

From www.lightingmagic.com

Strobe to umbrella distance

Hello. I just received a used studio flash and silver umbrella. Does it matter how close the flash is to the umbrella? Thank you.

Francis:

Dear Francis:

The distance from the flash unit to the umbrella controls the apparent size of the light source as seen from the subjects perspective. It's really not too difficult at all. Just think about what is happening. With the strobe very close to the umbrella, the light will be very intense on the umbrella right in front of the strobe head. Because the light falls off as the distance from the strobe head to the umbrella increases, your umbrella will be progressively darker toward the outside edge simply because your strobe is a greater distance from the outer edge than it is to the center. When you pull your strobe out from the umbrella, the distance from the strobe to all parts of the umbrella is about the same. This will provide a much larger apparent light source size for your subject.

A smaller light source will produce a smaller and more defined transition between the highlight part of your subjects face and the shadow area. This area between the shadow and the highlight is called the shadow edge. A smaller light source will produce a somewhat harder look to your subject. Character lines will be more defined. Use this when you wish to add character to your subject. An older man with a beard is a good example.

When you use a larger light source, your shadow edge will be wider and more gradual. Character lines will be less defined and a softer look will be observed. A larger light source is more flattering to an older lady with many character lines than a harsher, smaller light source. These effects are also controlled by how close your light source is to your subject. When your light is in closer, your subject see an apparent size that is larger than if it were positioned at a greater distance. A combination of light source size and distance from light source to subject will allow you a high degree of control in the quality of light that falls upon your subjects face.

Light subject and dark building

I took a picture of a person in front of a building at night using a flash, Portra 400VC, and a 30mm 5.6 lens. On the picture I see the lighted person in front of a very dark building. Does anybody know how to do this right?

Victor

Dear Victor:

First let's look at what you said in your question. You indicated that you took a picture in front of a building using flash at night. The film is not that important. What you didn't say was the distance from the flash to the subject and also the distance from the flash to the building.

There are not one but two things that contribute to the building looking dark. First, it's dark because the ambient light that is on it is far lower in intensity than the strobe light that is striking your subject. You can indeed help this situation along by dragging your shutter which will allow more of the available light from the neighborhood to build up on the film after your strobe fires. Be careful about long shutter drags. If you go too long, you can get color shifts on your main subject since they are in the ambient light as well as the building. The tungsten, neon, and fluorescent light that might be in the neighborhood will build up on the subject as well as on the building. You must find a balance. Also you might wish to work on a tripod so you will have a more stable situation. You can also get halos around your subject as they move slightly during the long exposure. This is rarely desirable and suggests a shorter shutter drag but still long enough to let the building "build" a little.

The other reason the building is dark is probably because the distance from the strobe to the subject is far less than the distance from the strobe to the building. If your subject is standing with their back up against the building, then the building will receive about as much light from your strobe as the subject did. In this situation the building will be lit just fine. If your subject is 8 feet from your camera/strobe but is standing fourteen feet out from the building, the building will receive three stops less light from your strobe than the subject did. This will definitely keep the building looking pretty dark. Remember that the light falls off as the distance from the light source to the subject increases. If the building is farther from the light source, it will receive less light than the person. You can drag the shutter which will allow available light to build up behind the subject as one method of overcoming this problem. You can move your subject in closer to the building which will allow more of your light to reach the building but you will see less of the building as a result of being closer to it. A simple solution is to use a second light and light the building independently from your subject.

White clothing changes flash results

Why am I having this problem? I shot a bride and groom during the ceremony. The bride, groom and minister were all dressed in white at the altar. Nearly all of my close up ceremony exposures came back looking underexposed on the proofs. Could it just be poor proofing? The Lab was telling me that my proofs were -.05 to -1 under exposed. What did I do wrong? This is embarrassing because I have to give this to my client.

Mr. Time

Dear Mr. Time:

I believe that your problem is a combination of two different things. Number one is possibly the printing. I would have to see the negatives to know if it was a big contributor but it is a possibility. What I suspect the main problem is, is the 18 percent gray syndrome that usually happens when your subjects are all dressed in white and your flash is being used in an automatic mode. If you think like your flash you can figure out the problem pretty easy. What is your flash programmed to do? It is designed to see the light that it puts out as it is reflected off of the subject, evaluate it and shut down in time to generate a negative with an 18 percent gray subject. This will in most cases produce a negative that is printable. Now, what does your flash say when it sees a bunch of people all dress in white? It says, "gee, look at all that white---I need to shut down early so it will be 18 percent gray", and so it does. The result is a negative that is quite underexposed. Not from any fault of the flash but because of the very nature of how flash units are made, which is for the typical, average scene. They think just like a flash meter. They want to make every scene look like a gray card.

The reverse of this problem is just a common but not complained about as much. When you have a bunch of black suits and they are not too close to a white wall, the flash will say, "not much light coming back, -better keep pumping it out so we will get the subject up to the brightness of a gray card". The result? Over exposed negatives. More light than you needed. Most photographers don't notice a big problem with these at first because they are still printable even though they look quite harsh from the contrast build up which occurs with an over exposed negative. An underexposed negative on the other hand prints as a flat, low contrast image. Muddy and without detail in the dark areas.

Enter the photographer and his or her experience to offset the mechanical devices that only know how to think like a gray card. Now that you know what the rules are concerning flash units, you can compensate next time when this scenario happens again. You can open up a stop or so when everything is white, which will help generate a proper negative. You can close down a bit when everything is very dark. Don't forget to observe your background and how close you are to it and what color it is. It will contribute to what the flash unit sees and thinks about. Over time, you will become quite familiar with the characteristics of

your flash and how it thinks. You can then compensate whenever special situations pop up. There is nothing like experience.

Change the distance and you change the light

Does light from a softbox become harsher as you increase the distance away from subject e.g lighting a face in a studio situation?

Thanks,
Vince

Dear Vince:

When you move your main light source away from the subject, a number of things take place. Here they are:

1. You reduce the amount of light falling upon the subject from the main light. While the light source itself never changes in size or output, the increased distance causes the light radiating area to look smaller from the position of the subject and therefore will have less effect.
2. You make the background look lighter. Yes that is correct. Lighter. As you reduce the light on the subject, you reduce the light on the background as well but to a lesser degree because of the greater distance. The change is greater on the subject than on the background which is farther away from the main light. When the exposure is adjusted for the new lesser amount of light on the subject, the lens will be opened up. Since the amount of change to the background was less than that of the subject, the background will now appear lighter than before.
3. You decrease the width of the shadow edge on your subject because of the apparently smaller light source thereby making shadows more defined.
4. You would actually reduce the ratio between the main and the fill (assuming you didn't disturb the fill light) which will make the now more defined shadows, less dark.
5. You increase the specular density relative to the diffused highlight or true tonality of the subject. In simpler terms, your portrait subject will look more oily as the highlights in the skin will be brighter relative to the natural color of the skin. Moving the light source in closer will reduce the specular density. Specular by definition means "mirror like". The tiny oil beads on the skin each reflect the light like a tiny mirror. As the light source is moved away, the highlights in each bead of oil reduce in size but remain at the same brightness. The fact that the light on the subject has reduced because of the increased distance makes it necessary to open up the aperture of the lens to get a correctly exposed piece of film. As a result of opening up, the specular highlights (that never really changed in brightness) are now overexposed and appear much brighter relative to the diffused highlight.

So the bottom line is that every move you make with your light has a specific effect that is predictable and quite specific.

Portable flash in the gym

Dear Scott,

I'm very much an amateur studio photographer. I take lots of pictures as a hobby but mostly outdoors. Recently I volunteered to take some group shots of our local cub scouts. I'll be shooting groups of about 10 boys and also a close-up individual shot in a gymnasium (I have no idea what type of lighting they use in the gym). My only lighting equipment is a flash mounted on the camera or off to the side on a "arm". I took a test roll and found I had a huge noticeable shadow against the wall. I thought maybe I could just buy a reflector, from the hardware store, and use a spot light 75 watts to fill in the shadow. But I read in your web site that I shouldn't mix flash and tungsten lighting. Seems the more I look up about lighting the more confusing it becomes. I'd just like the scouts to have a decent picture of the den and themselves. Hope you have a simple solution to my "problem."

