

Total time:
4-6 hours



Difficulty Level: Challenging

Skill Points:

- Learning how compositing works
- Discovering inexpensive alternatives to full programs like Photoshop
- Creating some composite images

COMPOSITING IMAGES

TO REACH NEW LEVELS OF CREATIVITY



Compositing is the combining of visual elements from separate sources into a single photograph. The idea behind the final photo may be to create something realistic or something more fantasy oriented.

KEY LESSON: Compositing used to be difficult since it used to require expensive layering programs like Photoshop. Now, you can composite images using phone-editing apps, which is a great way to get started - if you don't want to spend a lot of money on a full-featured editing suite. Our favorite phone editing apps for compositing are: *Photoshop Mix* (requires free Cloud account), *Snapseed*, *Photoblend Pro*, *Enlight*, *Blend Editor*, and *Fused*. They are either free or only cost a few dollars.

EQUIPMENT: Any camera including mobile | Any lens | **Software:** This requires a layer-based program such as Photoshop (Lightroom will not work), or an appropriate smart phone app.

SAMPLE PHOTOGRAPHS



Waterscapes: Here are two photographs that can be combined, through compositing, to create a stronger single image. If you're completely new to compositing, start with a simple app. For a beginner, we recommend *Fused*. Try each app since all have one or two composite techniques that they are really good at.



Red Light & Snow: With compositing, you can do what's called *overlay* imaging: where you "blend" parts of each image together. Many apps refer to compositing as *blending*. Here, the original was *blended* with a texture layer, and a semi-transparent teal colored layer, to create a final image that was far more interesting.



Window: When you begin compositing, you will start seeing objects, and scenes, as pieces to a puzzle rather than finished photos! There are two key factors to compositing: layers and masks. If your image file was created with a different camera, such as a DSLR, simply transfer the file to your app for editing (it may require a .jpeg file). Make sure that all of the resolution settings are set to the highest resolution: both for importing & exporting.



ACTION ASSIGNMENT!

- 1- For the purposes of this Action Assignment, we want you to use an app. Compositing in Photoshop requires a far deeper explanation (See Photzy.com for the Masking Guide). We encourage you to use the app "Fused" (easiest), Photoshop Mix (easier with full features), or Blend Editor (numerous creative options).
- 2- Pick two photographs to composite. One photograph should be simple and without a lot of detail. The other photograph should be a headshot of a friend or family member against a black background.
- 3- Blend the two shots using your apps. Try all the different settings to get familiar with them.

HOW DID YOU DO?

- Do you now have a basic understanding of what compositing is and how it works? Which app worked best?
- Are your composited photos visually stronger, and more interesting, than either of the individual photos used?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: COMPOSITING**

Total time:
6-8 hours



Difficulty Level:
Challenging

Skill Points:

- Learning about the Litho Film Effect
- Discovering how to create it in post-production
- Developing the skills to evaluate a subject for the Litho Film Effect

THE LITHO FILM EFFECT

TO REACH NEW LEVELS OF CREATIVITY

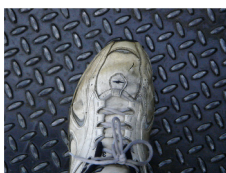


Back when film was more popular, there was a creative option called "Litho Film". Litho is a black and white orthochromatic film with one very distinct characteristic: when processed with a particular developing agent, it only reproduces **black tones and white tones**. There are **no middle tones**. The resulting images can have a striking graphic effect.

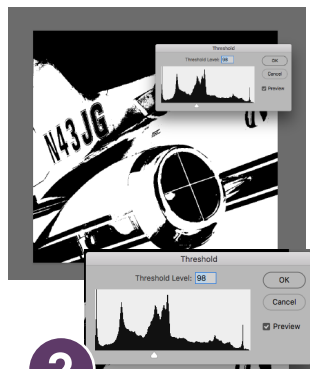
KEY LESSON: We can digitally recreate the Litho Film effect. If you have Photoshop this is quite easy. Open your photo, navigate to the Image drop-down menu, select Adjustments, and select Threshold. If you do not have Photoshop, you can still recreate the effect in other programs. It just takes a bit more work. **Images that already have high contrast, and strong dominant shapes, lend themselves well to this technique.**

EQUIPMENT: Any camera including mobile | Any lens | Post-processing Software

SAMPLE PHOTOGRAPHS



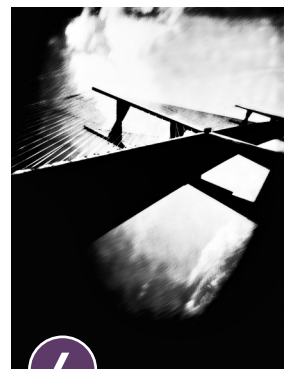
1



2



3



4

1- This example shows you how the Litho Film Effect can bring some visual interest to a mundane shot. Depending on your process, you may not be able to eliminate ALL of the middle tones.

2- The Threshold Adjustment, within Photoshop, quickly and easily reproduces a true Litho Film Effect. By moving the Threshold Level slider, the software determines how much of the original image file will be converted to black... or white.

3- Use any editing software you have. Set the color saturation setting to zero. Set the contrast adjustment to maximum. Adjust the brightness level up and down – stop when it looks close to your desired outcome. Adjust the black and white points using levels (or an equivalent). It now becomes a game of modifying these settings until you achieve a desired look!

4- If you're out shooting, and you don't have the best light, the Litho Film Effect can save the day. Interested in Abstract photography? **See the Abstract Action Card**, this technique lends itself well to this genre. Don't be afraid to go crazy with creativity.



ACTION ASSIGNMENT!

- 1-** Organize a photo shoot where you will go in search of subject matter that you believe will make interesting Litho Film Effect photos. Create at least 10 different photos with 10 different subjects. (Developing an eye for this technique takes time.)
- 2-** Organize a portrait session with a friend or family member. Contrary to normal thinking- use the harshest most highly contrast producing light source that you can. Study the contours of their face and body as you light them. Remember, you will have black tones, and white tones, with little or no tone between. So, shape is important. (Study the woman portrait above). Shoot at least 10 different portraits while changing the lighting and the angle.
- 3-** Go into your post-processing session and create a Litho Film Effect with all 20 images. Use whatever method you have, or even try different methods.

HOW DID YOU DO?

- Did all of your chosen subjects in Action Assignment #1 work out well in the Litho Film Effect? Or, did you discover how some subjects work better than others?

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: LITHO FILM EFFECT

Total time:
3-6 hours



Difficulty Level:
Very challenging

Skill Points:

- Creating astrophotography images without star trails
- Learning how to calculate the length of shutter speed needed for star trails
- Applying the 500 Rule during a photo shoot

THE 500 RULE

IS FOR THE STARS | ASTRO-PHOTOGRAPHY



PHOTZY.COM

If you've ever dreamed of creating beautiful Milky Way pictures, or landscape images combined with a sky full of shimmering stars, then this Action Assignment is for you. The 500 Rule is about keeping the stars sharp!

KEY LESSON: This rule states what the maximum time of shutter speed, with stars, can be that will NOT result in star streaks. You divide the effective focal length of the lens into the number 500. So, a 50mm lens, on a 35mm camera, or a full frame digital camera, would be $500 / 50 = 10$ seconds of exposure before star trails become noticeable. For sensor formats other than full frame (35mm film), a further calculation is required (see example photos below).

EQUIPMENT: Any camera with manual exposure | wide-angle to normal lens | Tripod
Remote Shutter Release - recommended | Post-processing software

SAMPLE PHOTOGRAPHS



- 1- Due to the rotation of the Earth, the stars record as streaks of light "through the sky" in long night time exposures. Star trails can be a desired effect, but we may also want points of light (as we see the stars with our eyes). To achieve "points of light", you need to use the "500 Rule".
- 2- You may also have heard of the **600 Rule**. The 600 Rule provides slightly longer exposure times, which may result in star trail blur. The advantage is that it allows more light to reach the sensor (or film) for exposure. We recommend the 500 Rule.
- 3- When you work with a smaller sensor camera, you must include an extra calculation, which takes into account the crop sensor factor (unless it is a DX lens designed for the smaller sensor size). Crop sensor factors for these brands include: Sony and Nikon/1.5X & Canon 1.6X. Here is the 500 Rule formula, with the Nikon "crop factor" included (as an example): $50\text{mm lens} \times \text{Nikon } 1.5\text{x crop factor} = 75\text{mm equivalent focal length}$. $500 \text{ divided by } 75\text{mm equals a } 6 \text{ second maximum exposure length before star trails occur (always round down)}$.
- 4- If the stars are sharp, and your picture exhibits one to several trails, this is not a failing of the 500 Rule. What you have captured is likely an airplane contrail, or a meteor.
- 5- You can also leave the 500 Rule behind, and experiment with creative star trails in your shots.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photos: Find an area with minimal light pollution. Have a clearly definable horizon line at the base of your photograph. Apply the 500 Rule to establish exposure length. Be sure to include the lens focal length and the crop factor (if necessary). Set your aperture to the widest setting and the ISO to 1600. Adjust as necessary for proper exposure after a test shot. Shoot in Camera Raw for maximum post-processing capability.
- 2- Shoot a number of frames starting at your calculated exposure length, and then increase and decrease the length of time. Adjust the ISO to keep a correct exposure. Keep good notes.
- 3- Adjust color, contrast, clarity, and saturation in post-production. All digital astrophotography requires post-processing to excel.
- 4- Print all of your different versions with your home computer printer or a photo lab.

