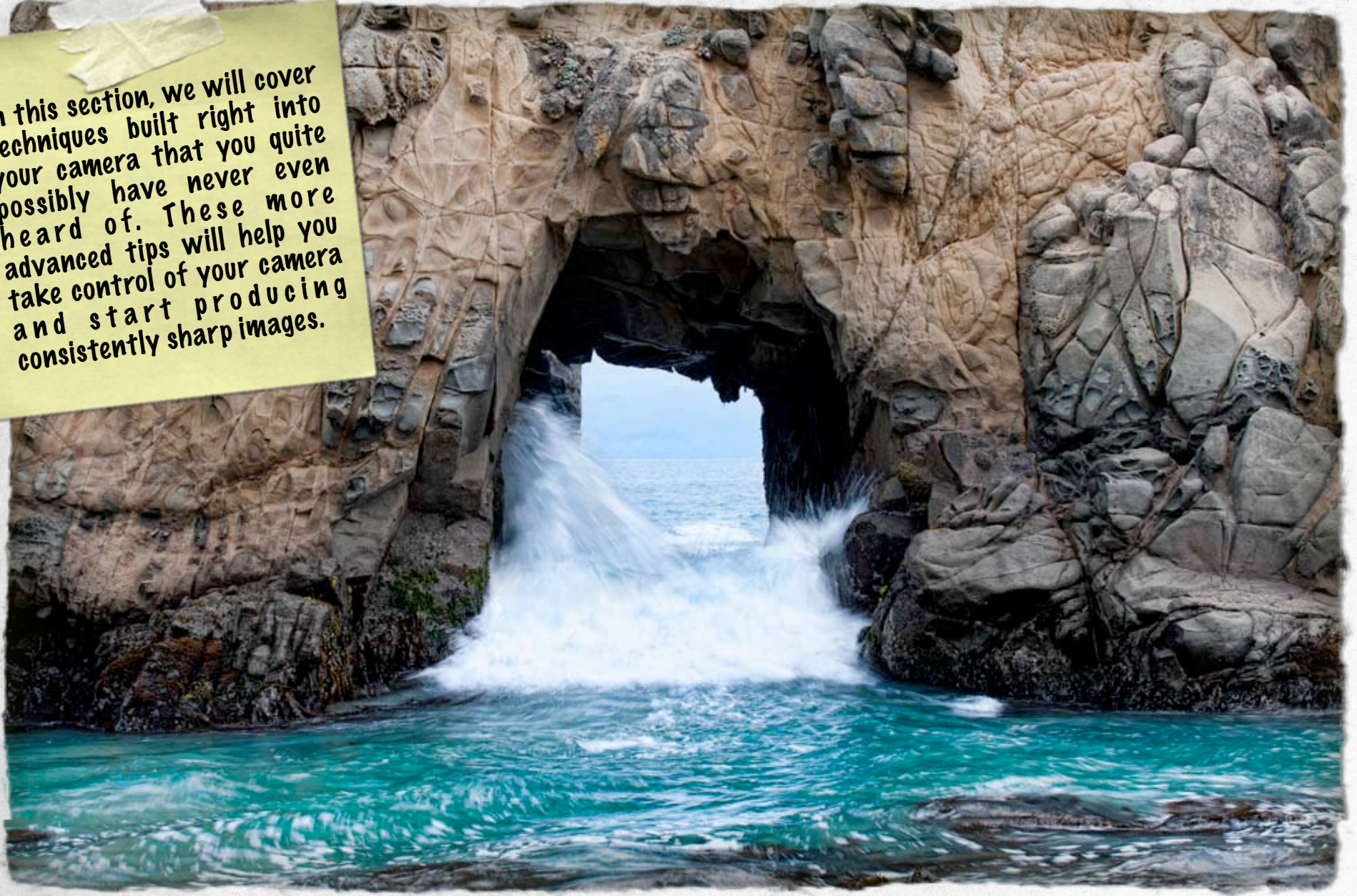


To remember how depth of field works, try this (although it isn't an exact science): Imagine that you have ten people lined up in a row, where the first person in line is close to you, and the last person in line is far away in descending order.