Thanks,
Jane

Hi Jane

There is nearly always a simple solution to a lighting problem. In the gym, you will almost certainly have mercury vapor or sodium vapor lights. One records as green and the other orange on daylight film. Your answer can be found in simple daylight film and your on-camera flash unit. The trick is to do two things. 1) get the flash unit directly above the lens. About 18 inches using a Stroboframe. Then your shadows will fall down and behind your subjects rather than off to the side where you can see them. It will also eliminate red-eye. 2) you must select a balance between doing the group too far away from the wall and too close to the wall. Too close and your shadows may be slightly visible on the sides but still not too bad since they are going down. Too far away and the natural fall off of the light from your flash will let the background go excessively dark and you will probably not like it. Keep your group short from the front row to the back row. This will keep them in better focus and minimize light fall off on the group. If your flash is powerful enough, use 200 or even 100 speed film. Contrary to what you may have been told, the slower film will force you to use more of your flash power to get a proper exposure. Using more flash power will help overcome the coloration of your scene from the gym lights. Using a faster film will allow you to record the scene with less flash power but the ambient light in the room will now be proportionately higher relative to the flash which can discolor your images.

Camera to subject distance and flash meters

Hi Scott,

I have been reading your web page, lots of good info for someone like me thinking about creating a studio. I read your recommendations on flash meters which brings up a question that has been bugging me. I have not used a flash meter yet, perhaps when I do it will answer itself. But, assuming the flash meter gives you an f stop reading for a given flash level, do you have to compensate for distance from subject to camera, and focal length of the lens? Seems to me the flash meter knows how much light reaches the subject, but has no idea about how much light will actually reach the film.

Thanks,

Steve McCain

PS: Love the idea of the diffusion panels. I think I will go home early today and start building one!

Hi Steve:

I am glad you enjoy the web site. I like the way you think. In this case you are partially correct and it shows me that you are thinking on a deeper level than is typical for a new studio photographer. To answer your question, when you make an exposure, a flash meter is first pointed toward the light source and an incident (flash) reading is made to determine what aperture to use. Varying the distance from the light source to the subject changes how much light reaches the subject. From the camera's point of view things never change with regard to brightness. Only the size of the subject changes with distance. To illustrate this principle, let's pretend that we have a soft box positioned about 30 feet away from the camera but point directly at the camera. Again let's pretend that we have a spot meter that will read a small spot on the surface of that soft box. Ok, we take a reading. Now we move the box in to about 15 feet and take another reading off the surface of the soft box. Is this reading the same or different? It is the same. Why? The brightness of the surface of the box never changed, did it? It simply got bigger from the camera's point of view. Is it now throwing more light toward the camera? Yes but it must be remembered that the square surface of the box will now occupy a larger area of the film's surface. The exposure does not change as to the brightness of the box itself. Only the size, so it's not an issue that you ever have to be concerned with. Think about the distance from light source to subject as your most important variable and you will do just fine. The flash meter does indeed know how much light reaches the subject and that is all it needs to know because the brightness of the subject is now constant as long as the distance between light source and subject remain the same. The lens used or the distance from the subject to the camera make no difference to your exposure. That gives you one less thing to worry about. Happy shooting!

Sincerely,
Scott

PS Delighted you are building panels. Many of my readers have built panels and viewed it as a life changing experience. For the first time you will have total control! Being spoiled can be a really good thing. :)

Small main & big fill

I am experimenting with lighting techniques and I am leaning towards non-diffused main lighting to add a more dramatic effect to my pictures. I am thinking of using a diffused fill light to get the lighting ratio in an acceptable range. What do you think?

Hello Roger:

What you are talking about is using a small light source as your main light and a large one for your fill light. This is a perfectly fine combination for portraits where you wish to achieve the look of the old Hollywood portraits. Small light sources, deep shadows and lot's of makeup to keep specular reflection to a minimum. It is usually best to keep your fill light larger so as to not create shadows from it. The fill should be invisible with regard to it's location so ideally it would come from the position of the lens. Since that is not practical, placing your fill above the camera and as close as you can without it being in your way is the best choice. When the fill is away from the camera axis there is always a chance that you will see shadows created by the fill which will be in a different direction than those of the main light. Conflicting shadows are rarely desirable. With this in mind a large fill light near the camera axis is generally the best idea. The small light source is also fine for doing portraits but not all portraits should be made this way. Use a variety of light source sizes rather than just one for your main light. You will find this easy if you build and use a set of diffusion panels. I provide some pointers on doing so in the "Equipment we use" page. Panels provide unlimited control of light source size without having to change out things like umbrellas and soft boxes which cannot be easily changed to another size.

Achieving the desired ratio is easy if you have the ability to control the amount of light coming from your light source. For your fill, you can simply feather (turn slightly away from the subject) your umbrella until the amount of fill light is correct. For your main you can attach a set of barn doors which will allow you to again control the amount of light coming from the light source. When you have control of both the main and the fill, you should have no trouble achieving a wide variety of ratios by simple mechanical means. I always prefer a mechanical change rather than relying on an electronic control that may not provide linear change between the modeling light and the strobe tube. Knowing what you will get and getting what you see is ALWAYS good news.

Controlling specular highlights

I have been studying a lot of beauty images and the thing that I find most disturbing is the specular highlights. In some of the more amateur photos, the specular just destroys the photo, blowing out all color. Now, the more professional photos I don't see such an intense specular highlight. I see a more even skin tone, rendering so much more quality and beauty to the photo. My question is how do you control the specular qualities of a photo to get the more even skin tones?

Pete

Hello Peter:

The brightness of the specular highlight is technically referred to as specular density. This refers to the density of the negative in that area. The specular density is controlled by the size and proximity of the light source as well as the surface efficiency of the subject.

A billiard ball has great surface efficiency so you can expect to see a good specular reflection of the light source in the ball. Now if you took a sand blasting rig and blasted that ball until the shine was gone from the surface you have reduced the surface efficiency and your specular highlight will now be diffused and not defined at all. This relates to skin because everyone has different amounts of oil on their skin. Some people have very dry skin (lower surface efficiency) and some have oily skin. (high surface efficiency) The application of powder will reduce the surface efficiency and thus the specular density. This is one method of control.

Second is the distance of the light source to the subject. Assuming that the light source itself remains constant, you could take a spot meter reading of the light source. You would get the same reading whether you were 1 foot from it or 20 feet from it. Remember it never changed. It just changed its distance. With this in mind, we must remember that a specular reflection is a mirror-like reflection of the light source so no matter how you change the distance from the light source to the subject, the specular density remains the same. What changes is the amount of light actually reaching the subject that we see as a diffused highlight. THAT reduces as the light moves further away. As a result, when we meter we will get a new reading that indicates a wider aperture to let in more light. Now we have a diffused highlight that is still correct but guess what happened to the specular light? It now becomes more intense because we opened up and that highlight is now recorded with greater density on the film even though it never actually changed. What we have now is a brighter specular highlight RELATIVE to the diffused highlight.

If you elect to use a large light source, closer to the subject you will reduce your specular highlights dramatically. Most of my head and shoulder portraits are done with my diffusion panel less than two feet from the face. This is particularly beneficial for subjects with oily or dark skin because their skin will now record on film looking much dryer and less oily.

Once these principles are understood, you will find it easy to be totally in control of all characteristics of your light.

Loss of detail in dark clothing

Scott,

I did a photo for a friend and his wife. She wore a black dress and he wore a black coat. I used an N90S in program mode with my camera set to -.3 to fill flash in open shade. The picture was great but the detail between the coat and dress was lost. They looked as one so to speak. What did I do wrong?

Take care,

Rick

Hi Rick

First, these modern cameras with all of their computer controlled compensations for everything provide no information as to how they are doing it. You simply put it at some setting and are supposed to trust it. Why your picture looks the way it does will remain a mystery as long as you let your camera think for you. By your description it sounds like your image was underexposed, printed too dark or a combination of both. Also, your subjects may have simply not had enough separation between the two black items. Think about it. Soft black coat, and soft black dress. Very similar, right? In portrait photography we use lighting coming from different directions to create highlights that separate adjacent dark areas. On camera flash only lightens the overall look of the scene. It has no direction from the cameras point of view so you can't expect it to create much separation for you. If the coat was leather, you might have seen some highlights in the smooth surface that would help create some separation but with two soft black materials, it's more difficult with just an on camera flash. If you had a good exposure on your film I suspect that you probably have SOME separation that was lost in the printing. Look at your negs with a loop and you should be able to detect separation in the area you are concerned about. If not, then your exposure is probably a little on the low side. Use your cameras controls to adjust for more exposure. One third to one half stop would be a good place to begin.

Lighting the round face

I would like to solicit your recommendations on how to light and pose a person with a round face so that they look thinner?

Thanks for your input!