HOW DID YOU DO?

- Did the 500 Rule correspond as the sharpest image with no star trails and the best exposure?
- Do you now see how the exposure length affects the star trails?

Total time:
2-3 hours



Difficulty Level: Challenging

Skill Points:

- Understanding what color saturation is
- Discovering how to accurately adjust color saturation
- Learning what over color saturation looks like

COLOR SATURATION

CREATING ALTERNATIVE ART

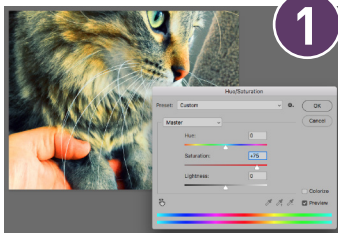


Color theory is extremely complicated. This time we'll look at color saturation. Over-saturation of color photography has been popular in recent years. There is nothing wrong with that -when the technique fits the subject. However, you should have an understanding of the difference between low saturation, accurate saturation, and over-saturation.

KEY LESSON: A hue is a pure color (they appear on a color wheel). Not all colors are hues. A color that has been tinted, shaded, or toned is not a hue. When you increase the color saturation level of an image, in post-production, it only affects the pure hues: red, green, yellow, and blue.

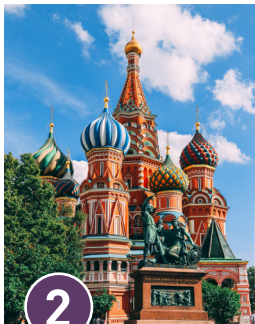
EQUIPMENT: Any camera including mobile | Any lens | Post-processing Software

SAMPLE PHOTOGRAPHS



1

1- Outwardly, this image appears to have no hues. It's not dominant in red, green, yellow, or blue. So, you may be tempted to severely increase the saturation level to bring out some color. The software searches for any pure hue that it can find, and increases the saturation. This results in colors that look like crayon markings, not natural looking.



2

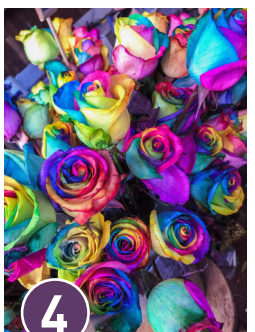


3

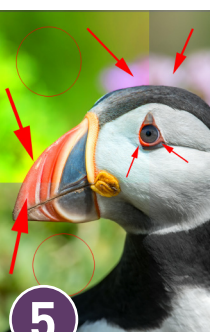
Accurate Saturation

2- This photo has a lot of red, green, yellow, and blue. Notice how the colors are vibrant without having the *chalky crayon* appearance. The color saturation level has been set properly to enhance the photo.

3- This example photo also has red, green, yellow, and blue. The colors do not look as vibrant as in the previous example. This photo could use a little increase in color saturation during post-production. The lighting of a scene affects color saturation. Bright light increases color saturation. Soft, less intense, lighting lowers color saturation.



4



5

Accurate Saturation

4- The color saturation level for this shot was set very high. In this case, it works, as the image is somewhat abstract. If the previous shot, of the child, were adjusted to this level, it would look awful. The technique really should fit the subject. Of course, this is up to individual interpretation.

5- This photo demonstrates 3 different color saturations levels. The lower left part of the image is neutral, as it emerged from the camera. The upper left has had the saturation level increased 50%. The very right side of the image has had the saturation level decreased by 50%.



ACTION ASSIGNMENT!

- 1- Pick 6 images from your files. Each photo should display a different color scheme. Pick one with a lot of red, one with green, one with yellow, and one with blue. Pick one that is strong in all of the hues. Finally, pick one that appears absent of all of the hues (similar to the cat picture).
- 2- Take each photo into your editing software and create 3 different versions of that image file. One with the color saturation as it was created in the camera. One with the color saturation increased by 50%, and one with the color saturation decreased by 50%.
- 3- You should end up with a total of 18 image files. Print them all out, and study them as a group.

HOW DID YOU DO?

- Do you now understand how the color saturation level setting will affect your photographs?
- Do you now feel confident to judge color saturation levels, and also decide when they may be set too high?

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: COLOR SATURATION

Total time:
5-7 hours



Difficulty Level: Challenging

Skill Points:

- Understanding how to implement mood into a photo
- Discovering how color affects mood
- Learning how to use lighting and camera angle to create mood

THE SECRET WEAPON CREATING MOOD



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A photograph will hold a viewer's attention longer when it touches as many of the senses as possible; this includes sight, sound, taste, smell, and feel. When a photo touches these senses, what we are really talking about here - is the concept of mood. What is mood in photography?

KEY LESSON: Mood is created in a photograph when it causes the viewer to place him or herself into the moment, and/or, it causes them to internally remember a moment that creates an emotional reaction. It's a complex subject. In this Action Card, we will review three areas of creating mood: color, camera angle, and props.

EQUIPMENT: Any camera including mobile | Any lens | Post-processing software

SAMPLE PHOTOGRAPHS



1

1- This photo creates a **mood of fantasy**. It is a very easy idea to execute. Color plays a huge factor: orange and red colors tend to create a mood of attraction. Adding the firefly spots was super easy using the app, *Lens Distortions*.



2

2- Red and orange attracts. Blue and green repels, especially when used in combination. And thus this photo uses that combination to create a **mood of mystery**. The red and orange excite a viewer to see what's inside. However, the blue exterior almost feels like a warning.



3

3- Warm colors, including yellow, often evoke feelings of happiness, optimism and energy, which is in direct opposition to the woman's pose, expression, and the choice of camera angle. When trying to set a mood, make sure you don't send mixed signals to your viewer.



4

4- This picture evokes a somewhat **negative mood**. This is created through camera angle and pose. What if the photographer had dressed the model in bright yellow? That would have ruined the mood! These little steps are important to learn advanced photography.



5

5- Mood is established through the choice of an old decaying subject, a dramatic 'Dynamic Angle', and post-processing with the 'Pastel Color Effect'. Each choice helped to set the mood. Can't you almost taste the dry air or hear the metal grinding as it swings under pressure from the wind? That's a mood!



6

6- This example is a little direct. Don't be afraid to explore that! Set goals, and then create photos that achieve those goals. For the Action Assignment create four pictures where only the mood will change in each photo. (See below.)



ACTION ASSIGNMENT!

- 1-** Go on a 3-hour photo shoot where you explore color, or color combinations, to set a very specific mood that you decide on as you're taking the pictures.
- 2-** Create 4 images that have the word LOVE physically displayed in each one. Set the mood for each photo as follows: **First shot:** the mood is love. **Second shot:** the mood is hate. **Third shot:** the mood is loneliness. **Fourth shot:** the mood is happiness.
- 3-** Use post-production as necessary to hammer home your mood setting images.
- 4-** Print 4 shots from Action Assignment #1 and all four images from Action Assignment #2.
- 5-** Ask friends and family to look at your resulting images. Ask them how each image makes them feel.

HOW DID YOU DO?

