

# THE CAMERA CLUB OF CENTRAL MINNESOTA



## The Newsletter of the Camera Club of Central Minnesota

Volume 12, Issue 1

January 2020

### Club Meetings and Other Bits of Information

The Camera Club of Central Minnesota will be meeting on the first Monday of each month with the second Monday of the month as back up starting in January 2017. We will meet at the Public Library in St. Cloud.

The club has monthly photo topics, image sharing and critique, hands on demonstrations of photographic gear and software, member online gallery links, discussions about photography, and is open to all.

Remember, all your photo assignments and meeting dates are online at:

<http://cameraclubmn.com>

#### Assignments

**Monday, January 6, 2020, 6:45pm – 8:45pm, Bremer Community Room 104, Good Junque**, old stuff, rusty stuff, such as cars, a collection of things, tractors, kitchen utensils, wheels, etc.

**Monday, February 3, 2020, 6:45pm - 8:45pm, Mississippi Room 106, Patterns**, The main subject is created by using repeating lines triangles, squares, colors...

**Monday, March 3, 2020, 6:45pm—8:45pm, Mississippi Room 106, Music**, anything related to music.



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### From Smart Phone to Real Camera

A smartphone is, in a way, the gateway drug that can lead to a lifelong addiction to photography. For millions of aspiring photographers, these multi-purpose devices are their first introduction to image-making and many smartphone users eventually get hooked on the craft.

Soon enough, they will want to take better pictures. But using a smartphone is NOT the way to go. Trust me.

If you are one of these photographers stuck on awkwardly using your smartphone to shoot mediocre photos, here are ten reasons why moving up to a “real” camera will not only improve your photographs, it will literally open your eyes to a whole world of picture taking.

#### Getting a Grip

A big reason to switch to real cameras is that they handle better than phones. Real cameras have better ergonomics; it's that simple. A real camera fits snugly in your hands. Your

right hand holds the body and your pointer finger rests naturally on the shutter button. With your left hand, you grip the camera lens and nestle the body in your palm. The camera is stable and balanced in your hands and you feel that you are connected to it. It's almost...natural. This makes everything from wedding photography to street photography faster, easier and more enjoyable.

Compared to a real camera, a flat glassy phone is hard to handle and slower to use.

#### Better Image Stabilization

Another reason to step up to real cameras is that they have better image stabilization (IS) systems. IS helps you get sharp photos at slow shutter speeds. Since phones are lighter and have less mass, their image stabilizers have to work harder than those in a traditional camera or lens. A good camera and lens combo has weight and mass, and when held in two hands as described above, I can get sharp photos hand held right down to



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## Shooting Long Exposures (continued)

about 1/8 second.

My phone takes decent images down to 1/30 second but even in normal room light I get nagging complaint messages that say "use a higher ISO" or "use the flash" or "hold the phone more firmly" and this is annoying and delays my shooting.

### Compactness vs Purpose

Phones are about staying in touch with friends and family and, originally, cameras in phones were a marketing afterthought.

Some people complain that they don't like cameras because they aren't as compact as phones and you can't slip them into a pants pocket. But that's not important to me because when I carry a camera I have the intention of taking pictures. I focus on doing that and not chatting with friends.

I still carry my phone just in case my wife wants to tell me to get something at the store. Phones are good for calls, cameras are good for photography.

### Bigger Sensors Work Better in Low Light and Produce Better Tonality

Cameras have much larger sensors than phones. That means the 24 million pixels on a large camera sensor have lots more room to gather light than the 24MP crammed onto a phone sensor. This allows the camera sensor to work better in low light and produce better overall tonality in your pictures. And while it's true that phone sensors have become much better recently, the sensor technology in real cameras has improved dramatically as well, thus keeping the cameras ahead in im-

age quality.

### True Primes and Zooms Are Better Lenses

The tiny fixed wide-angle lenses on phones are a big problem for me and another good reason to move to a real camera. These mini-lenses in phones are basically good for snap shooting, but they are no match for a real camera prime or zoom lens. Their optics are the result of years of lens design and they contain multiple superb multi-coated glass elements. There really is no comparison between true camera lenses and the tiny bits of glass and/or plastic in a phone.

### Can't Beat the Reach

Cameras beat phones by a wide margin when it comes to nature and sports photography. How many times have you looked at your phone shots and wished you could have been closer to an eagle or a quarterback? That's the job of a camera telephoto lens to reach out and put you in the heart of the action. Whether it's getting up close to a runner or nose to nose with a polar bear, telephotos do what a phone simply cannot.