Ky

Dear Ky:

When you have a portrait subject who has a round face there are a number of things you can do to help the situation. A slightly higher than normal camera position will help make the face look a bit smaller in the lower part of the face which is where most facial roundness is observed. Always use short lighting for this type of portrait because it slenderizes. It is also helpful to avoid poses that place the face looking straight into the camera position. Have the subject turn their head a bit and look back toward the camera. Finally, use a ratio that is a bit heavier than usual. That is to say, make the shadow side of the face just a bit darker than you might typically do. The more you light of the face, the more attention you call to it. When you light less of the face, it will appear smaller because the eye sees less of it. Your main light can be a number of different types and still be successful. You can do what you need to do with a small, medium or larger light source. Medium to large will give you the most flattering look. A stronger ratio is in order to darken the shadow side of the face just a bit more than usual to draw less attention to it. In addition, you should adjust your background to be about the same tonality as the shadow side of the face to again draw less attention to it. This would definitely fall into the darker category. Light backgrounds show the full shape and size of a subject. Not usually a good idea. Draw less attention to an area by blending it into a background with a similar tonal value. I don't wish to confuse you about my different method of determining a ratio. Rather than making you calculate the amount of light coming from each light, I prefer to have you take specific meter readings with the dome of your meter pointed toward the main light and again with it pointed at the fill light but shielded from the main light. It is very important to have all of your light operating so you will take your readings under the same conditions that will exist when you create your portrait. The difference in these two reading will give you the simple difference in brightness of each side of the face. For a portrait like you are talking about, a three stop difference or even a bit more is in order. Don't get confused and think that this is the same as a 3 to 1. It is not. This is purely a difference which is much simpler to think about. For most photographers, ratios were never very much fun to calculate. Hope all goes well for you.

Broad, short, loop and Rembrandt lighting

Scott, I feel that many of us would benefit if you would expand on the subject of broad, short, loop, and Rembrandt lighting.

Sincerely,
Soren

Dear Soren:

Loop lighting is the most common of all portrait lighting styles. It can be done in the form of broad lighting or also as short lighting. If you are not sure what the difference is between broad and short let me explain. Picture in your mind a portrait subject seated before you. Their nose is turned slightly to your left (their right). Now study the face. Divided the face into two halves divided at the center line down the middle of the nose. Look at the two halves and ask yourself which is the larger half. Remember the subject is turned to YOUR left. Which side of the subjects face do you see more of? Answer. Their left side. More of it faces you than their right side. This “larger” half is referred to as the broad side. The side that you see less of is referred to as the “short” side. It’s really that simple. The bigger side is “broad” and the smaller side is “short”.

Now, about the lighting aspect of this. Let’s keep the subject facing to our left (their right). Nose pointed slightly to our left as we stand behind our camera. The main light can now be in one of two positions that will be distinguished as either broad or short lighting. If the main light is placed far to OUR left (the subjects right) the light will fall onto the subjects face from the direction of the short side of the face. Guess what? That is short lighting. If we move our main light over to our right (subjects left) and light them where the main light is striking the larger or broad side of the face, that is broad lighting. Broad lighting is not used nearly as much as short lighting because it does two things. First, it lights a larger surface of the subjects face beginning with their ear (the one nearer to the camera) which is not that desirable in the first place. Because it lights such a broad amount of the subjects face, it adds weight to the subject making them appear heavier than they really are. Not usually what you want to do in a paid portrait sitting. The second negative thing about broad lighting is that the shadows cast by the nose and other features of the face fall onto the smaller or “short” side of the face. When you place shadows onto this small area they become somewhat confusing to the eye. You have so little real estate to work with on the short side it’s just not a good idea to be throwing shadows on it.

Short lighting on the other hand does a number of beautiful things for you subject. First you are lighting what is called the “mask” of the face. That part of the face that would be covered by the typical Halloween type mask. That is all the frontal features of the face NOT including the visible ear. When you do short lighting you are lighting both eyes, both cheeks, the nose, the lips, the chin and forehead. One way of knowing that you are doing well with the eyes is to study the eyelids and judge as to how equal they appear to be lit.

A little side note here. When doing short lighting, keep an eye out for the ear that is visible to the camera (the one closest to the camera). If your main light is lighting that ear, the light is too near the front and should be moved more to the side so as not to light the ear. Lighting that ear isolates it as a bright object sticking out from the shadow side of the face. It really screams at you. Not desirable. On that same subject, you should also

avoid allowing the ear on the back side of the subjects face to show at all. If you turn their head a bit more toward the back you can usually eliminate the back ear. If their ear is just too big to hide then you should select a background with a brightness level that is very similar to that of their flesh values. In this way you don't showcase the ear as a bright object in front of a black background. You disguise it by making it less conspicuous. Another alternative is to photograph them in profile to hide the size of the ears.

Now back to the lighting. When you create loop lighting your goal is to generate a shadow from the nose that points down toward the corner of the mouth but does not touch the corner of the mouth. The shadow should follow the natural line of the face from the nose toward the mouth. Now, it is critical that in achieving this that you don't sacrifice the light in the eyes. You can easily do this when making the loop but the eyes are always the priority. Make the loop shorter if necessary to keep the eyes evenly lit from top to bottom. The eyes are always more important than the structure of the loop. If you use light heads without umbrellas, soft boxes or other items that make the light source larger you will be able to see the distinct shadow shape more clearly. This is an aid in teaching you how to see light. In all my classes I teach with small lights which require much more precise placement than with a big light from an umbrella or other source. If you can master light with a small light, then achieving wonderful results with a larger light source will be even easier.

Rembrandt light is similar to loop but with a small difference. The loop shaped shadow from the nose is directed to move further toward the shadow side of the face until it connects with it. This connection of shadows will now create the characteristic triangle of light under the eye of the subject. It looks like an inverted pyramid. This is under the subjects left eye. Remember your main light is to your left and the subject is turned slightly to your left (their right). You are lighting them from the short side and allowing the shadow from the nose to connect with the shadow side of their face (their left side). The eyes should both be well lit and you should have a nice triangle of light under their left eye. Once you make your light source larger (umbrella etc.) the shadows will be less defined but the pattern is still there and very flattering. Rembrandt lighting is less used than loop lighting. It is great for character studies, people who have blemish scars on their face that should be de emphasized by placing them in shadow. It is also more dramatic when you wish to do something that is more powerful than your standard everyday portrait.

A final thought. As your light source becomes larger (softer), consider using less fill light to create a deeper (harder) ratio. As your light source becomes smaller (harder), use more fill light for a lighter (softer) ratio. This will control the shadows and prevent them from becoming too dark and harsh looking to the eye. I hope this has been helpful

Fill light for subject lying down

I am curious. It is recommended that the fill light be behind the camera in front of the subject. If I am photographing a person laying down I will lower the fill light. The problem now is that the camera and myself are kind of in the way. Won't there be a shadow or will the light wrap around me? I've seen catch lights in the eyes in some magazines and you can see the photographer. What is the best position of the fill light in relation to myself, the camera and the subject?
Kurt

Hi Kurt:

To answer your question about the fill light with a person laying down, the rules don't really change with regard to the placement of the fill light. The first issue in your question that I should address however, is that you indicated you were lowering the fill light but not the camera. In some cases when you lower your subject to a laying down position, you will also lower the camera position. You could also choose to raise the camera for a more looking down point of view. The effect of the fill light is very important but the location of the light should not be evident. This indicates a placement of the fill light at the lens of the camera. Since this is not practical, the best choice is to use your fill NEAR the lens. It's obvious that you cannot have the light source right there in your face so you have to put it in a practical location. The best compromise is to place it above the lens and slightly to one side (opposite the main light) but not so far as to make its location known due to shadows that it might cause. The problem of additional and unwanted shadows caused by the fill light when placing it too far from the camera can be virtually eliminated by keeping the fill close to the camera and by using a light source that is as large as is practical. A large umbrella is a common choice for a fill light. A smaller umbrella will produce a more defined shadow edge while a larger one will produce a much more gradual one, disguising its location.

Remember that you are not placing the umbrella behind you but rather beside you or even slightly in front of you with its edge over or nearly over the lens. With this arrangement you will have very good fill light and will not have to worry about blocking the fill light with yourself or your camera.

I do not recommend using the fill light on the same side as the main light. Doing so will create an area on the shadow side of the subjects head that receives no fill light at all other than what is bouncing around the room. This could easily make that area far too dark. Keep the fill centered as much as possible but just slightly to the shadow side to keep things in control.