If you want just the first person to be in focus, use f/1. If you want the first five people in focus, use f/5. If you want all ten people in focus, use f/10. The higher the f/ number (and the smaller the aperture itself), the greater or deeper the depth of field will be.

ADVANCED TECHNIQUES

In this section, we will cover techniques built right into your camera that you quite possibly have never even heard of. These more advanced tips will help you take control of your camera and start producing consistently sharp images.



BACK BUTTON (AF-ON) FOCUS

I discovered back button focus the same day I discovered AI-Servo. Both settings completely rocked my world and I still use them everyday.

The default setting for focus on any camera works like this: You see your subject, you press your shutter button half way down, your camera focuses on the subject, you press the shutter button all the way down, the camera takes the pictures. Well, this is crap. Let me explain why...

Your shutter button should serve one purpose and one purpose alone; releasing the shutter and taking a picture. It should not double as a focus button or anything else. The advantages of back button focus really become apparent when you start using it in concert with other advanced functions in your camera. Here are some reasons why back button focus is far superior than the “normal” method:

- **Set focus, and done**

- With stationary subjects you can hit the back button to focus on your subject, get the focus just the way you want it, then take as many pictures as you want. With the old method you'd have to refocus your subject each time you take a picture. What if you want your subject far off center, away from any focus point in your grid?



THE FOCUS TRIFECTA

When Servo, back button focus, and single point AF points are all used in harmony, you can be sure that the amount of sharp images you get will increase dramatically. This process eventually becomes second nature and won't even require much thought at all. You simply view a subject through your viewfinder, decide which focus point to use, select the appropriate focus point, tap or hold down the back focus button and fire off the shutter. Those five steps happen in a fraction of a second and the result will almost always be a better framed, better focused image. This stuff isn't rocket science, it's just not well known by most photographers because camera manuals aren't very fun to read!

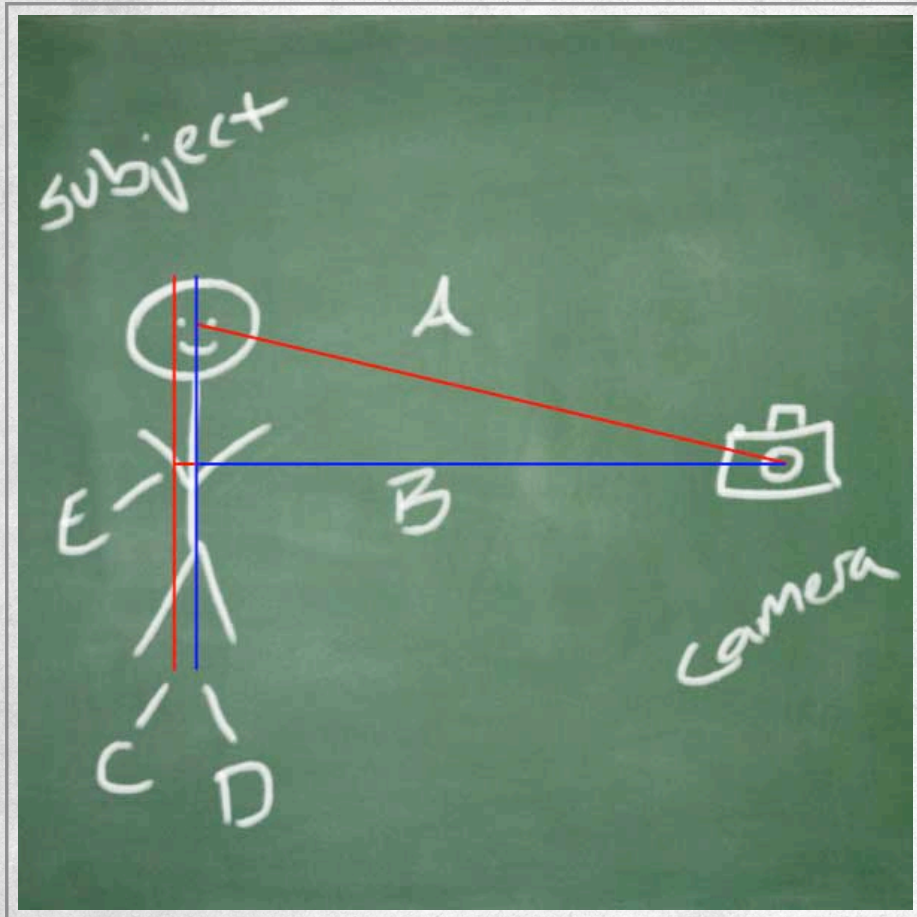
I've taught these techniques to countless photographers, and while some embrace it immediately and never look back, there are always a few here and there who aren't sure about it because it's so different. I admit, it's a bit uncomfortable at first trying to completely change your thought process before a shot, but I promise it becomes a non-issue after just a day or so of putting these techniques through the ropes.