- Do you understand how mood affects a viewer's experience with your images?
- Did your friends and family understand your intent? If not, how can you improve your next effort?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: CREATING MOOD**

Total time:
4-6 hours



Difficulty Level:
Very challenging

Skill Points:

- Learning how exposure blending works
- Learning how to shoot and blend several images
- Evaluating the end result of an exposure blend

EXPOSURE BLENDING SAVES THE DAY

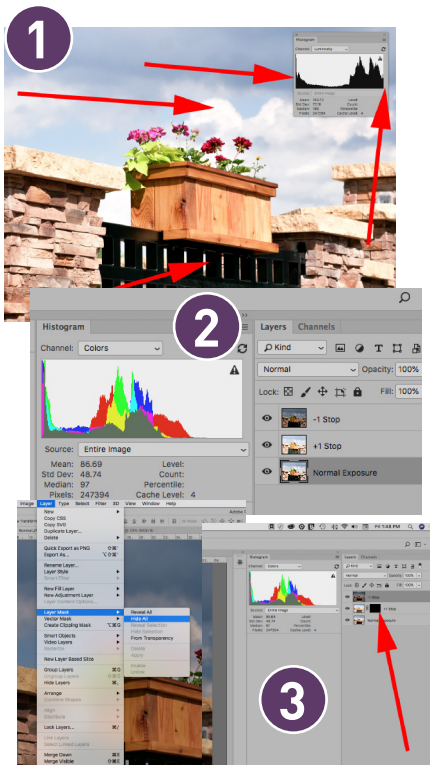
Some scenes have a dynamic range outside of the camera's ability to accurately record. Exposure blending helps to **reign in** extreme contrast.



KEY LESSON: Exposure blending requires a layer based editing program. Keep the aperture setting the same for all exposures. Shoot one frame, at the exposure indicated by the camera meter, and then one frame that is underexposed by 1-stop, and another over-exposed by 1-stop. Sometimes 1-stop isn't quite enough exposure change. We recommend bracketing 2-stops in both directions.

EQUIPMENT: Any camera with exposure bracketing capability | Any lens | Layer-based software

SAMPLE PHOTOGRAPHS



- 1- Normal Exposure:** In high contrast situations, the camera did its best to create a balanced exposure. Yet, the histogram reveals that the dynamic range was too great, and both the highlights and shadows were clipped off.
- 2- Layered:** Place the three images into a single multi-layered image file. Put the *normal* exposure on the bottom, the +1 stop file next, and the -1 stop file on top. Be sure to "Align" the three layers, so that there is no ghosting. You may have to crop along the edges of the shot after the alignment is complete.
- 3- Layer Masks:** On each of the upper two layers create a "Hide All" (appears as a solid black panel) layer mask. We will use the +1 stop layer to raise the dynamic range of the shadows, and we will use the -1 stop layer to lower the dynamic range of the highlights.

Blending: Use the color white and the brush tool. Set the Hardness of the brush to 0. Set the opacity between 15% and 35 %. Select the +1 layer and paint where you wish to bring up the shadows. Select the -1 layer and paint where you wish to reduce the highlights. The histogram is no longer clipped off. If you paint the mask and don't like the result, switch the color to black and paint over the area that you're unhappy with. When you're done, you should save the file in a layered format, as well as in a flattened version.

+ 1 Stop



- 1 Stop



Layered



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photo: High contrast scene / Deep shadows and bright highlights / Use a static subject (no cars and no people) / Use a tripod / shoot three frames: Normal, Under 1-stop, Over 1-stop
- 2- Import your images into your editing software and blend them. **Watch the exposure blending bonus video.**

HOW DID YOU DO?

- Did your files line up when layered? Do you understand how blending compresses the dynamic range?
- Were you able to produce a better photograph than any of the three original image files?

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: EXPOSURE BLENDING

Total time:
2 - 3 hours



Difficulty Level:
Very challenging

Skill Points:

- Learning what the Fibonacci Sequence is
- Discovering how it created the Golden Spiral
- Using the Golden Spiral to judge your composition skills

EQUIPMENT:

- Any camera including mobile
- Any lens
- Editing software with layering capability

FIBONACCI & THE GOLDEN SPIRAL

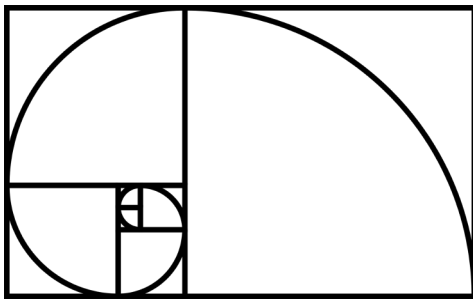


This Action Card is meant to give you an introduction into this very complex subject. In 1200 A.D. a Mathematician named Leonardo Fibonacci discovered a sequence of numbers, which is now known as, The Fibonacci Sequence. This sequence of numbers led to what is known as "The Golden Ratio", which is 1.618 to 1. As Fibonacci further explored his numbers, he developed a formula known as "The Golden Ratio", which further evolved into "The Golden Spiral". We will be concentrating on the Golden Spiral.

KEY LESSON: The reason that Fibonacci's sequence is known as The Golden Ratio is because it is found literally everywhere in the Universe. The Golden Spiral is found everything from art to architecture and in nature. We have included a Golden Spiral overlay that you can copy and paste into your own images to see how they fit into the spiral.

- Watch the Bonus video showing you how to do this. -

SAMPLE PHOTOGRAPHS



Golden Spiral: Fibonacci's sequence of numbers led to the Golden Ratio, which further developed into the Golden Spiral. The Golden Spiral has proven itself to be one of the most, if not the most, pleasing composition pattern to the human mind.

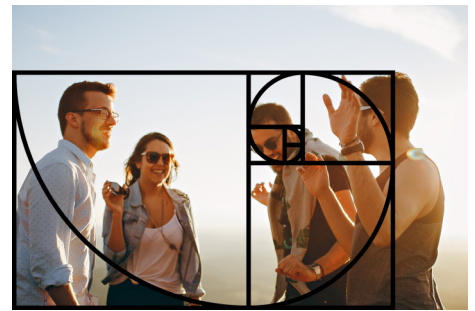
When you begin to look around, you will see the Golden Spiral is evident in everything around you: from products, to logos, to architecture, and even in nature. Some of the earliest artists in mankind's history began employing the Golden Spiral.



- 1-** The Golden Spiral is found everywhere in nature. You may have heard this mathematical equation referred to under different names such as the Golden Mean, Phi, The Divine Proportion, or even the Rule of Thirds. The Rule of Thirds was originally devised as a result of Fibonacci's Sequence.



- 2-** Use the included Golden Spiral .png file, and a layering program, to check your own photography. By copying the .png file, and pasting it into a new layer over the photo, we can see how we need to crop the image to "fit" the Golden Spiral.



ACTION ASSIGNMENT!

- 1-** Watch the Golden Spiral Bonus Video and download the .png file onto your computer
- 2-** Using a layer-based program place the Golden Spiral onto your images and judge your composition.

HOW DID YOU DO?

- Were you composing to the Golden Spiral ratio?
- If not, were you able to use the .png file as a guide to crop into a better composition?

Total time:
2 - 3 hours



Difficulty Level:
Very challenging

Skill Points:

- Learning focus stacking
- Discovering how to create a focus stacked image
- Creating a focus stacked photograph

EQUIPMENT: - Tripod

- DSLR, mirrorless, or hybrid camera w/ focus stacking feature if possible
- Lens w/ manual focus capability
- Software w/ layering capability

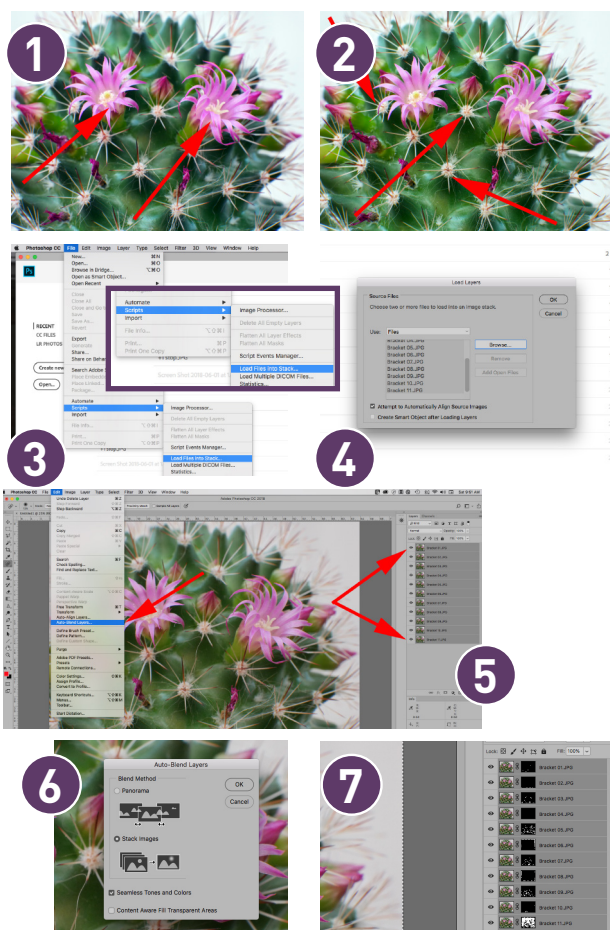
FUN WITH FOCUS STACKING

Focus stacking is the photographer's dream come true.