In addition, using a silver umbrella will give you more control than a white one because you can feather it (turn slightly to one side or the other) to increase or decrease the amount of fill light reaching your subject. White umbrellas are not quite as directional.

You need not change the actual location of your fill RELATIVE to your lens when your subject is lying down. If you lower your camera by a foot, you should lower

your umbrella by a foot. If your camera is tilted a bit more toward the floor, simply tilt your umbrella down a bit until it is pointing more toward your subject.

Crash course in fashion photography

I am responsible for shooting a model in a simple room for an experimental online web fashion magazine. I have taken good photos of models outdoors with a Nikon FM2 with a 105 mm lens and a Vivitar 285 flash, but I have absolutely NO experience with studio lighting

setups. I have been given a \$500 budget to buy lighting equipment, or I can rent a more elaborate strobe setup for 50 bucks a day from a local camera store. I am not sure what I should do.

The photo shoot calls for just photographing one model in front of a simple white background. Will a bed sheet work, if pulled tautly enough between two poles?

I have seen a simple photoflood set advertised for around \$230. Can I get a nice enough shot with such a modest setup?

The other option is to rent a multi-strobe outfit, complete with umbrellas, slaves, etc. I already have borrowed a friend's Sekonic L-508 flash meter, so I know I can use that to determine exposures, but I am still unsure as to whether I can use such an elaborate setup well. Does anyone know of a two strobe/umbrella setup that I should try and rent? Would such a setup be significantly better than the aforementioned floodlight setup, and would it be too difficult to learn how to use within one week?

ANY HELP would be greatly appreciated. The existing literature only discusses elaborate and expensive setups (Dynalites, Norman's, etc.) and I don't think I have the time or money to use such equipment. But I am intrigued by the idea of using two strobes bounced through umbrellas plus, this would give me an excuse to use my friend's flash meter. Please advise me on my ignorance!! Dazed and Confused and Short on Time.

Sumanto

Dear Sumanto:

I feel for your frustration. Let me try to suggest an approach that might be practical for you. While you have no experience with studio lighting, I believe that with a little guidance, you can do this job with minimal risk. First lets talk about the type of lighting to use which will help us understand what to get to do the job. You didn't say if your shoot was to be head and shoulders only or full length but with a 105mm lens I will assume that it is to be a head and shoulder session.

Let's establish that what you're doing is fashion photography rather than portrait photography. In fashion, some of the lighting guidelines are a bit different. Fashion photographers use many lighting styles and techniques that are quite different than studio portrait photography. While a portrait photographer works toward a directional light that usually comes from one side of the camera and allows one side of the subjects face to be more in shadow than the other, fashion photography often illuminates the face from both sides, above and even below. One photographer might place three umbrellas in a triangle around his camera to create a specific look while another might use a pair of large umbrellas or soft boxes above and to each side of the camera. This type of photography relies on the use of well done makeup to create contours and shape to the face rather than directional lighting. Knowing this, let's consider a two light kit for you to perhaps rent. A pair of easy to use monolights would be a good choice. I suggest that they be identical to each other to avoid confusion and the need to learn two different control panels. 500 watt

monolights will work nicely. If you use a medium size umbrella with each monolight you should be in pretty good shape. Select something over 42 inches in diameter. Silver is fine but will produce a slightly more harsh look to the face than white umbrellas. The difference may be less than you can detect so I wouldn't lose a lot of sleep over it. Do try to keep the two umbrellas the same.

Once you have your monolights and umbrellas assembled, place one umbrella on each side of the camera and just a little above the height of the lens but not too high. Keep them in fairly close to the lens as well. Perhaps within a foot of the camera on each side. This arrangement will give you fairly typical fashion lighting. I see no need to confuse you with a lot of unnecessary details. At this point, you simply want to do the job well and not create potential problems. With your flash meter set to the ISO of the film you are using, place the meter where the subject will be and point the dome of the meter toward the camera. You can have someone fire one strobe for you by pressing the test button. The second strobe will fire on its own at the same time as the first. Be sure that it's built in remote trigger is in the on position. Some monolights have a defeat switch. You want both lights active. Be sure to observe that both strobes fire while taking the reading. Once you have your reading, set your lens aperture to the indicated F-stop. Of course you must connect your camera to one of the monolights in order to take your pictures. This is done with a cord running from your sync connection on your camera to the socket on the monolight. This socket usually looks like an AC wall receptacle but is the sync connection site on your monolight. Once you are hooked up you are ready to go. By the way. You won't need your Vivitar.

With regard to the white background. I will have to suggest that you get a roll of white seamless paper from your camera store. You will need a set of portable stands to support it. Also have a couple of welding clamps to use on the roll of paper so once it's on the stands, it won't unroll onto the floor. Place your subject 3 to 4 feet from your background. This is closer than I usually recommend but the idea is to put a little more light on the white seamless in order to keep it white. I really don't think you would enjoy the results of using a stretched bed sheet. White seamless is a good investment if you want a white background.

Glamour lighting

Looking for some proven suggestions for glamour lighting. currently using butterfly lighting or short lighting. I have a three light 2400w/sec Speedotron setup. interested in some ideas on exact placement of the main and fill light thanks for any of your suggestions

Jerry

Hi Jerry:

Glamour lighting is not so much a list of locations for your lights but rather the understanding of where the light itself might be on your subjects face in order to create a new and exciting feeling. Photographing women is our main specialty at my studio. I do more of it than anything else. Making women look glamorous is a combination of lighting techniques, lighting style, and very importantly, making the lady feel totally at ease with you. With regard to the specific question on lighting, I would like to suggest that you try some new lighting additions to what you are already doing. For example, back lit hair using colored gels, edge lighting on the legs or sides of the body, again with colored gels. An amber accent light cutting across the bust line. Try using amber and blue accent lights. These two colors really work well together. Consider adding smoke. With only three lights you may have to improvise with a reflector for a fill light in order to free up an additional head to use as an accent light or hair light. Sculpt with light from unusual angles. Try making your fill light a color rather than neutral. Short light and butterfly light as you said you were using are just fine but try more lighting patters such as Rembrandt and even light from directly overhead while the subject looks skyward or even from below the typical location for the main light. There are no limits to what your imagination can do. Try what I call power lighting which is where your main light is placed in the position for Rembrandt lighting and then lowered to just below eye level. With a diffuser in front of the light, you will get an unexpected style of light that is very dramatic. The eyes will be very bright and the look is very strong and contemporary.

Lighting a subject lying down

I am having trouble lighting a subject that is on their side. Example - I want to shoot a subject in a bikini. So one pose is to have them lay down on their side like they are watching TV. This is a studio setup. I seem to be having problems with shadows under their eyes. this is from the hair light obviously or maybe it is from the fact that I can't lower the lights (My Bogen stands are about 3 ft when collapsed.) Anybody have any suggestions on proper lighting techniques when photographing a subject laying down.

Hello Kurt:

In order to light a human face correctly, you must understand where the light is supposed to go on the face in the first place. Ok let's see if we can describe this without the use of pictures. For the style of general lighting I am suggesting you will be lighting the front features of the face. What we call the mask of the face. This includes the forehead, both eyes, both cheeks, the nose and the chin. The main light comes from one side of the face rather than the center.

Now, use your hand and feel your cheek bone. That is the round bone that protrudes from your face about an inch below the corner of your eye. Now that you have located the cheek bone I want you to think about a rod several feet long, sticking out from your cheek bone into space. From left to right the rod is at about a 45 degree angle. That is to say it points half way between the area in front of your face and the area to the side of your head. Now, elevate the far end of that rod up to about a 45 degree angle above the horizon. Now if you did this correctly, the rod will be pointing 45 degrees up and half way between your nose and your ear. What is the purpose of this imaginary rod? It's easy, the rod points to where your main light should be. This is for general portrait loop lighting. The most common lighting used for general portrait work. This is not typical modeling lighting but you didn't say that you were doing a modeling shoot so I am assuming this to be a portrait session.

Ok, now that you know where the main light is to come from you must place it so the cheekbone points toward it. Let me say it another way. Place the main light so that the imaginary rod extending from the cheekbone is pointing toward it. Your main light is now in approximately the correct position. All faces and eyes are not the same so you have to look at your subject and evaluate how the lighting looks. Most important of all are they eyes. Are they both lit completely and equally? If not you will need to move the light perhaps a little more toward the front of the subject and maybe a little down as well to get more light into the eyes. It is very important to remember that if the head is tilted to one side, then the rod will also be tilted. You position this imaginary rod based on the position of the head, not the verticals and horizontals of the room. You need to do this with only the main light on so you can see precisely where the light and shadow are. Your room lights must be off so you can see your modeling lights effects. Once you have the main light in proper position you are ready to add the fill and the hair light. Use the hair light sparingly. Young photographers overdo it on many occasions. The best rule for hair light is if in doubt, use less and if not in doubt,

use less. If you are lighting the subjects face from their right, then you should position the hair light behind them, above, and to their left. Alternatively you could place it behind them centered and above. Either is a good choice. It's which ever you prefer. Centered might be less difficult for you to deal with until you have a little more experience but will require a boom to hold the light in place above and behind the subject.