Consider taking the photo of cowboys rounding up a young bull for branding. You could be shooting from a safe position about 350 feet from them but your long 600mm telephoto lens got you right up to the action.

### A Slice of Life

Besides bringing distant subjects closer, telephoto lenses will produce a shallow depth of field when used at their widest apertures. This effect isolates subjects from their surroundings.

### More Versatile LCD Screens

In a recent Shutterbug article, there was a piece about LCD monitor screens and they are another reason real cameras are better than phones.

Lots of cameras have LCD screens that can tilt away from the body and in some cases be rotated though a full 360 degrees. This lets you shoot over the heads in a crowd or down low for close-up of flowers.

Rotatable screens can also give a photo an interesting perspective. For my portrait of an artist at an exhibit I held the camera over my head and tilted the screen, so I could see what I was shooting before I took the shot.

### Hordes of More and Better Accessories and Filters

There are thousands of accessories for real cameras that can expand and enhance your picture taking experience. There are handheld flashes, auxiliary lenses and hundreds of special effects filters that screw right into a real camera lens. One amazing new filter just announced by the Hoya Company is called a "Starscape" filter and it cuts down light pollution for bet-



THERE REALLY IS NO COMPARISON BETWEEN TRUE CAMERA LENSES AND THE TINY BITS OF GLASS AND/OR PLASTIC IN A PHONE.



ter star photos.

## Three Legs are Better Than Two

Real cameras have tripod sockets while phones do not. You can buy a clamp or grip for a phone that has a tripod socket but that makes the phone big and clumsy.

With a real camera on a tripod, you can shoot at small apertures to get a very big depth of field and you can also shoot at long exposures of several seconds to blur motion. That beats the capability of both phone and camera stabilization programs by a country mile.

And don't be surprised that once you start getting better photographs with a real camera you discover that photography is really a worthwhile and pleasurable habit to have.



## Interior Photography

Whether you're capturing images for your Instagram grid or you're an aspiring photographer, taking photos of your home is a rewarding way to express and share your personal aesthetic. But no matter how amazing your home looks (or how fancy your camera is), there's a bit of a learning curve to snapping stunning interior photos. What gear is most important? What's the best way to edit? What's the most flattering angle?

According to photographer Alyssa Rosenheck, the first thing to know is that the process of photography is more about storytelling than gear, editing, or composition. To get the most out of your home photography, Rosenheck says it's important to rely just as much on intention and intuition as technical skills. Ready to up your interior photo game? Here's her best advice.

### Define your personal lens

Defining a vision for your photography is the first step to making sure you take photos that feel like "you" and really capture your style. Before you pick up your camera, Rosenheck recommends taking time to set an intention through your own personal

and emotional lens. Your home is your personal space—the place where you love and find inspiration—so carve out some reflection time to figure out your photo goals.

### Get a great editing app

Even if you have a proper camera, your smart phone can be a useful tool for creating, capturing, and sharing meaningful content. "iPhone's camera and video are sophisticated, and with the help of a few reliable apps, anyone can create images that rival the ones I produce for magazines," Rosenheck says.

Her current favorite app for editing is A Color Story, which is available in the App Store and on Google Play. "They have incredible filter selections that I use for portraits," she says. "And as for spaces, I bypass the filters and only adjust the exposure, contrast, and even out the color temperature."

### Photograph in natural light

Rosenheck says natural light (as opposed to overhead lighting or lamps) is essential for capturing the most accurate representation of a room—that's why whenever she starts a shoot, she flips off all the light switches in the

home. "It may be counterintuitive, but natural light yields the most accurate representation of the room's color and all the beauty within it," she says.

### Use a tripod

Investing in a simple tripod for your DSLR or an attachment for your smart phone is the most reliable way to ensure straight lines. "A classic rookie mistake is expecting superstar results from holding the camera by hand when shooting home interiors and architecture," Rosenheck says. "My goal is for the viewer to experience a sense of relief with my images, and when the lines are off, this results in visual tension and the viewer's eye immediately focuses on the crooked lines."

### Be a straight shooter

It's fun to play with angles, but Rosenheck says the most crisp and clean images are shot straight-on. So rather than snapping an overhead photo of your kitchen, aim for a straightforward shot. "Overly complicated angles result in fussy images and confusing focal points," she says. "If you want to play around with angles, I suggest letting these be closer detail shots."

DEFINING A VISION FOR YOUR PHOTOGRAPHY IS THE FIRST STEP TO MAKING SURE YOU TAKE PHOTOS THAT FEEL LIKE YOU AND REALLY CAPTURE YOUR STYLE.