Don't fall into the trap of laziness that so many fall victim to. Just because it's different and takes some getting used to doesn't mean you should just abandon the whole process and stick with what you know.

I meet so many photographers through meet-ups and photo walks who struggle with getting sharp images, or get frustrated because they can't place the subject in a certain part of the frame. It's always the same thing, they are always still using the factory settings on their camera.

I realize that you can press the shutter half way down, hold it there while you recompose the image, and then press it all the way down to take the shot, but why bother with have to do that every single time? With back button focus, as long as your subject isn't moving and you aren't moving, you can simply set focus and take as many pictures as you'd like. There is simply no other way of achieving this without these settings.

FOCUS-RECOMPOSE & WHY IT FAILS



I'm sure just about everyone reading this knows what focus-recompose is, regardless of whether you're familiar with the term. Have you ever seen photographers (maybe even yourself) bobbing your camera up and down while taking pictures? Focus-recompose is the act of using the center focus point on your camera to achieve focus on your subject and then recomposing the scene to taste without changing focus.

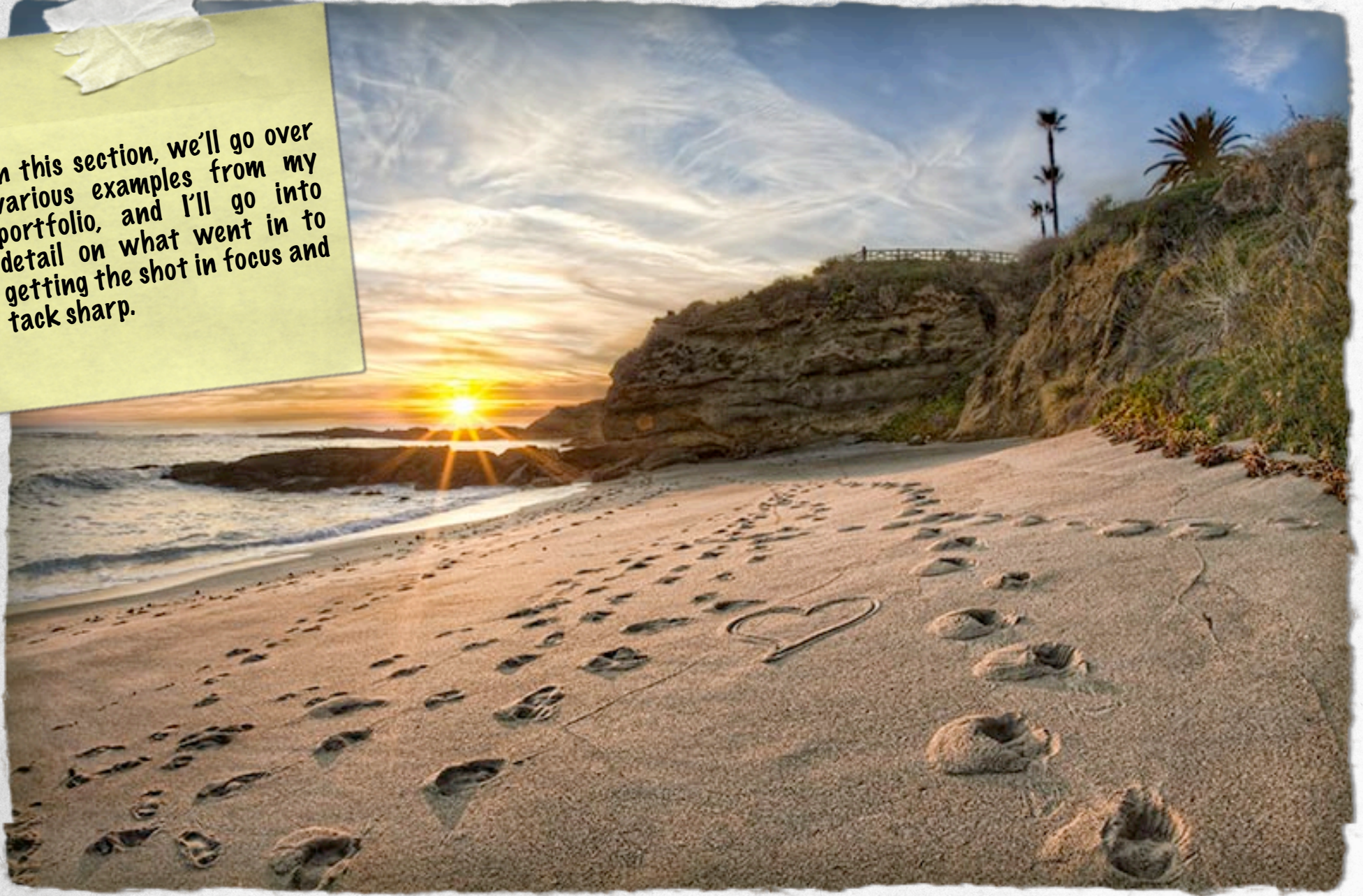
I wrote an in depth article over at DPS on this topic and I wanted to include it here because it ruffled quite a few feathers. It seems people don't like discovering they've been doing something wrong for years and years!

