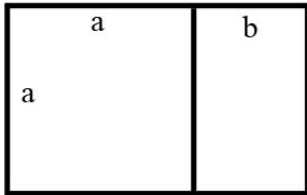


Composition in Photography

By Walter Harrington

Fine tuning the composition can make a good photograph great. Composition includes two characteristics in the photo: The size of the canvas (the height and width of the image) and the location of the dominant element, or elements within the canvas. The object of composition is to present these elements in a way that is pleasing to the majority of viewers. This is done by using rules as guidelines to determine the placement of the compositional elements. To discuss the process of composition we must first introduce the subject of the "Golden Rectangle."

The Golden Rectangle is the classic shape for elegant proportion and form as seen in Greek art and architecture such as the Parthenon. It is the basis for the standard 35mm format of 1.5:1. The Golden Rectangle is defined as a rectangle, which when divided into a square and a smaller rectangle, the smaller rectangle is the same shape as the larger rectangle. In other words, their sides are proportional and the two rectangles are similar.¹ The Golden Ratio is the ratio of the longest side to the shorter side and its value is 1.618:1.



For those who would prefer to see it defined graphically and mathematically:

$$(a + b)/a = a/b = 1.618$$

Canvas Size

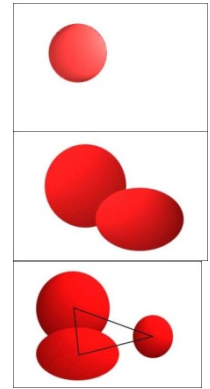
The first step when fine tuning the composition of a picture is to determine what canvas size to use. The elements in the image will often set limits on this decision. Is the photograph framed well enough to use the full image at the 1.5:1 ratio as shot, or are there elements in the photograph that need to be cropped out to improve the image? For example, is the horizon in a scenic in the center of the image? If you crop the image to keep the aspect ratio at 1.5:1 do you lose elements you want to keep in the image? If so you may be forced to crop out either the top or the bottom of the image and this will change the aspect ratio (the ratio of the height to width of the canvas). A vertical will become closer to a square, while a horizontal will become an elongated rectangle. The creative compositional process is to evaluate the photograph to determine the shape, or aspect ratio, that best accomplishes what you are trying to portray. As a general rule, canvas sizes with an aspect ratio in the range of 1:1.4 to 1:1.6 will be more pleasing to the viewer. But there are always cases where deviating from this rule will create a more dynamic image.

The task becomes more complicated if you are going to print the photograph for framing. Standard frame and mat sizes are not always compatible with the best canvas size for your picture. A 5x7 or an 8x12 print will work well. But an 8x10 or 11x14 print may require cropping out more of the image than you want. Printing for most of the standard frame sizes will require a compromise on the canvas size and you will need a custom cut mat.

¹ Jim Loy, <http://www.jimloy.com/geometry/golden.htm>

Numbers of Composition Elements

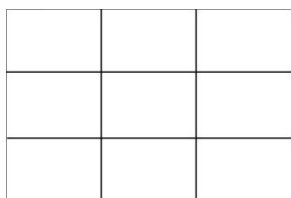
Once the canvas size has been selected the main elements of the image must be placed on the canvas. A picture may have one or more elements in it. Pictures with one, two or three elements will work nicely in a composition. Pictures with four elements are difficult to work with and seldom result in a pleasing composition. The figures to the right demonstrate how one, two or three compositional elements might be placed on a canvas.



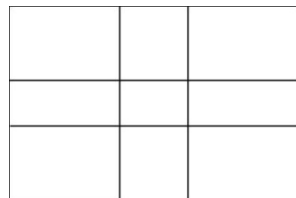
Here is an example of a painting that demonstrates the placement of two compositional elements in the picture. The larger clump of trees in the foreground is offset by the smaller clump of trees to the left and further back. It is also interesting to note that the canvas size has a 1.5:1 ratio.