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## Interior Photography (continued)



### Keep composition simple

At the end of the day, composition—what's actually in the photo—is far more important than the camera you have in your hand. "Composition enables the space's story to be told

through object arrangement and placement," Rosenheck says. "I can communicate a particular object of interest through my focal point, or, alternatively, I can introduce a moment of relief by emphasizing the negative space."

While there are numerous theories behind composition, Rosenheck recommends photographers focus on three things: achieve straight lines, balancing your layers, and letting the rule of thirds guide your lens.

## Softboxes

A softbox is an enclosure designed to fit around an artificial light source, such as a flash tube or halogen lamp. Its reflective interior intensifies the light output and projects it through its only means of escape—the front diffusion screen. This creates a quality of light long appreciated by photographers and videographers, which resembles the softer light one might find streaming through a window. It also creates square or rectangular highlights in the reflective surfaces of your subjects. The "soft" name stuck because of the quality of light this type of modifier emits.

Early softboxes were made of hard materials such as plywood, unlike today's lightweight materials, such as polyester and nylon. However, the concept is the same—light is contained as it bounces inside an enclosure and is diffused through a translucent white panel.

### Softboxes vs. Umbrellas

Since many photographers "step up" from the old diffusion standby, umbrellas, let's briefly explore the differ-

ences between umbrellas and softboxes.

An umbrella is incredibly easy to set up—no question about that, although softbox manufacturers like Chimera keep coming up with speed rings with jointed mounting holes that snap into place un-tensioned. Then there are also softboxes from companies such as Westcott, with umbrella-type action, so we at least have some partial parity here.

### Westcott Apollo Deep Umbrella

One of the few benefits of umbrellas is the round catchlights they create in a portrait subject's eyes—rectangular reflections just don't look as natural (unless you're trying to replicate window light). Of course, you can use a circular mask over a square or rectangular softbox, but that's another step in setup. Then again, you could also purchase an octagonal softbox, but more about that later.

Softboxes and umbrellas condense and focus the 180-degree beam angle of the light source, no matter what

size they are. When used at the same distance, a larger umbrella will have a wider beam angle than a smaller umbrella, and it's important to match its size with the size of the subject. In any case, umbrellas have a beam angle of approximately 135 degrees and lots of what's called "spill light" that's very hard to contain.

Softboxes, on the other hand, do contain the light and I think it's hard to dispute that they're much better at doing this than umbrellas. Out of the box, their beam angle is roughly 90 degrees. Spill light is greatly reduced and the light is easier to direct than the wider wash of the umbrella. In fact, major softbox makers produce optional honeycomb grids that reduce the beam spread to 60, 40, and even 20 degrees, which is a real benefit because the grid provides the directional control of a reflector with a soft, flattering quality of light and manageable contrast with open shadows. You're also less likely to have a piece of the softbox in your shot as you jockey for position on set to make light-intensity adjustments.

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## Westcott Pocketbox Mini Softbox

Umbrellas and softboxes have optional interiors of white, silver, or gold. One advantage of umbrellas is that on so-called convertible umbrellas, you can swap out the interior, although I wouldn't call the process easy. Softboxes, on the other hand, can accept additional diffusion inside for creating an even softer light. If you want to dive deeper into umbrellas and how they compare, Bjorn Petersen has put together another guide on how to choose one.

## Flexibility

Although all softboxes aren't created equal, softboxes are more able to render diffused light—unless, of course, you are using a 6' umbrella. And you're able to regulate how much diffusion is available, depending on your needs. This is one reason to consider buying a softbox with a removable front diffusion panel. Most of these have removable interior baffles that thwart hot spots in the output. Major manufacturers make front diffusers of different strengths and some even have filter panels that convert the output to daylight or tungsten balance, depending on your source. In any case, you also have the option of not using any diffusion, which turns your softbox into one big reflector.

## Impact Luxbanx Duo Medium Square Softbox

### Sizes and Shapes

Choose the size based on the coverage you need for the subject and the quality of light that you're seeking. In general, you wouldn't use a

12 x 16" softbox for a full-length portrait unless you're doing it for effect, and you wouldn't use a 54 x 72" softbox for a head or small product shot. However, there is a quality of light consideration, related to size. The farther away your subject is, coupled with its size in relation to your softbox, the harder and harsher the light source. While not a "point light source," the 12 x 16" softbox is a lot closer to that definition than the larger light bank, but you could match the 12 x 16" look if you pulled the 54 x 72" back far enough.