In the diagram to the left, 'A' represents pointing the camera up towards the subjects face and placing the center focus point over the subjects eye to achieve focus. Most photographers using the focus-recompose method know that nobody wants to see an eye or face right smack dab in the middle of the frame, so they then recompose the scene by moving the camera down to get the entire body in the frame or to simply move the subjects face off center. This new camera angle is represented by 'B' in the diagram.

I'm certainly not a mathematician but one of the few things I remember from geometry is the Pythagorean Theorem and the common sense that the length of A is longer than the length of B, and that if you were to lay the A line down on top of the B line, you would see the difference in length between the two.

BONUS EXAMPLES

In this section, we'll go over various examples from my portfolio, and I'll go into detail on what went in to getting the shot in focus and tack sharp.



Here's one of my favorite images in my portfolio. I shot this in Riomaggiore in the Cinque Terre region of Italy.

When you shoot at apertures around $f/18$, you start to get a starburst effect in strong light sources like lamps or street lights. I wanted to create that in this image so I took one exposure at $f/18$ which gave me something like a 1 minute exposure. The problem with this was that all the boats in the harbor became blurred because they were slowly bobbing up and down from the slight



movement in the water. To counteract this, I took another quick exposure at $f/2.8$ to freeze the boats in place. I then blended the exposures together manually in Photoshop to get the look I was going for. Learning to see a scene like your camera sees it can be invaluable to the end result of an image. Take the time to know your camera inside and out. It will always pay huge dividends.

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