It allows us to cheat the physics of optics, and thus create a depth of field window that simply was not possible before digital photography. Some cameras have a "Focus Stacking" feature built into them, which makes the in-camera portion of this technique a snap.



KEY LESSON: If your camera does not have the built-in feature for focus stacking, use manual focus. Always use either Manual Shooting Mode or Aperture Priority mode. Do not change the f/stop throughout the process. A tripod is essential. Place the lens critical focus onto the **nearest point within your scene** - where you want the DOF window to begin. For each successive shot, move the focus barrel 1/8th of a turn toward infinity. We recommend creating between 5 - 25 shots. *NOTE: The term stacking, in Lightroom, is not the same function.*



STEP-BY-STEP

- 1- The camera settings for this single shot image were: 150mm lens with an extension tube, 1/100th of a second shutter speed, f/11, ISO 1600, Aperture Priority, Pattern metering mode. Critical focus was placed where the red arrows are pointing. DOF was less than .5 inch (1.25 cm).
- 2- Focus stacking extended the DOF window down to the body of the cactus. 11 photos were created. For each shot, the lens was focused 1/8th of a turn closer to infinity.
- 3- We are using Photoshop. Any full-featured layer-based editing program should have this feature. Select **File>Scripts>Load Files into Stack**. You can also manually load separate image files into a single image file stack using the layers palette.
- 4- Using **Browse** navigate to your files and select them. For this photo we created 11 frames. Select **Attempt to Automatically Align Source Images**. Even when using a tripod, there may be movement between frames.
- 5- Select all of your layers. Select **Edit>Auto-Blend Layers**.
- 6- Choose **Stack Images**, and select **Seamless Tones and Colors**. Click OK.
- 7- Photoshop automatically examines each layer, and then selects the sharpest area within that image. It then masks out the remainder of the picture, in each layer, and blends them together. Flatten your image, and save.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photo.
 - Follow the shooting and editing guidelines listed above.
 - If there was camera movement, you may see some ghosting along the edges of your blended focus stack. Leave a little extra room when shooting, and crop the ghosting in post-production.
 - If you're unsure about creating and working with stacks, watch the "Exposure Blending Bonus Video".

HOW DID YOU DO?

- Did you create a focus-stacked image with very little ghosting? If not, practice keeping the camera still.
- Were you able to successfully load and execute a blended focus-stacked image? If not, try again.

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: FOCUS STACKING**

Total time:
3-5 hours



■■■■■■■■■■□□□□
Difficulty Level: Normal

Skill Points:

- Recognizing what Grunge Photography is as a genre
- Creating Grunge images either in-camera or using editing apps

GRUNGE

CREATIVE DECONSTRUCTION

The word 'Grunge' originated in the early 1990s within the music industry. It started in the Seattle, Washington area with the advent of 'Punk Bands'. The genre is often described as dark, old, and portraying peculiar vibes. It's meant to shake-up a viewer's senses.



KEY LESSON: Grunge photography, also known as 'Lo-fi', often requires the use of old or toy lenses. Toy cameras, film and digital, are also a favorite. While there is an emphasis on using film for Grunge Photography- you can mimic most of the effects easily using editing apps.

EQUIPMENT: Any camera (One Action Assignment requires a film camera) | Any lens | Specialized Editing App

SAMPLE PHOTOGRAPHS



Using Film

Left: This is a classic example of Grunge Photography created using film and a toy camera. Notice the vignette, the pincushion perspective, and the obvious out of focus areas. The technique often exudes high contrast and unusual color shifts.

Right: Another technique includes using film with the wrong color balance for the lighting, cross-processing the film, and then scratching it with various utensils.



Using apps

Left: With app software you can take a normal photograph and turn it into a piece of grunge beauty. This is known as 'Deconstruction'. This means taking a normal image file and applying grunge effects using post-processing software.

Right: This image was deconstructed using the app *Snapseed*. It is one of the most versatile apps on the market, and it's free.



Make it interesting

Grunge photography, or alternative forms of photography, are a great resource when you have limited access to a photo opportunity. Perhaps the weather is bad, or you simply have dull lighting on the one day you can take pictures. These techniques can put some pizzazz back into a shot that is well composed, but lacking visual punch.



ACTION ASSIGNMENT!

- 1- Download the free *Snapseed* app onto your smartphone or tablet
- 2- Spend an afternoon out shooting pictures. Keep in mind that you are going to deconstruct them into Grunge Photography. Look for subjects that fit to the genre, or perhaps need help due to poor lighting.
- 3- If you have a film camera. Shoot a roll of film using the wrong color balance of light. Process your film uncut. Scratch the film with pins, scissors, and various kitchen knives. Study the entire roll for interesting compositions. Don't be afraid to include parts of two different frames. Scan at least four shots from your roll. Post-process them further to your liking.
- 4- Print out all of your photos and share them with others.

HOW DID YOU DO?

- Did you find subjects that fit well into the Grunge Photography theme?
- What type of feedback did you get from others that saw the photos?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: GRUNGE**

Total time:
4-6 hours



Difficulty Level:
Very challenging

Skill Points:

- Expanding knowledge on histogram use
- Learning to read the histogram
- Evaluating histograms and making adjustments

DEMYSTIFYING THE HISTOGRAM

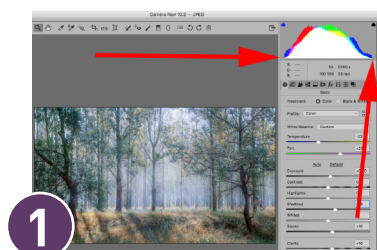
The histogram is one of the most powerful tools at your disposal in digital photography. It provides a measurable account of what is happening with the pixels of your photograph. This tool originated from mathematics. It merely plots data. It takes experience to interpret what the histogram is telling you about your photograph and why.



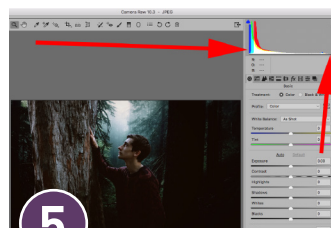
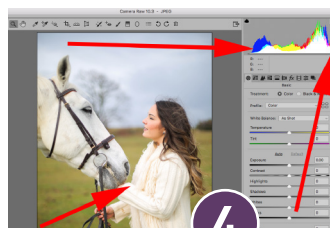
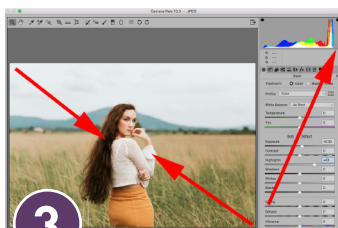
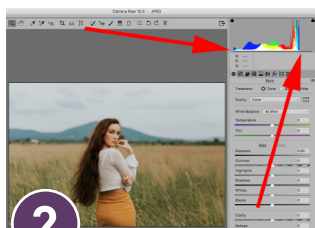
KEY LESSON: Using the histogram, you can evaluate: exposure, contrast, brightness, and color balance. The basic line on histograms is that they should appear as a mountain range that ends at either end of the graph before being clipped off.

EQUIPMENT: Any camera including mobile | Any lens | Photo Editing Software

SAMPLE PHOTOGRAPHS



1- The left side of the histogram represents the deepest blacks. The right side shows the brightest whites. Everything in-between is the various tones. Looking at the histogram vertically. The baseline is zero. As the graph rises from the baseline, it tells you how many pixels are in a particular tonal range. This histogram is telling us that there are many midrange tones.



2- This image appears to have a full range of tone. The histogram tells us that it doesn't. The blacks look good. But, the whites have fallen far short on their side of the graph. The histogram has just told us that this shot is **low in contrast**.

3- Adjusting the Exposure and the Highlight values moved the histogram toward the right side, correcting the contrast. When adjusting the histogram, always watch the preview window. If you're working the whites side- watch the brightest areas, so that you don't over-adjust and lose detail. When adjusting the blacks watch the shadows in the picture so that they don't block up.

