Alternative Exposure (Zone) System Part 2

Early Morning Fog, Lake Nillahcootie

Storm, Milford Sound, NZ

In the last issue I explained a way of arriving at a film speed and a development time for black and white and even colour film without going down the sometimes laborious testing road. The method was primarily for in camera meters used on the average setting.

In this issue I want to look at the method using a spot meter, whether it's a hand held meter or a spot meter within the camera. To remind you what a meter does I will give you some examples that may help in the understanding of these neat little devices.

If you are standing in front of a white wall and you point your meter at it, the meter will give you a setting that if used would return you a picture that is a medium gray (or middle gray) wall. If you were to stand in front of a very dark wall and you took a reading with your spot meter and then took a picture then you would be rewarded with a medium gray wall or 18% gray. 18% gray is what the camera meter has been calibrated to return whenever it is pointed at something regardless of its level of brightness. It will do this each time every time without fail, unless the batteries do, because it has no idea what it is looking at. All it knows is that it is dark, so lets lighten it up or it's bright, so lets darken it down.

We, the photographers, are the ones with the creative brain, so it is up to us to decide what shade of gray or depth of colour we want when we expose the negative. Let's take the straight forward approach and assume that we want a negative that will represent the scene as we see it. In other words we want the dark tones to be dark, the mid tones to be mid and the light tones to be light.

There is a dingy pulled up on a beach. The dingy is dark blue and the sand is light yellow. These are the two extremes. Lets for example say that there is a brightness range of 4 stops between the boat and the sand. If we were to point our meter at the sand only and take a photo with the setting it suggests then it would return us an average gray, or middle gray in black and white and probably a dull looking yellow in colour. In other words it wouldn't be a true tone for what the sand is. Like wise if we were to take a spot meter reading of the side of the boat it would render it lighter than it actually is because the meter

has converted what it sees to a middle gray, not a dark gray which is what a dark blue boat should look like.

So what do we do? Well we know that the shadow area is fixed (almost) when we expose in the camera and we know that the highlight or bright areas can be altered during development so we must turn our attention to the shadow areas to determine out setting. We also know in this particular scene that there is a 4 stop range between the sand and the boat. We know this by metering the side of boat and the sand. E.g. The side of the boat gives us a reading of F11 at 1/8 sec and the sand reads F11 at 1/125.

In Zone System terminology Zone 3 (2 stops down from 18% middle gray) is the lowest you would want to go to record something on film where the detail is vital to the image. Any lower than this and the negative or I should say the detail in that area starts to look thin and when printed it looks muddy, that's if you are trying to print detail.

My own practice is usually to only go down 1 stop (Zone 4 and sometimes 1 1/2 stops, Zone 3 1/2). You could take a reading of the boat, middle gray, Zone 5, and then close down your aperture by one stop (Zone 4) or 2 stops (Zone 3) and then take the picture. We know that there is a brightness range of 4 stops so from Zone 3 the sand would be 4 stops more which would be Zone 7 or from Zone 4 it would be Zone 8. If a negative is developed for the normal time then the film would hold good printable detail right the way through because this would be in the latitude of the film at normal development.

I didn't want to use the word Zone, but could think of no other that says what it is. Just remember that one Zone is one stop or a doubling of light. Forget Zones and just think in stops. Take a spot meter reading of something, set you camera to that setting, take the picture and you are returned with a mid gray tone. Close your aperture one stop or your speed setting and the object gets darker, one more stop and it gets darker again.

The changes occur when your brightness range goes beyond 5, 6 or 7 stops. It is here that you may want to consider reducing your development time in order to bring the range of the negative closer together. Bring the high values down by giving less development. It will have little or no effect in the lower or shadow areas. What you're doing is controlling completely what the negative looks like. Again if you have negatives that vary in contrast on the same roll then the best thing to do is develop your film normally and work on the higher contrast negs in the darkroom or write clear instructions to the lab who does your printing. Use shorter rolls, different camera backs or a different body for different development. It's all possible if you want it to be! Whack it on the computer and hit the contrast reducing equilibrium button. That'll fix it!

Too often though we take the easy way out. I'm trying to give you an easier way out, but as I've said before, probably too many times, photography requires work. Good photography requires more work and excellent photography is a dedication. Feel it, love it and embrace it and it will flow back to you. Tinker with it and it will always be problematic.

Back to exposure. Using the examples I have offered for this article, my normal approach using a spot meter is this.

Example A. Early Morning Fog, Lake Nillahcootie. This is predominately a high value scene. Only one area offers average contrast. The foreground log and its' surrounds. The rest of the scene offers little contrast although the high values need to be quite high on the scale. The scene itself is quite low in overall contrast except for that one area, so when we take a spot reading of the shadow in the foreground log and then the fog itself around the trees there is only a 3 stop difference. This is easily handled by the latitude of the film if the film is developed normally, but the question is where do we expose for?

In this case because the most part of the scene is in the high value area I will place the shadow trunk area as the spot meter reads, which is average or middle gray, which then places the high values 3 stops higher (Zone 8). An exposed and normally developed negative would give me a negative that looks sort of dense, but easily controllable. The high values would be bright, as they are, and give me a print which is full of foggy lightness. If this scene was recorded with a built in camera meter on average the resulting negative would be somewhat flatter and not displaying the brightness that was there. The camera meter would average the scene and in Zone terminology would probably reproduce a negative of Zone 5 or Zone 5 1/2 density. To me this would be YUK. Here careful placement of values for the negative is vital to how the final print turns out. With our camera meter I would need to open up 21/2 to 3 stops from the suggested setting, in order to give me a negative that displays luminosity.