Now, about the subject lying down. Light does not know if the body is lying down or standing up. It's the position of the face that determines the position of the main light. If your subject is on her side with her head resting on her hand, then it is probably at a slight angle to one side. The method described above will work just fine. If you have her with her head totally on it's side then the same method still applies. You just have to look at the face and determine where the imaginary rod is pointing and which cheekbone is pointing more toward the sky so you can position your main light easily.

If your hair light is so far to the front that it is affecting the light on the front of the face then you need to back it away and lower it so it lights JUST the hair. If your eyes have shadows in them then your main light is too high relative to the vertical axis of the face. I don't want this to be complicated for you. Just think about the imaginary rod and you will do just fine. I don't think you will need to place your main light anywhere near the three foot level once you place it correctly. Pick whatever side of the face allows you to position it conveniently and this will give you a good start.

Window light decisions

I just read a book about photographing babies (like, 1-year-olds), and I'm interesting in taking some portrait-type shots as described in the book. The book did a good job about explaining the non-technical issues (it was written for parents, not photography hobbyists), but I have a couple technical questions: My plan is to -- as the book suggested -- sit the kid beside a window, so that you get nice diffuse skylight from the window on one half of the kid's face, and then (relative) darkness on the other side of their face.

For example: You're in a room where the window faces north. You sit the kid beside the window, so that the kid is facing east. (The window is on the kid's left side.) Then the photographer sits to the east of the kid, shooting west towards the kid. The book recommends NOT using flash, to preserve the quality of light. I figure that at a film speed of 400ASA and a shutter speed of 1/60th of a second, the side of the kid towards the window is going to be illuminated at about F/8, and the side of the kid away from the window is going to be illuminated at something like 4 stops below this... say F/2.

Question 1:

If I was going to photograph the kid without light modification, and I was using print film, I would want to set the F/stop of my camera to the dark side of the kids face -- F/2 -- correct? Or would I want to set the camera to some value in between F/2 and F/8? Or would I want to set my camera to F/8 to match the illumination on the light side of the face?

Question 2:

Would it be preferable, rather than shooting the kid with 4 stops difference between the light side and dark side of the kid's face, to use a flash to bring the "dark" side of the kid's face up to nearly the brightness level of the "light" side of the kid's face? If so, how many stops under would be appropriate? Two stops? (F/4?)

Question 3:

If I was going to use a flash to bring up the light level of the "dark" side of the kids face, would it be ok if I left the flash mounted "on camera", since it's only acting as a fill flash? Or should it be mounted off camera somewhere?

Question 4:

I'm thinking about using black-and-white rather than color. I'm thinking that it might be a good idea to use a fast 3200ISO black-and-white film to take these pictures. (I figure that that way, I could shoot these pictures at a high film speed, with a reasonably small aperture -- making sharp focusing and camera shake less of a problem.) Is that a good idea?

Kent

Hello Kent:

First let me compliment you on such a detailed description of your scenario. It really helps develop an answer when you have plenty of info to work with.

Ok, to answer your question. First, let's skip the idea of using flash. This is a situation where you do indeed need to preserve the natural beauty of the light coming in the window. I would like to suggest just a little more about where the light touches the subjects face. While it is acceptable to have what is called split lighting, (half of the face is lit and the other half is not) it's not really a good pattern for such a young subject sitting by a window. Try to turn the subject a little more toward the light so that you can see light falling on both eyes and eye lids and both cheeks rather than just on one side. This will be more toward portrait lighting. You are lighting what is called the "mask" of the face. I think you will like it far more than split lighting.

I don't think you need super fast film for this portrait. A tiny aperture does indeed give you lots of depth of field but if your subject is seated and reasonable still you won't need but a little depth of field. You could use f 5.6 or f 8 and throw the background a bit out of focus making your subject more clearly the center of attention. It is best to work with your camera on a tripod.

The issue of such a great difference between the highlight side and the shadow side is a valid one but easily fixable. First, make your exposures based on the highlight side of your subjects face. If you make them based on the deep shadow side you will have grossly over exposed highlights with increased contrast and less than great color. Base your exposures on the highlight and then control the shadow. This is easily done. Get a couple of kitchen chairs and place them to your left near the camera stretching across to the area opposite the window. Throw a white or off white bed sheet over them. If the sheet has little yellow flowers, don't worry about it. It will still be just fine. You can adjust the sheet as you desire to control how much of the window light is returned back into the dark side of your subject. Be sure to keep the sheet set up more toward the camera. If you position it back behind the subject you will get cross shadows on the subjects cheeks where no light at all falls. Not too pretty. The fill should come from as close to the location of the camera as possible. This big sheet will bring up the shadows in a nice, soft way that you can control by moving it back and forth or making it smaller by moving the two chairs closer together. Bring up the shadow side until it looks good which will probably be about 2 to 2 1/2 f stops less than the taking aperture.

This method is fine for either color or black and white film. With black and white you may wish to use a little more fill than with color. It is usually desirable to keep at least a little detail in the shadow side of the face.

That glamorous hard lighting

I've read that beauty lighting should be soft and there should be a soft transition between the diffused and shadow. Well, I've studied many fashion magazines and the work of some very prominent fashion photographers. What I have found is a very sharp transfer between the diffused and shadow. What they seem to have done is just blast the subject with light placed (where?) to prevent shadows on the face. Am I correct? What type of light sources do they use? Where can I get technical information on beauty/fashion photography?

Thanks,

Pete

Hi Pete:

Butterfly light is a common, glamorous form of lighting. The main light is centered above the subject and fires down onto the face creating a shadow pattern under the nose that looks a little like butterfly wings. This style of lighting is often enhanced with a base reflector fill or even an umbrella placed under the lens to put light up into the lower part of the eyes as well as under the nose and chin.

The hard shadow edge that you have been noticing is quite simple to produce. It comes from using a small light source such as a flash head with no umbrella, soft box, or other diffusion device. The smaller the light source, the harder the shadow edge. The larger the light source, the broader or softer the shadow edge. It is the size of the light source that controls the character of the light on your subject. The use of a small light source has its place just as larger and medium size light sources. When you use a small light source, it is very easy to over do the ratio and allow the shadows to go very dark which can be quite unpleasant. Likewise it is easy to use a large light source with too much fill light which will make it difficult to see where the main light stops and the fill light begins. This will add weight to your subject because you have light reaching the face from ear to ear rather than just the mask area of the front of the face. Large light sources produce portraits that generally look pleasing when you select a heavier ratio by using less fill light. Small light sources produce portraits that look more pleasing with a gentler ratio caused by using more fill light. It is also common to use lens diffusion (soft focus) with smaller light sources to further soften the effect of the hard light on the subjects skin. Mixing hard and soft is what will produce the most pleasing images. If you use a soft light, AND a gentle ratio, AND a soft focus filter, your image will look too soft and muddy with few defined shadows to create the illusion of three dimensions.

A good rule to follow is this:

Soft light combined with a harder ratio and little or no soft focus.

Alternatively, combine hard light with a milder ratio and more soft focus.

The glamorous effect you refer to is easy to produce but at the same time you must be precise with your light. A small light will reveal less than great placement much faster than a large light source which will produce pretty much the same result even if you move around a bit. Francisco Scuvullo (I may have spelled it wrong) uses pretty much the same lighting style for each cover of Cosmo. His light is not very large but is located very

near the level of the camera and slightly to one side. If you study his work, you will see that if you simply point your light dead on into the subjects face from very near camera position and then move it to one side until you just see a hint of shadow on the side of the nose, you have it. This technique produces bright whites in the eyes, a nearly centered highlight in each eye and light under the chin and nose. On the down side, it lights the subject from ear to ear which adds weight and will make a person with a round face look even heavier. This is certainly not what you want to do for all subjects all the time but is one of many styles of lighting to choose from.

Another thing to consider is that when you use small light sources, the make up needs to increase to compensate for the penetrating quality of a small light source. If your subject is not properly made up with a solid matte surface to their skin, you will see specular reflections that will suggest oil on the skin and will not usually be flattering.