4- This image is mostly white tones. Trying to adjust it back to the left would ruin the shot. Using the Highlights slider, the clipping can be removed. The elevated blue area tells us that there is predominance of blue in the shadows. The white scale is strictly brightness value. The individual colored scales can help you to determine if your image has an color bias.

5- When a shot is made of predominantly dark tones, the histogram is going to be skewed to the left; **it does not indicate underexposure**. It's also important to have some part of the histogram reach the whites side (if possible). Don't try to move the entire histogram to the right, or you'll ruin the low-key effect.



ACTION ASSIGNMENT!

- 1-** Organize a photo shoot similar in content to the example photos.
 - Place your model in three situations: a dark setting that still has some white areas, a white setting that still has some dark areas, and a setting with a full range of white to dark (study the example photos)
 - Create a number of different shots and vary your exposures by no more than + or - one stop.
 - Go through your files and pull 10 images. Pick some that are too dark, some that are too light, some that look good to your eye, some that are close, but you believe could be better. Study all the histograms on your photos. Try to adjust them.

HOW DID YOU DO?

- Do your finished photographs reflect a histogram that matches your intent?
- Were you able to adjust the histogram and make your images better?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: HISTOGRAM**

Total time:
3-5 hours



Difficulty Level: Normal

Skill Points:

- Recognizing lens produced aberrations in a photograph
- Using lens aberrations creatively in-camera
- Creating lens aberrations artificially using apps

THE BEAUTY IN THE BAD LENS ABERRATIONS

Camera manufacturers have worked diligently trying to perfect camera lenses. One of the first innovations that made a huge difference in lens quality was the incorporation of multi-coating. Early lenses displayed all kinds of aberrations, distortions and defects. Photographers now look to those imperfections as a source of creative inspiration.



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KEY LESSON: Lens flair, vignette, and chromatic aberrations are the most commonly known lens producing defects. Since most lenses are designed to help eliminate these as problems, the best way to creatively incorporate them back is through the use of editing apps.

EQUIPMENT: Any camera including mobile | Any lens | Specialized Editing Apps

SAMPLE PHOTOGRAPHS



- 1- This image displays two classic lens aberrations. The first one is **Lens Flare**: streaks of light coming from the light source. The second is called **Ghosting Flare**: the round aberrations present in the lower right. This is usually caused by an older lens, or a lens of poor quality with non-multicoated lenses.
- 2- A dirty lens, an old lens, or a lens of lower quality, will often display 'veiling flare' when confronted with strong backlighting. Be careful of this aberration, as it can easily ruin a photograph by wiping out important details in an image.
- 3- In recent years there has been a trend toward using toy lenses, old lenses, and manufacturers are even designing new lenses that have old world defects. These lenses will often show a vignette as well as color shifts and focus aberrations.
- 4- Most lens aberrations become noticeable when faced with backlighting. Knowing this can help you to control it, and even use it creatively, as this photographer did. You can control the amount of lens flair and ghosting flare by changing your camera point-of-view (POV) - so that the light source moves in and round an opaque object- such as the tree limbs.
- 5- There are many apps that can introduce lens aberration defects into perfect digital picture files. Some of our recommended apps are: LensFlare, Rays, LD (Lens Distortions), LightLeaker, Snapseed, and AfterFocus. These apps are easy to use, and they allow you to take a simple photo, such as this 'Dead End' image, and turn it into something visually interesting.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photos. Keep in mind that you want backlighting.
 - Shoot at sunset.
 - Have an opaque object in the shot (similar to the trees in the 3rd example photo), so that you can experiment with moving the light source in and out to vary the effect.
- 2- Select 3 photos from your image files, which contain backlighting. Download three of the above mentioned apps. We suggest starting with LD, Snapseed, and LensFlare. Play with the apps to create lens aberration defects (lens flare, ghosting, and vignette).
- 3- Print out your results and share them with others.

HOW DID YOU DO?

- Did you make creative use of the backlighting and lens aberrations?
- Did you enjoy augmenting your photos with the app software?

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: LENS ABERRATIONS

Total time:
3-5 hours



Difficulty Level:
Very challenging

Skill Points:

- Learning how Long Exposure Photography works
- Discovering what subjects work best
- Learning how to avoid the pitfalls

THE LOWDOWN ON LONG EXPOSURE

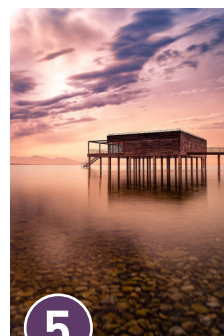
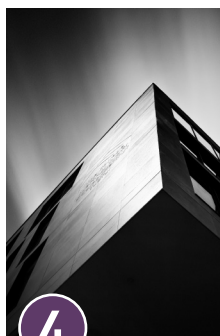
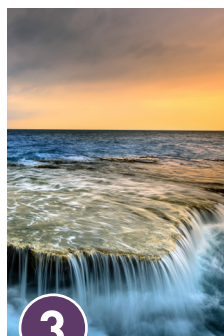
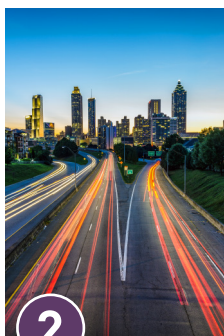


This type of Long Exposure Photography is created in bright ambient light, as opposed to shooting at night. Long Exposure Photography is unique because it mixes blurred motion, with sharp details, presented in bright ambient lighting.

KEY LESSON: For this genre of photography, you will need at least one ND filter; start with a 6-stop filter. The primary difficulty in LEP is unwanted camera movement: use a steady tripod. Experiment with exposures from 1/2 second to 30 seconds. Begin by shooting at dusk. Use a remote or cabled shutter release. Some object in the scene must be moving, and some object must be completely still. Don't shoot on bridge decks or the top of a building when starting out.

EQUIPMENT: Camera/Bulb capable | Wide-angle to normal lens | Remote release | Tripod | ND filter

SAMPLE PHOTOGRAPHS



- 1- This is a classic long exposure photo. The clouds and water are in motion, and the landscape is steady. The exposure has been slowed down significantly with the use of ND filters. The length of the shutter speed will change the effect.
- 2- Dusk is a perfect time of day to begin experimenting with Long Exposure. Mount your camera to a tripod. Shift to manual focus. Focus the lens. Determine exposure without the ND filter. Set-up the remote shutter release. Attach ND filter. Calculate the exposure adjustment with the ND filter. Set manual exposure including ISO, aperture, and then shutter speed. Fire shot. Review. Adjust.
- 3- Using a shutter speed closer to 1/2 sec will yield less motion blur depending on the speed of the movement.
- 4- The Long Exposure effect varies with the length of the shutter speed and the speed at which objects are moving. The movement of clouds may be imperceptible to the naked eye, but show sleek motion when captured at a 30 second exposure. If you're interested in Long Exposure Photography, check out Photzy's detailed Premium Guide titled, "The Complete Guide To Long Exposure Photography".
- 5- Using a shutter speed closer to 30 seconds maximizes blur, even on the slightest movement. This setting often creates a "creamy" appearance to water and clouds.
- 6- A photo killer to this technique is **unwanted** blur. Lock the camera down tight. If it's breezy outside, attach extra weight to the tripod, such as a 10 lb. sandbag. Avoid setting up in areas that move such as bridge decks.



ACTION ASSIGNMENT!

- 1- Acquire at least one ND filter. You can start with an inexpensive one. You should be able to find one for \$25 - \$40 online.
- 2- Set up 2 shoots: one for midday and one for dusk. Find appropriate subjects: movement and steady.
- 3- You need to recalculate exposure after attaching the ND filter. Most filters come with an exposure adjustment chart, or you can get the smartphone app, "LE Calculator", which is super easy to use.
- 4- Create shots of at least 6 different subjects. Vary your lens focal length and exposure times.

HOW DID YOU DO?

- Do all of your attempts have something with sharp focus present in the shot? If not, you've been tanked by camera shake. Try again.

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: LONG EXPOSURE

Total time:
4-8 hours



Difficulty Level:
Challenging

Skill Points:

- Photographing celestial bodies
- Working with apps and software
- Using long exposures properly
- Composing at night

CAPTURING THE MILKY WAY

To photograph the Milky Way, it's going to take some specialized skills, equipment, research, and patience. While that may seem daunting at first, the rewards are worth it.

