

Photographing Marquetry – Revisited Again

By Dave Peck

This article was originally published in a fall 1996 issue of Marquetry Society of America. It was revised for the Spring 2009 issue of the American Marquetry Society Newsletter. The rapid development of the digital camera continues so another update seems appropriate. Much of the original article still holds true. I'm just rewriting with an eye to current digital standards and possibly making it easier to read.

Importance of Taking Photos

After making a few marquetry pieces, you may start giving them away and eventually you may start selling your work. It's nice to have a photograph of the items you no longer have on hand. Even if you still have the marquetry there are many reasons for having a photograph. For example if you want to get to get into a juried show, a craft fair or an art gallery, you will need photographs. You may want to share your work with family members who no longer live a home. And most important of all, you may want to share your work with other members of the American Marquetry Society through the newsletter. Digital cameras make all of this easy and it works for all levels of expertise from the computer geek who owns several computers and printers to the person who doesn't even own a computer. If you are in the latter group don't worry. A digital camera can stand alone. You just take your camera to a camera shop and they download and print the photos just like in the old days when you walked in with a roll of film. The difference is with a digital camera lets you delete the "bad" shots and you only pay for the ones you really want. Most mobile phones have similar capabilities.

General Considerations for Photographing Marquetry Pictures

Make Sure the Camera is Square to the Marquetry

If the camera is at an angle to the marquetry or if it is off center the farthest part of the marquetry will look smaller than the close part (see Fig 1 & 2). It's a perspective thing like looking down a railroad track. The same thing happens with your photo. A little bit off may not seem important but the human eye has a wonderful ability to pick up these slight variations. You want your viewer to enjoy your work rather than wonder if it is really lopsided. *Tip 1: look at the edges of your*

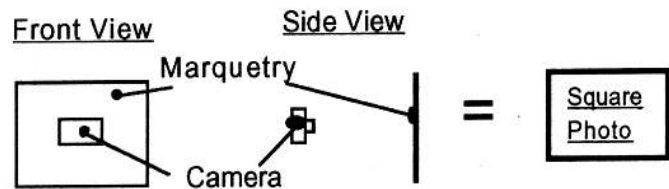


Fig 1. The camera must be centered on and square to the picture being photographed.

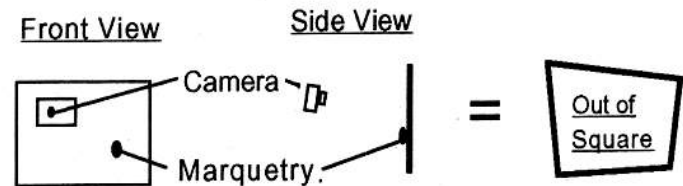


Fig 2. If the camera is not square, the edges of the marquetry in the photo will not be parallel.

marquetry and see if they line up with the edges of the viewfinder. Tip 2: Photoshop has a "perspective" feature when used with "crop" makes it easy to square up a marquetry that looks askew.

Watch Out for Reflections

Reflections cause a highlight on the shiny surface of the marquetry and "wash out" any detail in that area. If you try to take a photo with a flash on the camera the marquetry works like a mirror and the flash bounces back into the lens of the camera (see Fig 3). Also troubling are windows that are directly behind you as you take the photo. They

may show up as light spots in the photo. Even you may show up in the photo. If you have on light colored clothes your reflection may appear in the photo. It's best to wear dark clothes and you should be invisible.



Fig 3. A flash on the camera will ruin the photo.

The Background Should be as Plain as Possible

The idea here is to eliminate anything in the photo that might distract from the viewer's attention. Seamless paper (from photo stores) or mat board (from art stores or picture framers) makes a good background. A plain, neutral color is best. Avoid fancy prints.



Fig 4. This is the quickest way to get a photo and it's easy to get different lighting angles but getting the camera square to the marquetry takes practice.

The Camera (or Smart Cell Phone)

Digital cameras offer many advantages over film cameras. I've

already mentioned the fact that you can delete your poor shots but it goes way beyond that. Even the point and shoots have zoom lenses. You can set the camera for different light conditions, for example: daylight (full sun or shade settings), artificial light (no need to have a second camera with tungsten film) and more. With a computer you also have digital darkroom capabilities. The most important of these are cropping, exposure correction, and rotation. For years digital cameras were in a price range that limited them to only the professionals. Current prices make digital photography available to everyone and there are many brands and models to choose from. If you are in the market for a new camera then digital is the only way to go.