Candle lit portrait

I would like to take a portrait using a candle next to the face. Any suggestions on set-up.?

Hi Victor:

In your question you said that you wanted to take a portrait using a candle near your subjects face. If I am correct in assuming that you wish the candle to be in the portraits, here is a setup that you might find unexpected but that will provide you with a lot more light to work with without dramatically changing the look that you desire.

First establish the pose the way you prefer and place the candle so that it is lighting the face correctly. Preferably from the far side of the face in a 2/3rd face view so you have short lighting on the front of the face. Now we have to cheat a bit to achieve the desired end result without having to use a single candle as our light source. If you mix outside light sources, be they tungsten bulbs or strobes with amber gels, you will lose the legitimacy of the scene. An image like this tends to look more set up and fake when you deviate from your original idea. There are several problems with doing the shot with a single candle and a dark room. The shadows will be totally black unless you have some room light on to fill them in. This is acceptable but might be a little difficult for you to make comparisons between the effects of the candle and that of the ambient light in the room. You may not mind the shadows going totally black but the shadow edge from a single candle will be very sharp and will add some harshness to what sounds like a soft romantic image. Here is a method that will provide you with a softer light that is the right color to blend in with the candle and is several stops greater in it's intensity so you will have more light to work with and can use more reasonable shutter speeds and apertures. Get a large cookie sheet. Line it with aluminum foil. Press it in just as if you were going to bake cookies on it. Get something that you can use to prop the cookie sheet against so it is up on it's edge. Now prepare a number of white taper candles. They need not be longer than 6 or 8 inches for stability. Arrange them so they will be close together in a shoulder to shoulder configuration in the middle of another cookie sheet for safety. Now if you used 8 extra candles, you have a 9 candle power light source rather than a one candle light source to work with. To make your 8 candle light source, position yourself so that you can see your hero candle (the one that will be in the shot) lined up and centered in the subjects face. Now place your cookie sheet reflector right there and locate your candles a foot or so out in front of it toward the subject. Your new light source (located just out of frame) with it's reflector will provide a larger, softer light that is coming from the precise, same direction as the hero candle. The light will be much brighter to work with and easier to take a meter reading than the minimal light of a single candle. If desired, you can add even more candles giving you yet more light to work with. Don't burn down the house! The color will be consistent, the shadow edge will be much more gentle thereby adding to the romance of the image. It is even possible to add a little natural fill by placing a white board out of cameras view that will reflect some of the candle light into the shadow side of the subjects face.

If you are wondering why I selected a cookie sheet lined with foil rather than a silver reflector of some kind, the reason is simple. Safety. Most photographic reflectors are either made of material with a silver coating or a silverized plastic. In the event of a minor accident where the reflector falls forward against the candles, it's metal rather than

a flammable material. Anything you can do to reduce risk when working with fire is always preferred. I work with fire a lot so I try to avoid accidents.

If you are using your in camera meter, place a piece of ordinary brown cardboard in the scene in front of the subject so that it gets the same light as the subject. It should be large enough to pretty much fill your viewfinder. Take your meter reading off of the cardboard. It's not too far from the reflectance of a gray card so your exposure should be fairly accurate. If using a handheld meter, take ambient readings at the face with the dome pointed directly toward the light sources. If using Kodak 160NC, rate your film at ISO 100 or even 80. If you are using 400 film, rate it at ISO 250. With an image like this, a single layer of black tulle over the lens will provide a slight amount of blending for the subject and will give you a soft star effect around your candle. If you use the tulle, lower your ISO one more setting to compensate for the 1/3rd stop of light loss from the material.

To tilt or not to tilt

Scott:

Let me start by saying how much I appreciate your web site with the valuable information you provide for the rest of us out here in cyberspace. Thanks to you I feel a lot more confident about lighting and portrait techniques that you've suggested. And now the question. Is there a general rule that would apply when using the camera tilt in portraiture. For instance, is it best used with certain types of poses? When should you tilt east or west (right or left)? Can it be as effective for male subjects or children as it is for young ladies. I look forward to hearing from you, and thanks again.

Mike T

Hi Mike,

Tilting the camera does basically one thing. it does what the subject could do but with greater comfort. Set a model with elbow on a posing table doing a profile and add a little pizzazz by tilting to the left (for a left facing profile). The tilt is mostly used to suggest that the subject is looking more upward thereby making the front of the face a diagonal line rather than a vertical line. It can be just as effective for men but be careful not to suggest a feminine tilt. It's not used that much for children because they generally don't hold still that well and you don't want an overly adult look for a child's portrait anyway. Tilting the camera can be easily overdone so don't make it a big habit. I do it once or twice a year when the image can be enhanced by it. Concentrate on working on good posing and you won't feel the need to do much tilting. It can occasionally help but it can also look like you made a mistake if you over do it.

Lighting dark skin

Any suggestions for shooting dark skinned people? Indoors vs outdoors?
Bill

Hello Bill:

Contrary to popular thinking you really should not change your exposure when photographing people with dark skin. Being indoors or out makes no difference if you are using your film, and meter correctly. To alter and increase your exposure is to change the contrast of the image and increase it which is not desirable. You can also experience color shifts in printing when film has been overexposed. If someone needs to alter the exposure just because they are photographing a person with dark skin, then they were not making accurate exposures in the first place. Working in your studio or on location should not have a different set of rules for people of different races. The differences colors are just too small to completely change the rules. Still people insist on changing the exposure just because the skin is darker. The correct idea is to have a correct negative. Very dark skin should record on film with it's true tonality. Think about it. We don't deliberately UNDERexpose film just because a lady comes in with very light blond hair and very pale white skin. Properly placing the tonal range of your subject within the working range of your film is what will keep your negs perfectly consistent and your lab loving you. Today's films have plenty of latitude so that a pale skinned white person may be photographed right next to a person with very dark skin with predictable, and perfect results. The necessary things to do are to have the working ISO of your film established and use your meter with 100% consistency. Once you have tested to determine the correct working ISO for the film you are using, you will always have predictable results with consistent highlights and detail in the shadows no matter what the subject. All of my images of people are exposed with the same ISO settings and metered the very same way. I photograph quite a lot of dark skinned people and have many of them in my web site galleries. I think dark skin is very beautiful in portraits. My images are all exposed the very same way. I use Kodak 160NC in the studio and Kodak 400VC outdoors.

One final point that probably confuses many photographers is that poor printing can and does degrade many images of dark skin people. Sadly, some labs set up their printing equipment and never choose to make density corrections when printing so a perfectly exposed negative of an African American is often printed such that they look excessively dark in the face with just their eyes and teeth showing. This is unfortunate and easily corrected IF the printer chooses to do so and if the negative is indeed correctly exposed. To add additional problems to this, when photographers deliberately overexpose their film, they further increase the contrast between the dark skin and the light color of the eyes and teeth making the image even more difficult to print. Working for a proper exposure is the correct way to go.

If you need any additional help with this, feel free to write to me.

Large light outdoors

I'm shooting a large group outdoors (about 10 people) and the largest umbrella I have is 53". What about getting a bed sheet and shooting flash through it to get a giant "soft box"? Comments/suggestions please!

Robert

Dear Robert:

A bed sheet has similar properties to rip stop nylon and will take its place in a pinch. Natural light would be a far better choice when doing a professional portrait outdoors. Anytime you use flash outdoors, your image will have that flash fill look. This is something I don't feel is good for professional photography. Many photographers have difficulty learning to see light outdoors and finding great locations where true portrait lighting is present. It is there, just about everyday. Once you know what to look for, you can almost always find it. In the afternoon around sunset is the time to work. Portraits like this are usually done in wooded areas as opposed to open areas. Working near trees will give you the opportunity to look around for a large patch of open sky above but not over your subject. The light must come into the face, NOT down upon it. Just like in the camera room. The only difference is that rather than moving the lights around, you are moving the subject so that their placement relative to the light source is similar to that of the camera room. A little practice and you will never haul all that stuff out for a location sitting again.

Article about flash fill outdoors

The article below is the result of a photographer questioning my stance that young photographers should learn to see light outdoors and learn to use it correctly without the aid of flash fill or other bulky equipment. He is in favor of taking flash outside to make portraits with flash fill. While this is no sin, I maintain that IF one has properly learned to see light and shadow and can quickly identify it and use it efficiently then that is by far the superior method of creating pleasing, professional images. I thought you might find my response helpful in understanding why I feel so strongly about this.