Example B. Storm, Milford Sound, South Island NZ. Here we have a scene that is almost the antithesis of the other. This negative not only displays overall contrast, but local contrast as well. Careful placement of important areas is again vital to giving me a negative of a good range and one that will reproduce with the same degree of brightness (and darkness) that the scene offered. I made this photograph last year whilst I was conducting a workshop in this magnificent area. When we arrived at the location there was a veil of gloom hanging about the scene. Although it still had appeal I didn't feel that there was a photograph to be made. I wandered about the area for 15 or 20 minutes and then suddenly I noticed that the light between the peaks was becoming progressively brighter. In anticipation I got out and set up my camera. (If you set up you may get nothing. If you don't set up, you'll definitely get nothing!) What I wasn't sure about was when to press the shutter. Would it get better, or worse? I took this photograph and believe it or not the light started to close in again and within about 2 or 3 minutes it was back to average dull. " How did you get *that* photograph? F 8 and be there!"

Anyway I feel this image has a certain sense of drama about it and hopefully my explanation of how and why I exposed the negative will help you understand the importance of correct placement. Both sides of the scene showed almost no detail, to the naked eye, and were really quite dark. I had only shadow separation. I took a spot meter reading of the dark area about 1/3 left of the picture and also to the right about 1/3 in. I then read the light coming down the Fjord. There was a difference of 4 stops between my measured places. If I had measured the light on the hill in the foreground to the left the difference would increase by another 2 stops. It was here I made a decision where to "place" the shadow area, the area to me that I felt was important for the photograph to work. By placing that area for the important shadows I was allowing the other darker area to go almost black. The negative still shows thin detail, but enough for what I wanted.

So I spot meter the area to the left, this gives me via the meter average gray, 18%. I know that it is quite darker than this and I know that I want the cliff areas to be dark so I close my aperture by 1 stop (the highlights are 4 stops brighter remember) and make the photograph. I have used a slight tele photo lens at F16, 1 second exposure. I also used a deep yellow 15 filter to try and give me a bit more separation in the sky. The deep yellow filter will darken any blue that is around and if there is any in the shadow areas (shadows are usually lit by blue light) it will darken that area as well. The film was TRI-X. The negative is very healthy and with a bit of dodging here and there to keep the shadows separated and some burning in the bright sky area to bring out the detail that IS on the negative, we are done.

An aside: A couple of issues ago I broached the subject of Photographic Integrity. There were heaps of Emails sent to me and the Editor of this magazine re this article. Consider this with regard to that article : *If we play a Beethoven Sonata we play the notes written (negative) but interpret them in our own way when we play (print) we don't add notes to the score because we feel it needs it!*

Back to Milford Sound (Oh I wish!) I had to dodge the shadows a bit because I chose a slightly higher magenta setting on the colour head to give a little more contrast. In doing so the blacks went a little blacker. As I remembered the scene it was closer to the mark by doing this. I printed this image on Polymax Fine Art Paper because I like the cool tone of the paper and I think it displays more the atmosphere of the situation than a paper with a creamier base. Sometimes paper choice can be vital to the final "look" of the print.

Now in this case an average reading via an in house camera meter would have suggested to the camera brain that this is too dark and we need to open up a fair bit in order to give me 18% gray. This would have given me a much denser negative than I wanted. But that's what the camera has been trained and calibrated to do, so Mister operator don't mess me around with your fancy dial twiddling just so you can get a negative that expresses what you want to say. Remember that I, THE CAMERA, AM IN CHARGE. *I* make the decisions! Got it!!!!

Sorry, got carried away.

By using a spot meter via the camera all you do is read the important shadow area and the important highlight area, count the number of stops, work out if it is in the range of the film, go back to the shadow reading, close the aperture 1 or 1 1/2 stops and make the picture. When you get proficient at that you can start doing fancy moves with your negatives and learn how to control the full range of what is available to you. But first things first. Get a handle on this first and you'll notice the improvements.

Now IF the range of stops was say 6 stops then I would have reduced development of the negative or negatives which would bring down the high values and bring them within the latitude of the film. Again the really important thing to remember is placement of important areas. Areas that are important to you in order to make the photograph that expresses what you are trying to say.

Well between this issue and the last I hope I have given you somewhere to begin with getting an exposure that fulfills what you have seen. I'd like to think that there are no excuses if we screw up, but there are. I did just the other day and it beats me where I went wrong, but it must have been me unless it

was that mystery gremlin that creeps in all the time and it leaves people to utter " Whatever it was it wasn't my fault!" Now who said that? Just keep trying and don't give up.

Richard White is a Portrait and Landscape photographer who lives in the North East of Victoria. He conducts photographic workshops around Victoria and New South Wales and from his studio and darkroom in the hilly countryside of Mansfield. For more information or a current illustrated brochure on these workshops write to Richard at P.O. Box 425, Mansfield, Vic 3724, phone / fax 03 5776 9533 or
Email: ragwhite@mcmedia.com.au Alternatively fill out the reader information card and circle the appropriate number.