Tripod

A tripod is a valuable aid. Most fuzzy photos are caused by camera shake especially in low light situations that require slower shutter speeds. A tripod gives the camera a steady base and allows you to use those slow shutter speeds. Another advantage of shooting with a tripod is in making sure the camera is square to the marquetry. Both hands are free with a tripod so you can move around and line things up. You can use a carpenter's square to check if the picture is square in front of the camera. You

can switch the items being photographed. You can change the lighting. You can go answer the phone, whatever, and the camera stays put.

Lighting Setups

Fastest (but not necessarily the easiest)

The fastest setup is to lay a piece of mat board (purchased at an art supply or picture framing outlet) on the ground and lean over the marquetry picture to take the photograph (Fig 4). You need to do this before mid-morning or after mid-afternoon so that the sun is coming in at approximately a 45 degree angle. During the middle of the day (or on an overcast day) you may have problems with reflections. The low angle of the sun has advantages and disadvantages.

On the advantage side the single source of light is great for showing grain and figure in the wood. Take two photos, the first with the sun coming in from the top left and the second with the sun coming in from the top right. You will be amazed at the way some woods reflect light differently according to the angle that the light is striking the wood (see Fig 5 next page). The "cat's eye" effect is called chatoyance and I consider it to be wood's finest asset. As you move, or as the light moves, the wood takes on a different appearance especially the woods with figure. The wood comes alive. Artist's paint cannot do that. Wood rules! When photographing in the sun. ALWAYS take two (or more) photos with different lighting angles.

On the disadvantage side, the direct sunlight makes a very strong, hard, shadow that can be distracting (see sidebar "Hard Light vs. Soft Light" at top of next page). One way to soften the shadow is to hold a piece of white mat board just outside the photograph area to reflect light back into the shadow. This helps but doesn't eliminate the shadow.

You probably noticed that I said this is the simplest but not the easiest. That's because standing over the marquetry and trying to get centered (squared up) exactly takes practice. Stand over the piece and bend over until the marquetry almost fills the viewfinder. Line up one edge of the picture with the edge of the viewfinder/monitor and then look at the opposite edge. Is it also parallel? If not, you have to move just a little until it becomes parallel. It won't be long till you can do at least an acceptable job.

Hard Light vs. Soft Light

Makes a distinct shadow with a sharp edge.

Comes from:
The Sun
Direct Light bulb
Direct Flash

Makes less defined shadow or none at all.

Comes from diffused, large sources such as:
Overcast sky
Reflected light
Diffusion screen

Light from above right



Light from above left



Fig 5. Notice the difference in the mountain below the snowcap, the cliff behind the trees to the left, the trees at the base of the mountain on the right & the look of the water. All by changing the direction of the light.

Another way to eliminate the shadow is to crop the photograph to just show the marquetry picture without any background. With this option you don't worry if the photo has the marquetry exactly square because you can correct it with digital darkroom software on your computer. If you have the full version of Photoshop this is easy. The crop function has a "perspective" option that makes it simple align all edges perfectly. There are other companies making digital darkroom software at a much better price.

An alternative to bending over is to hang the marquetry on a wall (Fig6). A fixed wall makes it harder to get the light coming from two

directions - or you may want to build a tripod or similar movable support instead of using a wall.

If you hang your marquetry in the shade be sure to select the "shade" setting on your camera's White Balance menu. Watch for those pesky reflections that can ruin a picture, especially along the top edge.

Indoor setups:

Some days the sun isn't shining or one might say it's liquid sunshine - rain. Then it's time to think of doing the photography in a dry place. Indoor photography requires more than normal room light. You may already own flood lamp reflectors or halogen lights (Fig 7 next page). With a digital camera it's just a matter of setting the white balance to the type of light.



Fig 6. Standing is easier than bending over but you may have lighting limitations.



Fig 7. You may already have reflectors or halogen lights. With a digital camera it's easy to correct the white balance.

Again you want the light coming in from a 45 degree angle but now you need two lights one on each side of the marquetry. The sun is so intense there is no drop-off of light between the near and far side of the item being photographed. If you use a single artificial light there will be a very noticeable drop-off of light from one side to the other. For copy work (which is what we are doing – copying the marquetry) the

normal practice is to place the light sources on opposite sides and at a 45 degree angle to the work (see Fig 8). By having the light coming from an angle you eliminate unwanted reflections. Use the same wattage in both lights and set them the same distance from the object. Hold your finger in the middle of the marquetry and you should have equal shadows going each way. Also look for reflections coming from windows or lamps that are directly behind the camera. If these reflections are spotted ahead of time they are easy to fix. Pull the shade, turn off the offending light, etc.