Hello Gene:

I appreciate your position and understand your thinking in many of the areas you discussed. We don't really have a lot of disagreement and I totally respect your feelings on how you would handle this topic. Let me just point out a couple of things that may clarify why I feel so strongly the way I do. It might make more sense once you know. First let me say that the vast majority of photographers that I deal with, either in the classroom or via email are fairly new at this or have been struggling for a long time and need some real guidance. I absolutely don't discourage photographers from exploring a wide variety of techniques. The problem is that when too many things are tossed into the soup when one is in the early stages of learning, there is almost always confusion and frustration. We must all walk before we can run. What I teach my students is to learn to see light quickly and accurately. To rely on luck is not where I want them to go even though luck plays a part if you are in a place you have never been. Great light is not that hard to find. I have been in business for nearly two decades. When we go the gardens to do a location portrait, the light is always there. I just have to quickly find it. There is never any waiting around. We move from one location to the next and stay busy.

I recently volunteered to go with a photographer to the gardens to photograph a couple of children. My job was to watch and later critique his technique. This was an experienced photographer with good work and several years in business. As it turned out, the kids never came so we spent an hour walking around, learning to see light. He later told me that he only thought he knew how to see light. This was a major learning experience for him. I have encountered this for a long time. There are varying degrees in photographers ability to see light. Once they really know, it never leaves them.

With regard to the sun. My young students do not need the added complication of trying to balance a strobe or reflector with the direct power of the sun. They need to learn to see light first, learn where it is supposed to be on the face and then once they have mastered locating portrait lighting outdoors, then they can experiment with more involved concepts. They will have the tools and knowledge to learn it even better. I must respectfully disagree with you that it is difficult to find short lighting in nature. It is there everyday for the using. I would rather teach someone to see light and to master controlling it and know that they can improvise at a less ideal time of the day when they have to because they have the knowledge to do so. My opinion on flash fill outdoors must stand. Please note

that I indicated that it was my opinion. I frequently judge prints at conventions and the ones with even a small amount of flash fill look so different than the same portrait would had it been done with wonderful natural light. I realize that sometimes situations happen and a photographer has little choice but to strap on a strobe and get a saleable shot. That is just fine. It is simply not what I prefer to do or to teach. We all know that there are plenty of fine saleable images that are done with flash fill that make consumers quite happy. I have never disputed that. As I am trying to say again and again, this is my preference in my practice and in what I teach. I believe that elevating the quality of our work is always a good choice to make. Seeing portrait quality light is the same indoors and out. You just don't have a movable light outside. You move the subject instead. The single largest reason I teach my students to learn to see natural light and to make the most of it quickly and efficiently is so they won't have to deal with hauling a bunch of strobe equipment, panels, umbrellas and light stands with them on location. It's just not practical.

As I visit our public gardens from time to time, I take note of how many photographers have all of this hardware with them and how it must be set up, kept up especially if there is any wind and then moved from place to place. I just don't want all that to get in the way of creativity and good use of the available light that God provided. I prefer to take my camera on a tripod, put my meter around my neck and get busy. I can visit far more locations in the gardens not having to worry about the hardware. You won't believe this but I actually have a chapter in my lighting book that deals with using strobes and umbrellas outdoors as a main light. I make it clear that it's not my preferred way but if you are going to do it, you might as well do it so it looks the best it can. Now, if one decides that they simply must do portraits at noon or mid afternoon, then they are forced to use all this extra hardware to achieve a saleable result. We have the right to choose if we wish to take outdoor sittings in middle of the day. It's perfectly fine to do that. It is my choice not to do that. I do one outdoor sitting in the late afternoon and that is it. It's simply a choice.

I hope you can see my position in some of these issues. You don't have to remind me that it's not a position that all photographers take. I know that and that is just fine. I feel strongly as I do based on my experience, the amount of people that I teach and what I see when I look at other photographers work.

Finding natural light outdoors

I feel pretty comfortable working inside with my strobes but outside I have more difficulty. I want to make beautiful portraits outside and I really want to avoid using flash fill. To me, anything with flash fill just looks terrible. I am hoping for some help with this problem. I want my outdoors portraits to look like portraits and not candid's. I guess I don't ask for much do I. Thanks for any help.
Jeanne

Dear Jeanne:

Basic portrait lighting teaches us that we should light the mask of the face. That is, the front features that would be covered by a Halloween mask. In most cases we are talking about both eyes, the nose, mouth, chin, cheeks and forehead. To light this area you must find the main source of light in the sky. I commend you for desiring to do this without the aid of fill flash. If you do what I do and schedule all of your outdoor sittings for the late afternoon you will find a wonderful soft light source in the western sky above where the sun has set just moments ago or even earlier if there is a line of thick trees blocking the direct, setting sun. Why would I not schedule an outdoor sitting in the morning you ask? Simply because I want the subject to look his or her best. We don't want peoples faces to look puffy because they just got out of bed. A lot of people also take a long time to wake up and are not at their best in the morning. Other good reasons for not going in the morning include the fact that on many mornings the ground is covered with dew making it very wet to walk on, sit on or drag a dress over.

What about the mid day to mid afternoon time period? Well, unless it is just totally overcast it's a bad idea as well. Most of the light will be very harsh and from overhead or near overhead causing deep shadows under the chin and in the eye sockets making your subject look like a raccoon. If direct sun is illuminating the background or other objects in the scene, you will not be able to easily correct for them and they will require expensive artwork to fix after the fact. Imagine a beautiful bridal dress with all of these bright white patches all over it because the sun is streaking through the trees. The late afternoon is clearly the most appropriate time to do a sitting outdoors if you wish to maintain a natural, non flash filled look. "This magic hour" is your window of opportunity for beautiful, soft, and yet directional light. If you are near a line of trees or hills or other light blocking objects you can find light sources in other places besides the west. For instance, let's say you have a line of trees to the west and the view is clear to the east. If you work very near those trees, you will have as your main source of illumination, the eastern sky. Remember, this is around sundown! The open sky is a brighter source of light than the line of trees so it becomes your main light. Finding directional light is not hard. Just look around for a large patch of open sky that is not directly over head. In the studio, you move the light sources around the subject. In the outdoors you adjust the subject to the light.

How do you know that you have found good light? It's easy. Hold up your arm with your hand pointed up and study the light falling on it between the wrist and the elbow. Does one side look brighter than the other? That is what you are looking for. A difference. Look for one side that seems to glow. Pivot where you stand and look for a noticeable glow that comes from one direction. The side that glows should be noticeably brighter than the other side but remember, you are not in the sun now. It's not like holding your arm or hand up in direct sunlight where one side is blinding and the other nearly black. This is a more delicate difference. Notice that I said difference and not ratio. A white golf ball also makes a dandy light tester. Just hold that little fellow up, rotate yourself and observe. Once you find the location with a nice directional glow, you can take meter readings toward the light source and also facing the other direction. This will give you your difference. How simple. Let me see now, when I point the dome of my flash meter toward that big bright area over there, it reads f 8 at 1/30th of a second. When I point it toward the other direction it reads half way between f 4 and f 5.6 at the same shutter speed. In other words I have a 1 and 1/2 stop difference. A nice ratio. No hardware. Just Gods light that we found. Yes, you certainly can haul all of that stuff around and create lighting in locations where it doesn't really exist and at odd times, but why? There are so many locations that already have wonderful light. All we have to do is look for it. I prefer to just be a photographer.

I talk with my subjects and work with them and because we are not wasting a lot of time playing with the reflectors and whatever, we get to go to more locations and can then show the customer more variety. I remember a couple of years ago I had a sitting in the gardens. A short distance away there was a photographer setting up a black panel over this couples heads and there was an assistant holding a gold reflector down by their feet shooting this yellow light up into their faces. By the time he made a series of exposures in this one location, I had done my entire sitting in four locations and we were leaving. He was still in the first location! Indeed, you can use all of the panels and reflectors outside if you desire but if you can find perfect studio quality light out there everyday, as you indicated that you wish to do, then why not? Let's make life easy. Let's keep it simple and allow our brains to do most of the work for us. Let's just learn to see better. I really appreciate your desire to create beautiful portraits with totally natural light. It's there. You just have to learn how to find it.

Incident or reflective readings?

When metering a subject in a studio flash set up what reading do you take? Do you take the f-stop reading that the flash produces or do you take the reflected reading from the subject? In other words do I point my light meter at the flash or do I read from the bounced light (point meter toward subject)?