Placement of Elements on the Canvas

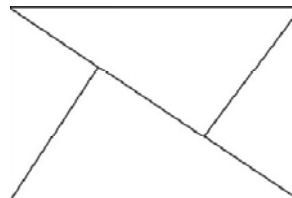
The painter, who starts with a blank canvas, has a bit of freedom in placing the elements of the picture. The elements can be drawn in at any desired location to make the composition work. For the photographer, except when shooting still life setups, the problem is different. The elements are recorded in the photograph. With some planning when taking the photograph, the elements can be placed in an approximate location in the frame. But their positions, relative to each other, are fixed by the scene. It may make sense when shooting to leave a little room all around the edges to allow for fine tuning the composition by cropping later. There are tools to help the photographer with this task. The most common of these is the “rule of thirds” grid, which can often be set into the camera’s view finder. Don’t be misled because the word “rule” is in the name of the grid. It is a guide that works, but is by no means the only one. There are other tools that are helpful at the cropping stage and these tools are developed from the Golden Rectangle. They are the Golden Section, the Golden Triangle and the Golden Spiral. Examples of these are shown below:



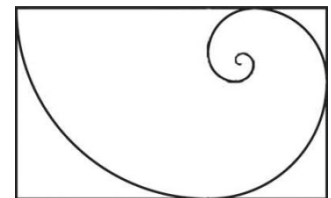
Rule of Thirds



Golden Section



Golden Angle



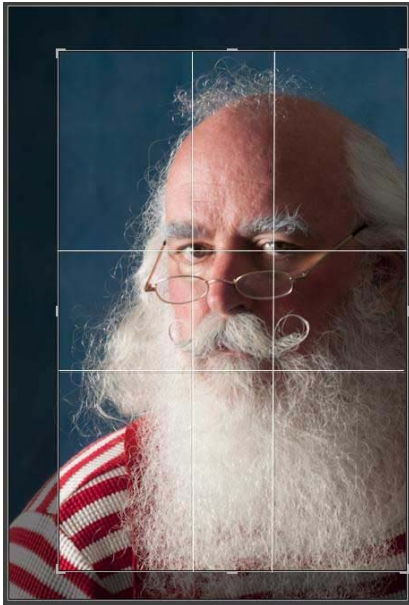
Golden Spiral

From these figures you can see that the “Rule of Thirds” is a simplified approximation of the Golden Section. The idea with the grids and the golden angle is to place the main subject at one of the intersections of the grid lines. Comparing the rule of thirds grid to the golden section grid you can see that the lines in the golden section grid are placed closer to the center of the image. If you are shooting with the rule of thirds grid in your view

finder, you can place the main subject somewhat off the intersection of the grid lines and toward the center of the frame and still have a good composition. The golden angle guide line can be used when cropping and is very helpful on an image that has a strong sloping line. When using the golden spiral, place the tightly curved end at the main subject and let the curve of the spiral flow through the remaining subjects.

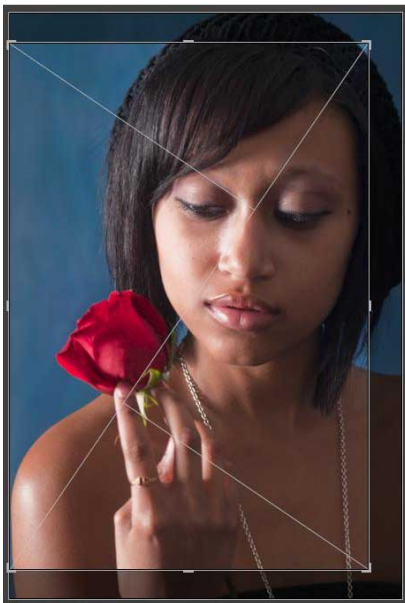
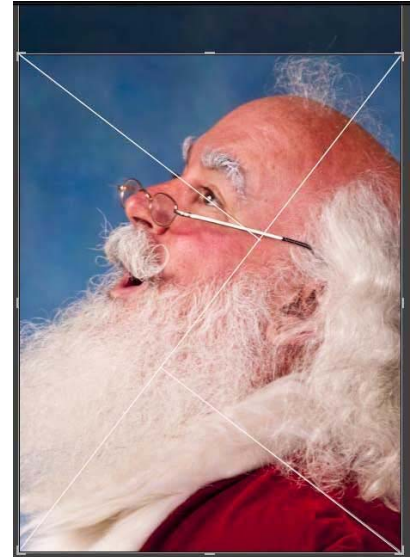
Working with the Grid Overlays

Check out your editing software to see if the grid templates shown above are available. I especially like working with the crop tool in Lightroom because the grids can be laid over the image to assist in making the crop. Here are a few examples using the crop tool in Lightroom:



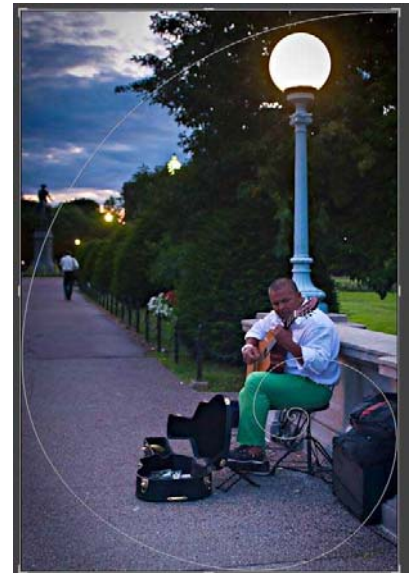
On the left is an example where the Golden Section overlays the image. The intersections of the two vertical lines and the top horizontal line are placed right on the eyes of the subject.

