

MODULE 2. Light for Portraiture

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Aim:

To develop an appreciation of different light sources and lighting patterns for portraiture

Purpose

To consider the differences between different types of light sources and position and direction of illumination in the lighting of the face and body for portraiture.

To gain an appreciation of some of the common lighting patterns used in portraiture.

Outcome

Produce images for homework that demonstrate a range of lighting techniques.

Notes

The photographer has the challenging task to get everyone and everything together, well illuminated for that crucial 1/200 sec¹ exposure.

Light sources

Ambient – i.e. the light that is already there – daylight, room lighting etc.

Ambient light requires little or no additional equipment and there are no technical issues with flash power and so on. Ambient light may be from the sun, or perhaps the normal lighting in a room.

This is the kind of light that beginners should attend to when starting out in portraiture. In many ways ambient light is the easiest to use, as it is the light we are familiar with.

- directional e.g., window
- diffuse – e.g., overcast day; full or partial shade

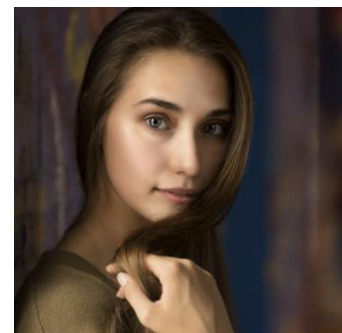
Locations for different ambient lighting:

- *windows / doorways / walls*
- *direct sun / overcast / shade*
- *under trees*

etc.



Lighting - outside with a light cloud cover.



Lighting – indoors, beside a window (left of frame).

¹ Why is 1/200 sec exposure used in portraiture? A faster shutter speed assists in avoiding blurred photos if your model moves or you aren't steady holding the camera (especially telephoto lenses).

Artificial

- Continuous - Tungsten/halogen/LED
- Flash/strobe
- Studio flash

Artificial lighting requires extra equipment such as lights and light stands, and a little technical knowledge, but gives you great flexibility to put the light exactly where you want it. Note that different light sources may have different colour temperatures. If all the lights are a similar temperature it is easy to adjust using the white balance setting. If you mix lights with different temperatures you may get undesirable colour casts across your image because you cannot adjust the white balance to suit both sources at the same time. In this situation, converting to monochrome can provide a solution.

The easiest to work with is continuous lighting, which allows you to see the lighting effect as you adjust the position of the light or the model.

Using flash/strobe usually gives you greater light, but only for an instant, so you have to use a bit of guess work and trial and error to refine your lighting setup. Many studio flashes give you a modelling light that is a lower powered continuous light that allows you to set up the lighting as you want, and when you click the shutter you get the more powerful strobe light for the exposure. Studio flashes also give you much more illumination power than a standard camera flash (speedlight).

Even with a single off-camera flash, by using umbrellas to diffuse the light, and reflectors to balance illumination across the model you can achieve a range of effects.



Simple, one light setups. Direct flash gives hard shadows. Flash through an umbrella gives much softer light, but there are still strong shadows on the far side of the face. Adding a reflector to the shadowed side, fills in the shadows. In the “setup” image, the camera is to the right of frame, the flash on a stand to the left. Note I also have a stand set up behind the model (me) to hold a backdrop. I was thinking of using a black cloth as a neutral background, but decided the plain wall was better for this demonstration as it shows the shadows on the wall behind my head. We’ll cover lighting equipment more in Module 5.

Catch Lights

Catch lights are highlights in the eye and add a sense of life and 3-dimensionality. Compare the two images below to see the effect of removing the catchlight.



Catchlights naturally appear with most lighting scenarios. You might also consider using a low powered on-camera flash to add a catchlight if the ambient lighting does not give you one.

Types of lighting pattern

Chiaroscuro

Chiaroscuro is the use of strong contrasts between light and dark, usually bold contrasts affecting a whole composition. It is also a technical term used by artists and art historians for the use of contrasts of light to achieve a sense of volume in modelling three-dimensional objects and figures.

Eg: The painting *Matchmaker* by Gerrit van Honthorst, 1625 (below left) and a model called Ash (right).

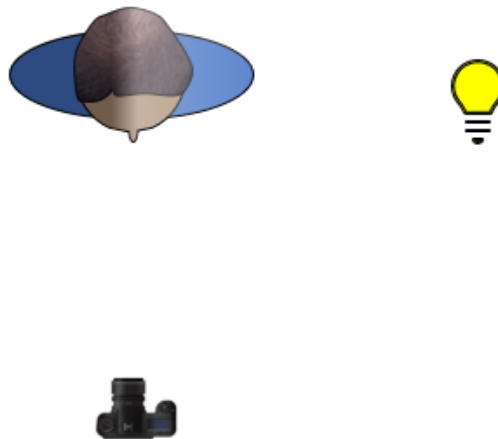


Split lighting



Split lighting, as the name implies, splits the face into equal halves. The main light is off to one side at about 90 degrees and positioned at face height or slightly above, and usually with the subject is facing the camera. My images right illustrate this. Below are some links to other images (avoids copyright issues if I link rather than copy) that I think benefit from this lighting pattern. It can give a sense of drama.