Put simply, the bigger the light source, the softer the rendering and the wider the beam angle, and therefore, the coverage. Also, the closer you move the softbox to your subject, the softer the wraparound light you get.

The softbox type governs the shape of the light you're putting on your subject. Much of a large softbox's surface area is wasted on a headshot, for instance, but it's ideal for small- to medium-sized groups. This, among other factors, is the reason for different size and shape softboxes.

### Rectangular

This is what most people think of when you say "softbox." Longer on one side, they're ideal for full-length portraiture and vertical compositions in general. Some have speedrings are made to rotate so that you can orient the box in landscape mode for wide, horizontal coverage. A rectangular softbox casts win-

dow-shaped highlights in reflective objects, but the catchlights it creates in a portrait subject's eyes are less than ideal.

### Interfit Foldable Rectangular Softbox: Square

A favorite of portrait studios, this shape works with most subjects, although there is some fall-off in full-length shots and catchlight rendition is much like the long rectangle. Square softboxes are great for low-ceiling shooting spaces, and their shape is ideal for head-and-shoulders portraiture and small groups.

### Angler Collapsible Softbox: Strip

The long, thin strip box is also capable of rendering soft, flattering light, but can be better confined and aimed when compared to the broad wash of standard rectangle, square, or octagonal banks. While the dimensions of a rectangular softboxes have a ratio of approximately 1:1.3, short side to long side, strip banks are about 1:4, making them ideal for edge or rim lighting to separate the subject from the background, and also overhead as a hair light for individuals or groups, depending on the size of the softbox. This shape is also handy for lighting backgrounds from above or below, and makes creating a "gradient" background easier for product photography. Strip banks create long, elegant highlights in glassware and other reflective objects.

### Impact Luxbanx Duo Small Strip Softbox: Octagonal

Octagonal softboxes have



PUT SIMPLY, THE BIGGER THE LIGHT SOURCE, THE SOFTER THE RENDERING AND THE WIDER THE BEAM ANGLE, AND THEREFORE, THE COVERAGE.





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There is a suggested donation of \$25 per year. Members should provide: Email Address, Mailing Address, and Phone Number.

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The Camera Club of Central Minnesota publishes a monthly newsletter which is distributed via e-mail. The newsletter will contain information about up-coming meetings, summaries of previous meeting, recommendations for photographers, announcements of photographic workshops, and other material that seems appropriate.

If you would like to send suggestions, comments, or other communications concerning the club or newsletter, please send your e-mail to [rheath@tds.net](mailto:rheath@tds.net).

### Softboxes (continued)

become popular for their soft output, shallow design, and rapid fall-off as you get farther from a background. The octagon's large surface area gives it a signature soft, wrap-around quality of light that's very flattering at virtually any point, on or off axis. The octagon has, arguably, the best rendering of natural-looking, circular catchlights in the subject's eyes and, unlike the umbrella, there are no visibly distracting frames or spokes.

use and narrows the beam spread while maintaining a soft quality of light, with manageable contrast. Available in 20, 30, 40, and 60 degree spreads, grids add directional control as well as spill light control, making them valuable for use as edge lights or hair lights on a boom where an umbrella would just get in the way. Used on a main light, the grid nicely isolates the subject from the background for an elegant, painterly look.

#### Fabric Grids

Probably the best softbox accessory ever made, the fabric grid folds flat when not in



### Computational Photography

Phone cameras have undergone huge improvements in recent years, but they've done so without the hardware changing all that much. Sure, lenses and sensors continue to improve, but the big developments have all been in software. So-called computational photography is using algorithms and even machine learning to stitch together multiple photos to yield better results than were previously possible from a tiny lens and sensor.

Smartphones are limited by physics. With a small sensor, narrow lens aperture and shallow depth, there are serious challenges in designing an improved phone camera. In particular, these mini cameras suffer from noise -- digital static in the images -- particularly in low light. Combine this with limited dynamic range, and you've got a camera that can perform pretty well in bright daylight, but where image quality starts to suf-

fer as the light dims.

To work around this, companies have had to get creative. The biggest advances have all come from ways to stack or combine multiple images in the phone. Depending on how many images are stacked, and how clever the algorithms, this technique can be used to reduce noise, boost the tonal range, take clear shots in the dark, or even artificially boost resolution.

These techniques were known to photographers, and they're doable in programs like Photoshop, but the success of computational photography is having all these tricks happen seamlessly and nearly instantaneously, inside your phone. All you have to do is click the shutter, and the software handles the rest.