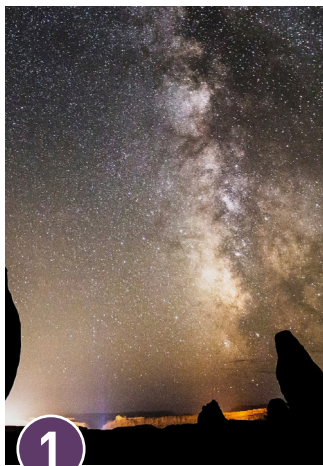


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KEY LESSON: To successfully capture a Milky Way photograph, (outside of equipment), you need the following- A location that is free of light pollution, a clear night, a proper time of the year, and the knowledge of where and when the Milky Way will appear in the sky. There are several apps to help you. *PhotoPills*, or *Skyview*, will help you find the Milky Way in the Sky. *Dark Sky Finder*, or the website *Light Pollution Atlas*, helps you to find a location with minimal light pollution. The *Dark Skies* app will help you to eliminate star trails by calculating the maximum shutter speed length for your lens.

EQUIPMENT: Camera with "Bulb" setting | Sturdy Tripod & Remote Shutter Release | Wide-angle Lens 14-24mm range 10 lb. Sandbag (optional to add weight to the tripod if it's too windy) | Post-processing software | Recommended Apps

SAMPLE PHOTOGRAPHS



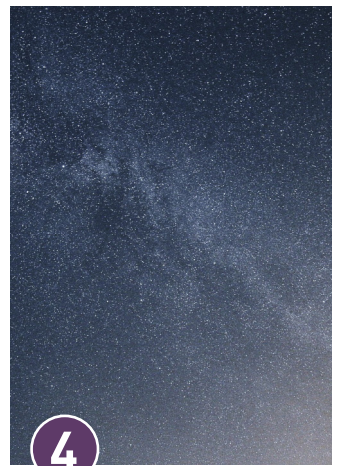
1- Light pollution can ruin your shot. You will be photographing at extended exposures.



2- Start with a simple silhouette of a structure in the foreground to add composition. If nothing is available then start by just including the sky. Eliminate star trails based upon lens focal length calculations.



3- Light pollution can also be beneficial if it's properly placed. Your exposure times will range from 20 – 50 seconds. Be aware of objects in motion that might ruin your shot.



4- An unprocessed Milky Way picture will lack color and contrast. Post-processing is a necessity.



ACTION ASSIGNMENT!

- 1-** Research a location with little or no light pollution, pick a clear night, and choose an app to help you locate the Milky Way in the sky.
- 2-** Set up your equipment. Set your lens aperture to the widest setting, and the ISO to 3200 (go to 6400 if your initial attempt is too dark). Set the shutter speed, as determined by the "600 rule" or use the "Dark Skies" app.
- 3-** Include a foreground object in silhouette, (if possible), otherwise frame for just the Milky Way in the sky.
- 4-** Use camera "Live View" - Zoom in on a star and manually focus the lens. The star should appear as a solid point with no halo. Zoom out to recompose.
- 5-** Unprocessed Milky Way photos are dull in color and contrast. Post-processing is a necessity. Shoot in camera raw. Use the Clarity, Saturation, Vibrance, and Contrast settings to make the Milky Way Pop!

HOW DID YOU DO?

- Is your shot free of star trails?
- Did your post-processing make the Milky Way pop and increase color?
- Is the Milky Way in focus?
- Did you capture an accurate exposure?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: MILKY WAY**

Total time:
4-6 hours



Difficulty Level: Challenging

Skill Points:

- Learning how mixed media works
- Creating mixed media ideas
- Creating mixed media images

MIXED MEDIA

CREATING ALTERNATIVE ART



Mixed Media is an art discipline that seeks to unify a range of art forms. This is achieved by creatively combining an array of artistic insights and crafts towards the photographic medium.

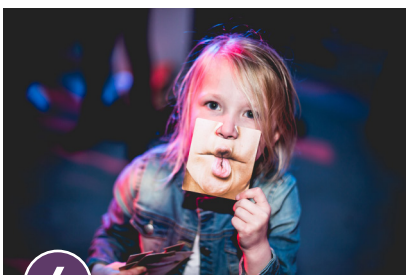
KEY LESSON: For this Action Card, we will concentrate on three mixed media ideas. Please use this as a springboard toward creating your own ideas. Accomplishing these Action Assignments should help you to visualize your photographic art... beyond simply taking a picture.

EQUIPMENT: Any camera including mobile | Any lens | Printer for Action Assignment (you will need to create a print)

SAMPLE PHOTOGRAPHS



- 1- This is a very clever use of mixed media. It combines photography with paper cutting. Think about all of the different shapes that you could cut into a piece of paper or cardboard! What type of background would you place behind your cutout to create artistic meaning or drama?
- 2- Using paint, to create unrealistic colors, turns a simple pineapple into a work of Minimalist art. What other ways could you use paint and photography?
- 3- This example photograph takes "mixed media" to the next level. In the original photograph, the model was "painted". In post-production, the photographer turned 1/3 of the image into a monochrome representation. They then took mixed media to the next level by including a paintbrush dipped in black paint. Try this: photography, paint, and "fill-in the blank".



- 4- This is an easy way to get started with mixed media. Create a photograph. Print that photograph. Use that photograph as part of a new photograph. In this example, it alters the subject.
- 5- This photo is similar in technique to the previous example, except instead of altering the subject - the print "becomes" the subject. The "second photograph" is merely providing an interesting and meaningful background.



ACTION ASSIGNMENT!

- 1- Create a photograph where you mix paint and photography to craft the final result.
- 2- Create three photographs, where you fashion cutout shapes on white, or colored, art board, and then use them to make a visual statement against a background. Don't go for the easy answer. Think through the process, and make the combination meaningful.
- 3- Take a photograph that already exists in your files. Print it. Place it in a scene, and photograph it. Use this to test your creativity. Your final image should alter a viewer's perception of the original shot that you printed.

HOW DID YOU DO?

- Of the 3 Action Assignments, which one was the most successful for you?
- What three shapes did you use for your cutouts and why? Do others understand your intended meaning?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: MIXED MEDIA**

Total time:
4-6 hours



Difficulty Level: Challenging

Skill Points:

- Using the Mood Board tool
- Learning to create a mood board
- Completing a photo shoot using a Mood Board as guide

MOOD BOARDS

GETTING THE MESSAGE ACROSS

Mood boards are visual collages of inspirational photos, or other related materials, designed to provide yourself, your team, or a client with a visual reference guide that everyone can agree on before your photo shoot begins.

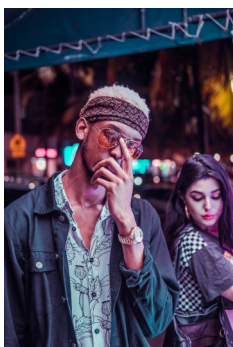
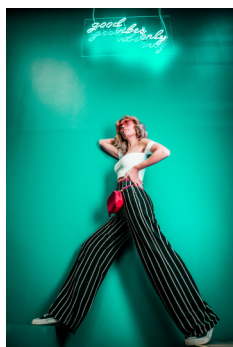


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KEY LESSON: A mood board can be a pivotal instrument in the creative process for photography. Often used for fashion, portraiture, wedding, and food photography- it can be extremely helpful for any genre, especially if you are just learning the art of photography.

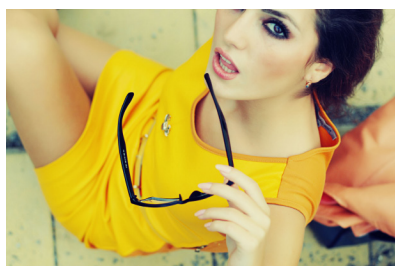
EQUIPMENT: Any camera including mobile | Any lens

SAMPLE PHOTOGRAPHS



The Mood Board is a tool that can help you get close enough to a specific concept, or idea, without actually copying the work of someone else. Your photos can have a similar feel to the Mood Board examples, but creative differences will be apparent in the final photographs. They also work extremely well for team produced projects. For example, in a fashion shot, (such as this example), you may have a team member finding the clothing, another doing the hair and make-up, and yet another searching for locations and props.

If you were to book a portrait session, and the customer wanted something similar to these examples, however, you provide shots like the previous three examples on the left. Things will not likely end well. A mood board helps alleviate this potential problem by establishing boundaries and guidelines.