Professional and advanced amateur photographers use dedicated light sources such as light boxes, strobe lights, umbrellas, etc. but the setup is

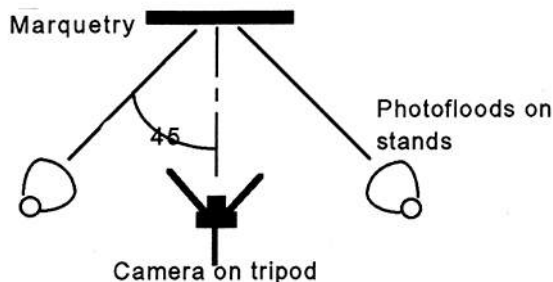


Fig 8. Light coming in from 45 degree angles eliminates reflections from the light source.

basically the same (see Fig 9). There is a wide range of prices for photographic lighting equipment. If you do much photography it is well worth considering.

Now Let's Look at Three Dimensional Items

Three dimensional items such as boxes, bowls and furniture are hard to photograph in direct sun because of the harsh shadows. Diffused light from umbrellas, light boxes, or reflectors is a must. This means the light needs to come at 45 degrees from both above and to the side. You are looking to eliminate reflections so a careful review is needed both before and after taking the first shot. This is where the digital camera on a



Fig 9. Defused lighting plus seamless background paper (available in camera)

tripod will pay for itself fast. You get immediate feedback. You can look for unwanted reflections and move the light(s) to eliminate them. It may take two or three tries but it's worth it

Depth of field (defined as: the distance between the nearest and the furthest objects that give an image judged to be in focus in a camera) also comes into play with three dimensional objects. The camera's depth of field has a direct relationship with the size of the lens opening; the smaller the lens opening, the deeper/longer the depth of field. If you use a tripod you can shoot with a longer shutter time and smaller lens opening. This helps tremendously but you may still not have sufficient depth of field for the whole piece to be in sharp focus. For example you want the top of your box to all be in focus. Depending

on there are a couple of ways to proceed.

One thing we can do to improve this situation is to focus behind the front edge rather than focusing on the front edge (see Fig 10).

If your camera has a manual focus you should use it. Remember to change both the camera and the lens to manual focus. In modern cameras you have to do your focusing with the lens wide open, therefore, it's not showing what will happen when you take the picture. Take a picture and see what it looks like. Adjust and take another. Look for the front edge of the top in focus and any fuzziness near the back.

If you only have automatic focus then you will need line up the photo, hold the shutter release half way down and while holding the shutter at half cock, move the box forward about half the tops width. Having the shutter cocked locks the focus so holding the release half way while you move the marquetry forward a few inches lets you take advantage of the focused area that would have been out in the air ahead of the front edge.

Final Thoughts

Digital cameras are wonderful. You can take all the pictures you want and then delete all but the best ones. I've always found that taking lots of photos is the secret to getting good photos. The digital camera lets you take lots of pictures without worrying about the expense. I hope you too will take lots of pictures and that you will share them with the rest of us through the newsletter.

Revised March 13, 2018

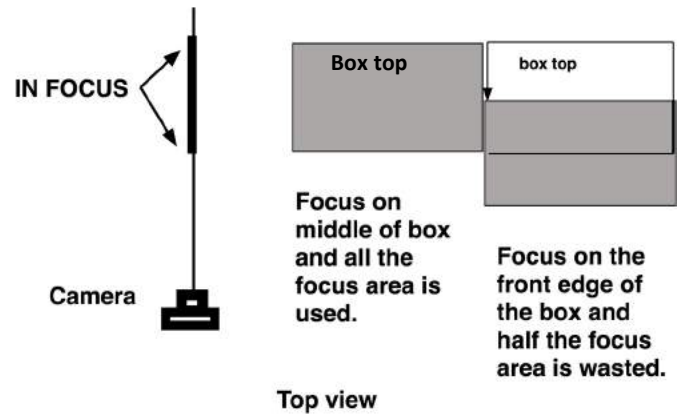


Fig 10. Depth of Field is critical when photographing applied marquetry. Place the focus in the middle of the area you want to be clear. Focusing at the front edge wastes half of the clear area. Remember the smaller the aperture the larger the depth of field.