

Beckham Digital

June 2017



Sand, Soda and Limestone

Sand, Soda and Limestone, yes it's the basic ingredients of Glass, a substance we take so much for granted we can often miss the beauty of it. Surely glass is one of our best inventions being used for basic things like window glazing and now as a building material in its own right. Then we have all the art applications too numerous to mention, but neon lighting is one of course.

Mix almost any glass object with a little light and colour and you generate interest. In our case the interest is Photographic. So, take a look at the images in this Pdf as an example of what we can all easily produce. The image below is one I called Cool Blue when I posted it on [Flickr](#).



Lighting

Lighting the glass is our first hurdle and maybe you're thinking of flash systems which are great, but I think the vast majority of you reading this, already have a great light source, your large flat screen monitor, or even a TV. You will need a tripod, a camera, some glassware and a PC monitor/TV, but I am betting you have all these.

Many years ago I created images similar to these using slide film and a film projector as my light source. The light doesn't actually fall on the glass at all, it falls on the background and you could say we are photographing a coloured background, but with glass in the way.

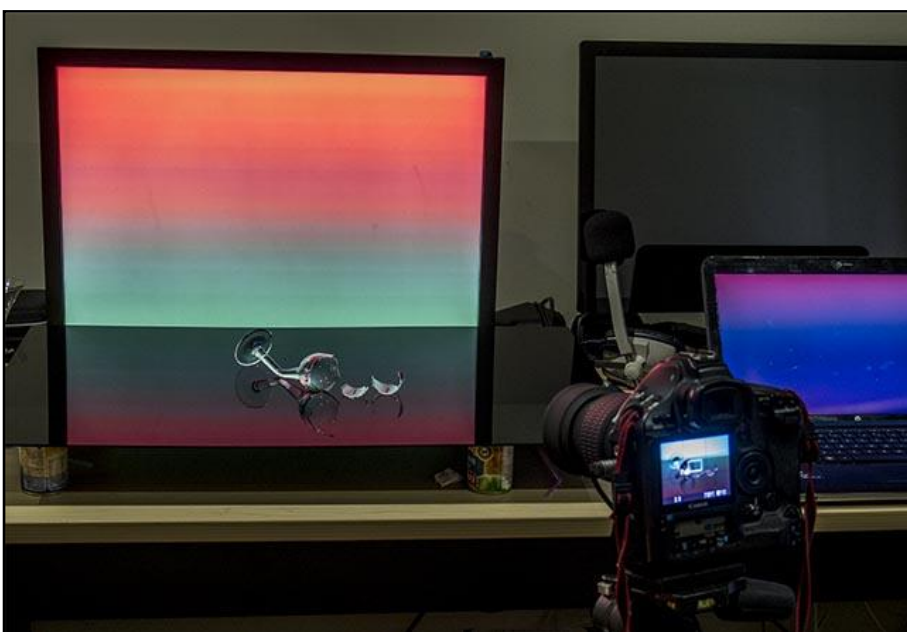
The PC screen not only gives us light, but also a myriad of colours, shapes and textures all created in our image editor. Then we display them full screen and most of the work is done. The monitors light isn't very powerful, but it's more than adequate for transparent objects like glass. It's not so

good if you want to introduce other elements like slices of lemon or a flower. There is not enough power to light these objects from behind, which is what we are doing with the glass.



As you can see above, we can either shoot a complete glass set-up, or go in close and allow the light and colour to bounce around the glass shapes. The above is a cheese platter and the trick is to get in close and isolate an interesting part, it's great fun too.

Below you can see my basic set-up which all looks rather a mess when you back away from the viewfinder, but what you are seeing is my laptop connected to the monitor. Lying flat in front of the monitor is a piece of black perspex, which is not essential, but not expensive either. It's just an off-cut I picked up from a local plastics company.