Creating mood boards will also inspire you to try things that you might not have thought of on your own: including dramatic angles (see the Dramatic Angles Action Card), and the use of bold color (see the Color Saturation Action Card). Creating mood boards is an excellent exercise for your creative muscle.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photos (a fashion portrait). Try to have at least two models- one male and one female.
 - Create mood boards that illustrate your ideas on the fashion portraits for each subject.
 - If you have a team- distribute your mood boards and set them to action.
 - If you are on your own, begin to produce your shoot using the mood board as guide to location, clothing, props, hair, jewelry, and anything else that comes to mind.
- 2- Print the final photographs using your home printer. Examine them together with your mood boards.

HOW DID YOU DO?

- Do your finished photographs reflect your mood boards? If not, why?
- If you used a team, did they find the mood board helpful? Did it assist in your expectations?

READY!SET! GO! **ACTION CARDS - STRETCH GOALS: MOOD BOARDS**

Total time:
3-5 hours



Difficulty Level: Normal

Skill Points:

- Understanding pastel colors
- Discovering how to use pastel colors in a photo
- Learning how to post-processing for the 'Pastel Color Effect'

PASTEL COLOR

THE UN-SATURATED LOOK

A pastel color is defined as a soft and delicate shade of color. Pastel colors are not intense in saturation, luminance, or brightness. They create a clean and subtle look. Pastel colors are not pure colors (see the Color Saturation Action Card).

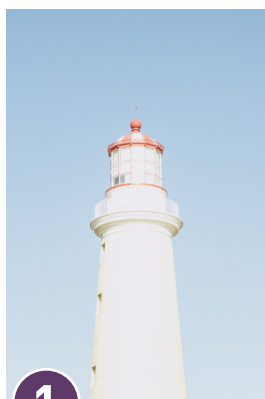


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KEY LESSON: A 'pastel look' can be achieved in post-production by brightening the image, lowering the saturation level, slightly decreasing the contrast, raising the black point, and finally applying a split tone filter. You can also stage a shot that begins with pastel colors.

EQUIPMENT: Any camera including mobile | Any lens

SAMPLE PHOTOGRAPHS



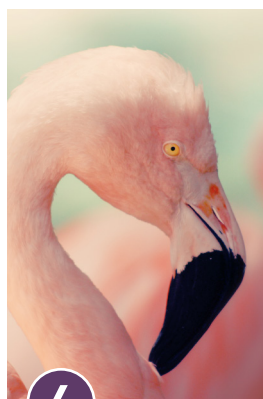
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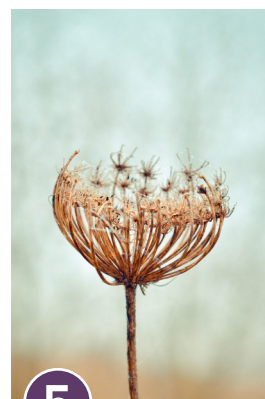
2



3



4



5

- 1- Simply increasing image exposure, or image brightness, does not create a pastel color scheme. The lighthouse photo, although tagged as being a pastel color photo, is really just overexposed.
- 2- This example photo was staged with pastel colors. Using the post-processing technique, **(described below and in the Bonus video)**, can add to the Pastel Color Effect. Some color photos, will not post-process into the pastel color scheme very well. It helps to start with pastel colors to begin with.
- 3- This example photo has similar color values to the Lighthouse example, however, this image is properly exposed, and it has a pastel color scheme.
- 4- In a properly adjusted pastel color scheme- there is generally no deep black value, such as in this shot. In PP for the pastel look, the 1st step is to brighten the image approx. +20%. The second step is to lower contrast approx. -10%. The third step is to increase the black point by approx. +20%. The 4th step is to reduce Clarity by approx. -5%, Vibrance -15%, and Saturation -25%. The 5th step is to raise the Black Point approx. +5%. The final step is to apply a split-tone, which will vary depending on the original image. **(See the 'Creating a Pastel Color Effect' Bonus Video.)**
- 5- Not all subjects will lend themselves to the Pastel Color Effect. Part of the learning process is discovering what works, and what doesn't!



ACTION ASSIGNMENT!

- 1- Go on a photo shoot for an afternoon where you will look for, or create, scenes that already have pastel colors in them, and also those that don't. The subject matter is open.
- 2- You should end up with about 4 to 6 final image files to work with.
- 3- Using your editing software go through the Pastel Color Effect post-processing steps with each shot. (Refer to the bonus video.)
- 4- Print out your finished images- along with the original images files, and study them as a group.

HOW DID YOU DO?

- Do you now understand how the Pastel Color Effect works?
- Do you now feel more confident judging what subject matter fits the Pastel Color Effect?

READY!SET! GO! **ACTION CARDS - STRETCH GOALS: PASTEL COLOR**

Total time:
9-12 hours



Difficulty Level:
Very challenging

Skill Points:

- Learning what pre-visualization is
- Discovering how to break down a scene for pre-visualization
- Create photographs and following through with the pre-visualized ideas

GOING TO AN EXTRA LEVEL PRE-VISUALIZATION

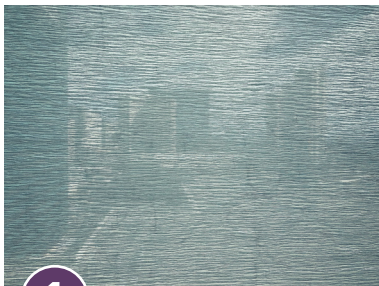


Pre-visualization began in Hollywood with moviemaking and the art of storyboarding. Photographer Ansel Adams is credited with bringing the idea to still photography. **Pre-visualization is the art of *seeing the finished photograph***, in your mind, before you ever pick up a camera. It may sound easy, but it requires advanced skills in art knowledge, equipment, composition, lighting, exposure, and post-processing.

KEY LESSON: The goal of this Action Card is to make you aware of the idea of pre-visualization, and to begin practicing it. This is not something you will learn quickly. In fact, it's a lifetime endeavor. However, the more you practice, the better you will become with this highly specialized skill.

EQUIPMENT: Any camera including mobile | Any lens | Photo Editing Software

SAMPLE PHOTOGRAPHS



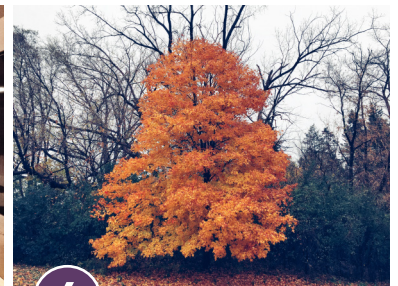
1



2



3



4

- 1- For a moment, change the word pre-visualization to translation. Try to complete a mental translation of a 3-dimensional scene into a 2-dimensional photograph. This photo is a perfect example. It was taken in Las Vegas from a 12th floor hotel room. It depicts a cityscape that is semi-obsured by a window shade. What you see here is exactly what the photographer saw in his mind before clicking the shutter. When attempting this, imagine your scene printed huge, framed, and hanging on a large blank wall.
- 2- A first step toward pre-visualization is training to see in **spatial relationships** versus actual objects. A spatial relationship, in art, is the ability to perceive the relationship of an object's position within a space. In this photo, the photographer saw the pre-visualized shape of a man, in a dark suit, within the surrounding white space of the buildings.
- 3- Spatial relationship is intrinsically tied to light, shadow, color, and shape. A fantastic training tool for developing pre-visualization is to view your scene through squinted eyes. This eliminates details and divides the scene into spatial blocks of light, dark, color, and shape.
- 4- Understanding your equipment is key to pre-visualization. If you don't know how your equipment if going to affect the photograph, how can you pre-visualize it? The photographer saw an almost semi-abstract image with blocks of color and little depth. Knowing this- he selected a telephoto lens to compress the scene.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot where you will spend the better part of a day out taking pictures.
- 2- Do not take a picture before you spend at least 5 minutes thinking about the picture and anticipating what it would look like hanging on your wall. Set a timer.
- 3- Post-process to your pre-visualized thoughts.
- 4- Print a selection of your best efforts. Tape them to a blank wall in your home. Leave them there for a week. Each day, stand 5 feet (1.5 meters) in front of each photo and look at it for 1 minute or longer.

HOW DID YOU DO?

- Do your finished photographs reflect your initial pre-visualized intent?
- Were you able to follow through on your pre-visualization from beginning to end?