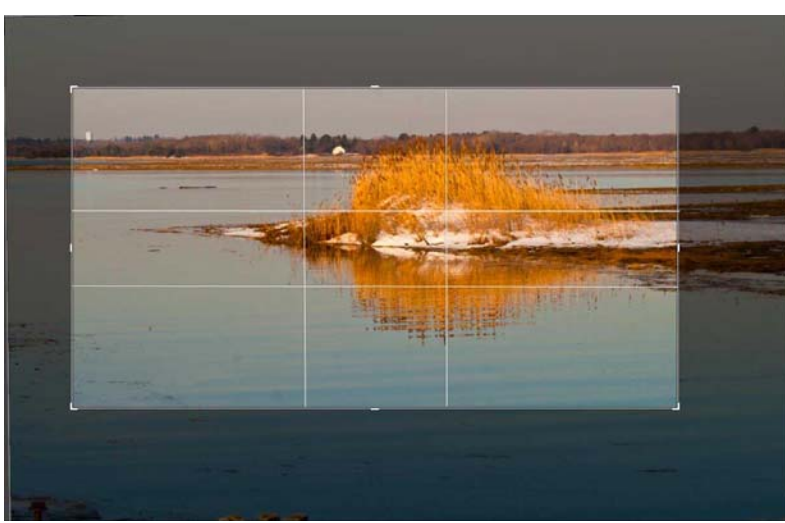
On the right, the Golden Triangle is used, with the main line picking up the slope of Santa's head with the cross line going right through the eye.



In the photograph on the left, the Golden Triangle is used to set the crop using one intersection for the eyes and one for the rose.

In the photograph of the street musician, the Golden Spiral is used to evaluate the composition. No crop was made.



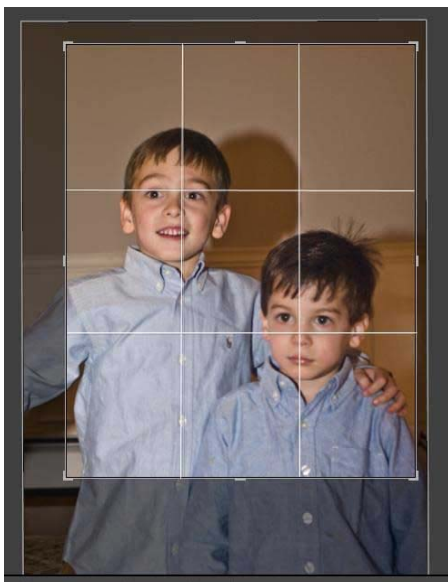


The photograph on the left is an example of cropping a scenic to remove the water in the lower half of the frame and then crop into a 2:1 panel. The grid for the Golden Section is used to place the center of the clump of sunlit reeds on the upper right intersection.



This photograph of dinghies at a dock at sunrise does not really work well in the standard 1.5:1 ratio. The sky detracts from the composition and there is too much of the water in the lower half. The golden Spiral was used to help with the composition. The image was cropped in from the right to remove some of the ramp and then cropped from the top to get rid of the sky. The lower edge was then dragged to a position that placed the tight end of the spiral on the waterline of the last dinghy on the right. The boats in the background all lay along the sweep

of the spiral. In the final processing of the image, the distracting ramp is cloned out in Photoshop.



Here is an example of a photograph with two subjects, i.e., the faces of the boys. The rule of thirds grid is used to set the crop edges and position the faces in the image. Note how one eye on each face is just inside the intersection of the grid lines. There are other problems in the photograph that need to be addressed in Photoshop, such as the distracting shadows, but this is a good example of using the grid to compose the picture.

Summary

In the end, you are the photographer and you are the maker of the image. You decide how you want to present it. The intent of this paper is to make you aware of the characteristics and tools that may help you to fine tune the final result. Also be aware that sometimes the best picture results when you break all the rules.