Split lighting can arise from carefully positioned artificial lighting (see examples in links below). Directional ambient light can also produce this effect, generally with a softer feel as the shadows are generally not so dramatically dark.



Additional Resources

- <https://digital-photography-school.com/wp-content/uploads/2013/10/split-light-guyer-photography.jpg>
- http://blog.backdropexpress.com/wp-content/uploads/2013/03/8242623937_682286d177.jpg

Butterfly lighting

Butterfly lighting is named for the butterfly shaped shadow under the nose created by placing the main light above and in line with the camera. It is frequently used for glamour style shots and to generate shadows under the cheeks and chin to give them definition.



The image left was taken in rainforest, the main light is from the sky directly above.

Loop lighting



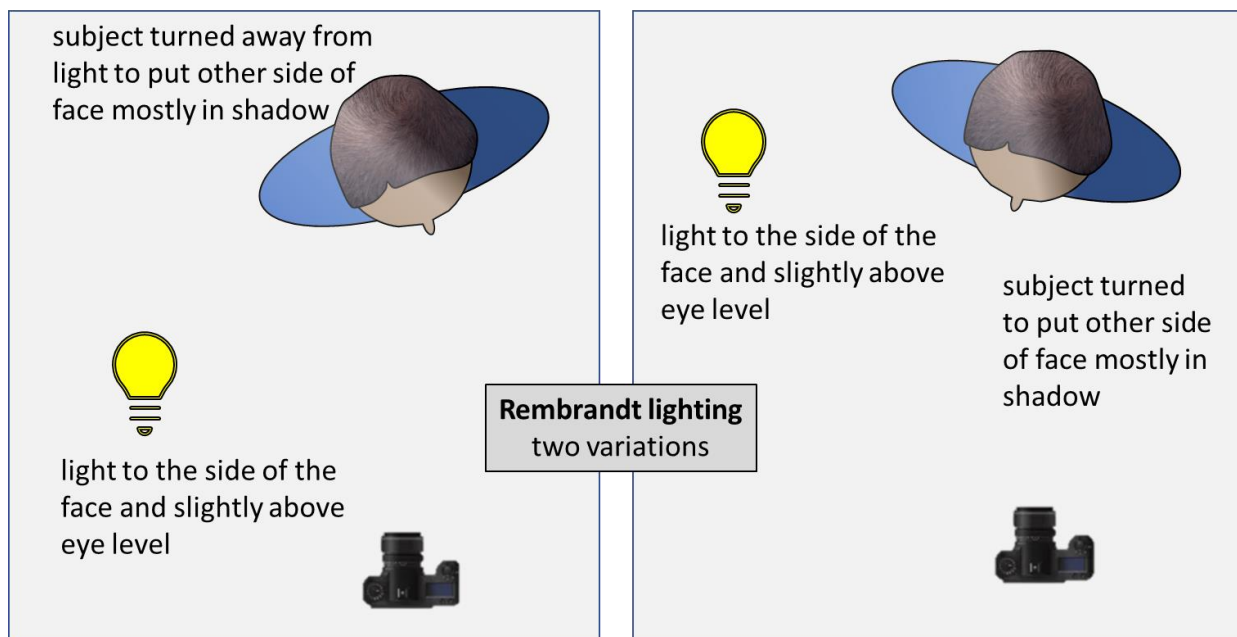
light about 45 degrees
to camera and slightly
above eye level



This is a very popular lighting pattern, characterised by the shadow of the nose falling to the side and below, with the main light to the side and higher than the face. Unlike with Rembrandt lighting (below) the shadow of the nose does not merge with the shadow on the cheek. Keep the shadow of the nose small and downward pointing. Avoid a too high light placement which will give too much shadow below the nose in the eye sockets and under the chin.

Rembrandt lighting

This standard of studio portrait lighting is named for the style of lighting seen in Rembrandt's paintings, exemplified by [his self portrait](#) (right). Typically there is strong side lighting casting a shadow of the nose across the cheek, with the glancing light leaving a triangular highlight on the shadowed cheek. This effect is achieved with light from slightly in front and to the side, with the subject facing slightly away from the light



Broad lighting and Short lighting

These are styles of lighting rather than a particular pattern. You can use Broad or Short lighting with Loop, Rembrandt or Split lighting.

In broad lighting, the face is turned away from the light source so the side of the face towards the camera has the most light on it – ie the brightest area of the face is broad. This makes the person's face look broader. This style of lighting is often used for high-key portraits.