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: PRE-VISUALIZATION

Total time:
1-2 hours



Difficulty Level: Very easy

Skill Points:

- Discovering proper form in holding a camera
- Using the Reciprocal Rule to increase image sharpness

EQUIPMENT:

- DSLR, mirrorless, or hybrid camera and different lenses

THIS ACTION CARD IS ESSENTIAL: RECIPROCAL RULE



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New photographers are often frustrated, because their images are not sharp. The biggest “Photo Killer” in this regard is called **camera shake**. Camera shake occurs when the shutter release button is depressed to create a photograph. The camera literally shakes, and creates motion blur in the image.

KEY LESSON: As the focal length of a lens is increased, so is the magnification. As the magnification increases, so is the possibility of camera shake. There are really two key lessons in preventing this. The first one is proper form and technique when holding the camera. The second one is the “Reciprocal Rule”.

START HERE

Lenses: The camera lens plays a critical role in the occurrence of camera shake. A lens that is physically large is more prone to camera shake. The *Reciprocal Rule* states, that the shutter speed of your camera should be at least the reciprocal of the effective focal length of the lens. (Ex. 50mm use 1/50th)

Proper Grip: However, just using the Reciprocal Rule may not be enough. Holding the camera properly, and then using a smooth movement when depressing the shutter release button, also impacts camera shake.

Good form: When handholding a camera, use the viewfinder and not the Live View function. Press the viewfinder to your face. Support the lens from beneath. Tuck your elbows into your side or chest. Breathe evenly. Slowly depress the shutter release. Use the Reciprocal Rule.

SAMPLE
PHOTOGRAPHS

1 300mm



2 85mm



3 28mm



- 1- Telephoto:** If this photograph were shot hand-held with a 300mm lens, what does the Reciprocal Rule tell us? The shutter speed should be 1/300th of a second or faster.
- 2- In the middle:** While the Reciprocal Rule gives you a guideline, your camera holding technique plays a huge role. With an 85mm lens the shutter speed should be 1/85th of a second or faster. If your camera technique is still being developed, your shutter speed should likely be faster. If your camera technique is excellent, you may get away with a slower shutter speed than 1/85th of a second.
- 3- Wide Angle:** These lenses do not magnify a scene, they push the scene out and away. This allows them to be handheld at slower shutter speeds. You would likely never want to handhold your camera at a shutter speed of 1/8th of second or slower.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot, and use all of your lenses- use every focal length. If your lenses are zoom lenses, then shoot at various zoom focal lengths.
 - For each scene and focal length- shoot your first image using the Reciprocal Rule.
 - After the first shot, for each scene and focal length, vary the shutter speed both up and down.
 - Take notes- or make sure that your camera data is being recorded.
 - Have a friend shoot video of you taking the pictures. Examine the video for flaws in your camera holding technique. Print your images.

HOW DID YOU DO?

- Did you create a sharp image at the setting recommended by the Reciprocal Rule? If not, you need to work on your camera technique.

READY! SET! GO! **ACTION CARDS**
STRETCH GOALS: RECIPROCAL RULE

Total time:
4-6 hours



Difficulty Level: Very easy

Skill Points:

- Using Selective Color to improve a composition
- Learning the difference between Selective Color and Spot Color
- Shooting and completing a Selective Color portrait session

SELECTIVE COLOR

HOW TO USE IT PROFESSIONALLY



Selective color is a feature in some digital cameras or it is a post-production technique. Selective color is NOT spot color. (See the Spot Color Action Card.) Selective color combines monochrome tones, along with colored hues, in different portions of the same image.

KEY LESSON: Some cameras allow you to use a “Selective Color” setting. We do not recommend this, as it takes the creativity and fun out of the process, and limits your end result. If you have no other option, then by all means go for it. **The single biggest lesson here is selecting the right subject for the technique.**

EQUIPMENT: Any camera including mobile | Any lens | Photo Editing Software

SAMPLE PHOTOGRAPHS

Wrong and Better

- 1- This is a very amateur looking attempt at selective color. All of the monochrome areas in this image have disappeared, and they don't provide value to the image.
- 2- This is a better example. The selective color was used to enhance the features of the model and props that the photographer wanted you to take direct notice.



1



2



3



4



5

The photographer had an interesting idea of combining the model and the graffiti. It's clever. However, the model is lost in the busyness. This is perfect for the selective color technique.

- 3- Select the model using any of the myriads of selection tools available today in virtually any software package- even mobile.
- 4- Reverse the selection, isolating the model from the background. Make sure that your edges of the selection are clean, so that there is no bleed from one section to the other. This is known as leaving artifacts.
- 5- Convert the background to a monochrome black & white. If you're unsure on B&W conversion- Photzy offers an in-depth Premium Guide on that subject titled: **Better Black & White**. The model now stands out from her background. However, the theme and the idea behind the shot are not only visible, but also enhanced.



ACTION ASSIGNMENT!

- 1- Organize a photo shoot similar in content to the example photo (model & moto).
 - Place your model in front of busy backgrounds. Make sure that the background is pertinent to the story you are trying to tell about your model (as in the example)
 - Create a number of different shots, in different locations, as some will likely work better than others when you get into post-production.
 - Edit your photos into selective color following the guidelines above. If you're unsure on how to make a selection- there are many free tutorials- or you can check out the Photzy publication, “The Next Step To Perfect Photography: Understanding Masking In Post-Production”.

HOW DID YOU DO?

- Do your finished photographs reflect a professional use of selective color?
- Were you able to make a clean selection of your subject without leaving artifacts?

READY! SET! GO! **ACTION CARDS - STRETCH GOALS: SELECTIVE COLOR**

Total time:
4-6 hours



Difficulty Level: Challenging

Skill Points:

- Learning how to identify storytelling elements
- Discovering how to work a scene and find the story
- Developing the skills to incorporate storytelling into your photography

STORYTELLING WITH PHOTOGRAPHY



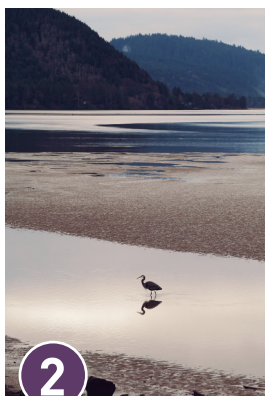
PHOTZY.COM

Storytelling is an art form. For some people, it comes naturally. For everyone else, the good news is... that it's a skill that can be learned, especially as it relates to photography. A good storytelling photograph will always include some element of drama.

KEY LESSON: The key to successful storytelling photography is to be aware of drama and to look for it. Find the drama in what it is you're seeing. The art of storytelling is as old as mankind. If you would like to dig deeper into this subject, check out Photzy's Premium Guide, "Effective Storytelling with Photography".

EQUIPMENT: Any camera including mobile | Any lens

SAMPLE PHOTOGRAPHS



- 1- Storytelling requires drama. Drama elicits a reaction. One way to convey a visual story is through comparisons. The drama of the tiny hand juxtaposed against the larger hand elicits an emotional response. Does it hurt the story that we don't know the relationship between the hands? No. In fact, really good stories often leave some mystery. This allows us, as viewers, to fill in the details in our mind.
- 2- A location such as this landscape is ripe with photo opportunity. However, it's the inclusion of the heron that brings a story element to this shot. Train yourself to look for the less obvious details that will create dramatic effect.
- 3- A simple photo tells a better story. If a viewer has to spend time trying to "figure out" the story, they probably aren't going to "get it". This shot borders on being "too complicated" in its story.
- 4- A story will often develop quickly, and you must be ready. This shot without the driver is meaningless. Including the driver creates the necessary drama to make the shot successful. You will often spot a scene that you want to photograph, wait for a story to develop. Patience often pays off.
- 5- A great story often involves action. Activity always has the potential for creating drama. Watch the activity surrounding the subject. Wait for something to develop.



ACTION ASSIGNMENT!

- 1- Choose a family member, or friend, who has a child. Photograph them and create storytelling photos. Some photos can be obvious in the story. However, try to make some of them less obvious (think of the hands example photo).
- 2- Go to a public venue. For example, go to the zoo, a carnival or fair, an outdoor concert, an outdoor art fair, or a large well occupied park. Stake out an area as your location. It doesn't have to be a single spot, but a general location. Don't wander the entire area. Have your camera ready, watch, and photograph drama that unfolds. Try to create at least 10 successful storytelling shots.

HOW DID YOU DO?

- How many shots did you take at your chosen venue? How many did feel successfully conveyed a story? Print out those shots and share them with family or friends. Ask them, what they think the story is.

READY!SET! GO! **ACTION CARDS - STRETCH GOALS: STORYTELLING**