Kurt

Dear Kurt:

While it is indeed possible to take reflective readings from your subject in a studio environment there is no good reason to do so. Measuring the light that is illuminating the subject is far more accurate. You must establish your working ISO for the film you choose to use. If you are doing portrait work you can use Kodak Portra 160NC. It's a fine portrait film. Fuji makes fine film as well. It's important while you are learning that you stick to one film so you won't have a different set of rules to work with each time you try another series of portraits. Keep things simple and the same each time so the only variable is your performance. This way you can learn more efficiently because you are the only thing that is changing. Hopefully for the better! Now without going into a far too lengthy explanation as to why you should rate your film a bit different than the rating on the box it will be easier for now if you simply rate the Kodak 160 at 80 or 100. If you have a flash meter with a dome, point it at the main light. Many believe that you should point it at the fill light but if you desire truly consistent negatives regardless of the ratios used during the sitting, this is the best way to do it. You will have negatives that are virtually identical one to the next. Keeping your flesh values consistent throughout your sitting will insure uniform contrast and color balance.

On which meter do I set the ISO?

Due to the frequency of this question I have also included it in the Beginners Q & A section.

When you set the ISO on your flash meter, do I also set the same ISO on the meter in my camera?

Burt

Dear Burt:

I bet a day doesn't go by where I don't receive this question. I want to make you think a little here so you will thoroughly grasp this concept. Here we go. What does the hand held flash meter measure? It measures the studio strobe lighting that is falling upon the subject. You then use the f stop setting that it recommends and set your lens aperture accordingly. What happens with the meter in your camera during all this? Not a thing! Why would you even think about the meter in the camera? It does not measure flash. It measures the amount of available light that is in the room. (Not much compared to the flash.) You are NOT using the room light to light your portrait. You are using the studio strobes to light your portrait. Your camera is in the full manual mode (or at least it better be) and you are the one telling it what to do. Set the shutter speed to the proper sync speed that the camera is made for and then set the f stop on the lens and then MAKE PICTURES! Don't make it complicated. You don't use two meters at the same time. The one in the camera might as well not even be there. It is not used. Let me say this again. IT IS NOT USED. Now I feel better. Use the meter in the camera when you are outdoors during the day. That is what it is there for. It is NOT for studio strobe work. Your handheld flash meter measures the strobe output, you set the camera and then create. That's it! Simple, easy, cool, no worries.

Using gels

I am just starting out doing mostly children pictures but some adults as well. My question is about the color gels. Exactly what is the technique for using the color gels? I have seen pictures with these used and think that it would be a great addition to my work.

Karrie

Hi Karrie

The technique is simple. Put gels over your strobes and use them. You will need gel holders that attach to your strobe heads. You then attach the gel to the holder. You can use welding clamps to attach the gel directly or the better way is to cut out some cardboard squares the size of the gel holder with a hole in the center and attach pieces of gel that are the same size as the cardboard. You can attach the gel with black tape that is a lot like masking tape, just black. Get it at an art supply store. Don't use duct tape or gaffers tape. The adhesive is too soft and will melt with heat and make things rather sticky.

That's it! You must make decisions as to where you want certain colors to be. You will probably find that a warm amber is more attractive as a hair light than green. Blue makes a great compliment to amber as a background color. You learn simple by looking at other photographers work and see what you like and what you don't like. It's also important to be creative on your own and invent new color combinations and ways to use them as accent lights for the subject and the background.

You can take meter readings of colored light just like you can white light but beware that depending on the accuracy of your flash meter, not all colors will read accurately. This is another reason why I so strongly recommend the Minolta Flash Meter (not the lesser expensive auto meter). The Minolta Flash Meters color sensitivity is generally better than other meters according to a Minolta representative. I have never had an experience where the reading seemed hugely inaccurate. I feel pretty good trusting the meter.

What to do with a bald head

I have a sitting coming up with a family of five. My biggest concern is that the father is totally bald. I don't wish to emphasize his lack of hair. Are there any special tricks to help solve this problem?

Tonya

Dear Tonya:

No tricks but a few little things that will help. A high camera position will provide a "birds eye view" and is to be discouraged. Lowering the camera position will help by keeping the view more of the front of the head rather than the top.

You should also eliminate the hair light so there are no highlights on the top of the head further calling attention to the problem. For individual portraits, consider a mild accent light coming from the side of the subject rather than from above. If you gently kiss the side of the head with a touch of light, you have added depth and interest to the portrait without drawing undue attention to the bald head. Place the accent light about eye level with the subject coming from over their shoulder and keep the amount of light very small. My favorite way is with barn doors. You have total control and you get what you see because the changes are mechanical rather than electronic.

Another idea for when you have an individual rather than a group is to use a grid spot attachment on your main light flash head. The grid keeps the light in a column or beam. You can use this to your advantage and light the face without lighting the top of the head. Your light will be direct and have a hard shadow edge so use more fill to keep the shadows from being too black.

In special situations, it may be appropriate for the person to wear a hat. If it doesn't seem a wrong choice, it's another option.

The best technique for bald heads especially when you are doing a group is to select the background carefully so that it records on film as a similar shade to the person's bald head. Think about it. If the background behind the bald head is about the same tonal range as the head, then the head will not stand out from it. On the other hand, a bright head photographed against a dark background will really stand out. A bald head will also stand out against a white background. Your best choice is to find a background and light it so that it is about the same tone as the subject's head.

Quick and Easy Couple Posing

Scott,

I am about to photograph 200 couples/individuals at a party. We have been requested to do 3/4 length images. I have 3 1/2 hours which I can probably stretch to 4 1/2 hours. My concerns are, is this time realistic, will I be able to pose them standing and get flattering portraits. This question of standing the subjects or seating them is troubling me. I think that seating them will allow me to bring their faces together and show a more intimate pose. But seating them may take more time than I can allow.

Do you have a recommendation?

Chris

Hi Chris:

Seating couples will make the legs get in the way if you want them facing each other and that is usually better than back to back or front to back. If you stand them, their laps go away and you have much better control over the pose and can easily get them closer together. Standing works faster in your situation so keep it nice but simple. Arm around each other in back but not so far as to see the fingers coming around the other person. Heads tilted slightly toward one another and perhaps even touching. Let them hold hands such that their elbows are at the curvature of a banana and angle the bodies so that the man is slightly more directly facing the camera than the lady. This will insure that he looks bigger than her rather than the other way around. This should give you a fast and foolproof method of posing couples and still get a respectable image.

Pale skin portraits

I took some photos of a young lady who has very very pale skin, almost ghostly white. I used an umbrella fill measured at f8 and a 22" louvered parabolic metered with the fill at f11. I am not satisfied with the results as the highlight side of the face is pretty much blown out. It looks like there is density in the negatives so perhaps I just need to have the prints redone. Anyway, does anyone have any general advise for dealing with pale skinned people i.e. lots of makeup, higher/lower lighting ratios, softer/harder lighting, special posing, more/less hair light, lighter/darker backgrounds, etc.

Tom

Dear Tom:

While it's easy to suggest any number of remedies for photographing a person with a very fair complexion, it really comes down to a couple of very basic issues. First, is the exposure correct for the film you are using? If you are metering correct, and I suspect you are, then you are indeed getting correctly exposed film. The other place to turn for answers is how the images were printed. If your film is exposed correctly then the only reason the images look unacceptable is because they were printed that way. The lab has enormous control over how images are printed. I run my own lab and if I so choose, I can print an image in any density or color. I can make you look light green or dark blue if I wish. The lab's responsibility is to print the images correctly so long as they have a negative that is printable. Far too many photographers take the rap for poor printing and as a result blame themselves and then reinvent the wheel every time they see another crop of proofs. Rejoice! It's not always your fault. If you are using a typical ratio for your portraits, metering correctly, and rating your film correctly, then there is no need to change a thing. A light skinned person requires no change in light sources, filters, ratios or anything else. They deserve the same flattering techniques that everyone else gets. Their lighter skin should pose no special problems.

The typical Caucasian has skin that falls roughly in the zone six range. About a stop above a gray card. A person with very pale skin will not fall much more than a stop or so lighter than this. This is not all that much lighter and falls well below the shoulder of the film.

You can use filters to alter the color of your negatives but the lab may very well print those off color too. Having a perfect negative is always the best choice. Fixing the mistakes of a lab is not something photographers should contend with. The lab is paid to print correctly. There are many fine labs who do great work. If yours is inconsistent, you need to talk with them about improving or find another. The main issue is to avoid changing everything around because a person looks too something in your prints. Contrary to what some people think, the rules for photographing an African American and a very pale Caucasian are precisely the same. Look to your lab as a possible source of inconsistencies.