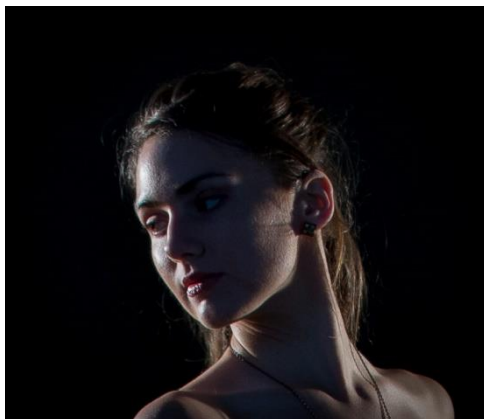
Short lighting has the face turned towards the light, so that the side of the face nearest the camera is more shadowed (the lightest area is narrower). Having more of the face in shadow gives stronger sculpting giving a more 3-dimensional appearance. It can give the illusion of slimming the face giving a more flattering appearance. Low-key portraits often use a short lighting style.



For some more examples, look at <https://digital-photography-school.com/understanding-broad-and-short-lighting-in-photography/> .

Cross lighting

As the name suggests, the subject is lit from two directions that cross. There are many potential configurations. Often there will be a diffuse, soft light on one side (eg light from a large window or a studio light and soft box) and a more directional light from the other side or behind (eg, direct sun or a flash with only a small diffuser).



High key / Low key

Whilst most images are dominated by the mid-tones, high key images are dominated by light tones; low key images are dominated by dark tones. Both high- and low-key styles can be highly effective in setting a mood for an image.



High Key: https://commons.wikimedia.org/wiki/File:High_Key_portrait.jpg



Low Key

Colour Balance

No matter whether you are using ambient or artificial light, achieving a neutral colour balance may be tricky. Light in the shade comes from the blue sky above; The light bouncing off that yellow wall near your model will be yellowish; sunlight light near sunset will have an orange cast; fluorescent, tungsten, quartz halogen and various LED lights all have different colour temperatures. Flash units tend to be designed for a “daylight” colour temperature. If you want to ease the challenge of setting the colour balance in your images, it is often worthwhile adding a white/neutral grey/black colour patch to your camera bag. Take a test shot of your model, holding this patch to the camera. You can then use this to set the colour balance (correctly set, the white/grey/black will all be neutral colours with no colour cast).



Camera Raw

I strongly encourage the use of setting your camera to capture RAW images (see <https://resources.waverleycameraclub.org/capturing-images-in-the-camera-raw-vs-jpeg/>). Raw image files capture the whole of the information from the sensor as well as the camera settings. If you capture jpeg, a lot of information is discarded as the camera reduces your image from 12 or 14 bits per channel to 8 bits per channel according to some fixed internal algorithm. With jpeg out of camera you will have less detail in shadows and highlights, and adjustments like colour balance will be far more difficult. Sure, RAW images require a processing step or two extra once you get the file on the computer, but why pay thousands for a camera and waste its potential with inferior file formats.

REFERENCES

<https://www.dpmag.com/how-to/shooting/classic-portrait-light-2/>

https://en.wikipedia.org/wiki/Photographic_lighting

<https://digital-photography-school.com/6-portrait-lighting-patterns-every-photographer-should-know/>

Exercises

Ambient light varies greatly. As an experiment, place a subject in a room with a relatively small window (ie not a glass conservatory). Turn off the electric lights. Look at the lighting on their face (you can do this yourself, using a mirror if you have no one willing to assist you). Look at the lighting with the subject facing the window, turned at 45 degrees, and at 90 degrees. Consider different camera angles relative to the direction of light from the window. Place the subject as far as possible from the window – this gives you harder lighting than close up to the window. Place the subject beside the window, facing the window. Have them move closer or further from the window. How does the lighting on the face change?

On a sunny day, consider the lighting on the face of a subject with them in direct (mid-day) sunlight. Now move them into the shade – perhaps under a tree. See how the lighting changes as they move further under the tree. Or perhaps get them to stand in the shade of a building. How does the lighting compare. Think about where the light is coming from. Is it just from the blue sky above? Or is there a lot of light reflecting from the red brick wall across the lane way. How does this affect the quality of the light?

Quiz

Consider the image of Ash that we used earlier. This was taken with artificial light against a dark background. Note how Ash is lit so that he stands out from the background, rather than having shadowed parts of his body blending into the dark background. How many light sources were used? Where were the lights positioned? Which of these was the brightest light? Which lights were direct, which were diffused (soft boxes etc).

<<answers will be provided next session>>



Homework

Take a portrait where you have consciously arranged the lighting, be it by placement of your subject using ambient lighting, or by using artificial lights (flash etc) or light modifiers (eg reflectors) to highlight some mood, feature or narrative in the image.

Submit the image and brief comments on the setup and how you feel it achieved your aims on the form at:

<https://resources.waverleycameraclub.org/portraiture-homework-2/>

Example homework submission:



Geoff Shaw_Module 2_Self Portrait-flash+umbrella+reflector.jpg

This image was taken with a single flash to the left of the frame, pointed through an umbrella 80 cm across, about 1 m from the head. I held a silver reflector just out of frame on the right to fill in the shadows. If I had been further from the wall I would have avoided having a distracting shadow on the background. Putting the flash slightly higher relative to the face may also have improved the modelling on the face (note the shadow of the nose).