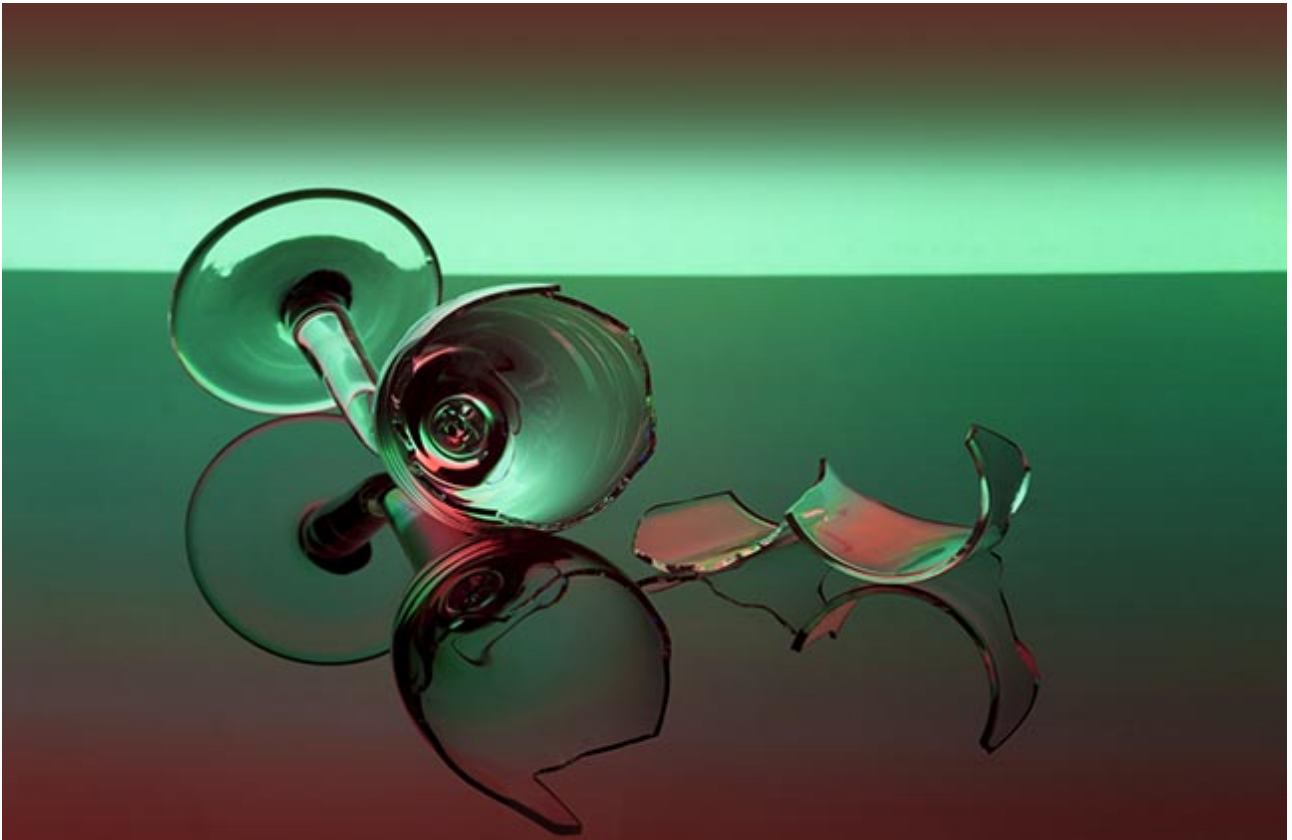


The camera is on the tripod and a cable release is connected. So, once I have carefully framed up on my subject, in this case a broken glass, we are ready to go.

I can fire the shutter, take a peek at the LCD to make sure I am happy with the shot, then use the cursor control keys of my laptop to jump to the next background image.

After all, it's the framing up and critical focusing that takes the most time, so once the subject is there and neither it nor the

camera are going to move, we can rattle off as many shots as we like using different background shapes, colours and patterns. The image below is the one you can see in the set-up above. Take lots of pictures with different backgrounds so you have plenty to choose from later on, on your computer.



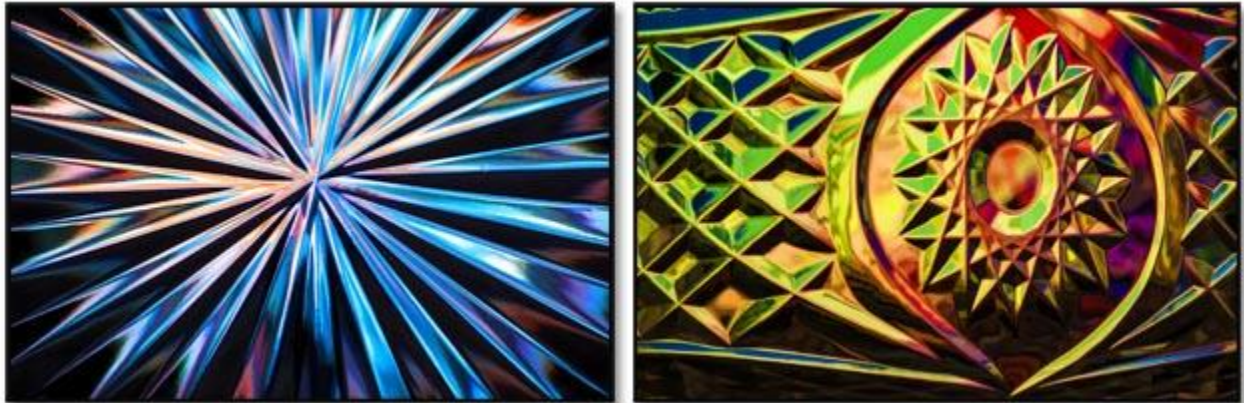
The Backgrounds

This is where we start, by creating some brightly coloured backgrounds on our PC, but you can also use colourful regular images too. That's all I did back in my film days and I had a fair degree of success with this technique. In Photoshop and Elements we can easily create vivid coloured gradients on a new canvas and save them as a Jpeg.

Below left is a hot air balloon image with a little Gaussian Blur added. The one on the right is created using Photoshop's gradient tool and this one is straight out of the Photoshop Tool Box.



Once you have shot some glass, in my case I started off with some close ups. I then recycled them to create new backgrounds for more shooting opportunities. Below are two close up glass images I shot using the backgrounds I made in Photoshop.



However, we can then recycle these images above and one example is below left where I have applied Radial Blur, but in the zoom mode. On the right, horizontal movement blur has been added. Later I will suggest a great way to get these images full screen quickly and easily to speed up the shooting of images.



Experiment

It's all about experimentation and just trying different background, shapes, colours and subjects to see what works. Shoot lots and evaluate what you have later on, on the computer, because each shot will be different if you use a different background for each, as I did.

What creates the differences are a number of factors, none critical. How far our glass is from the monitor will determine how sharp the background is. As a guess I would say most of my shots were around 18in from the monitor. The F stop you use will also have an impact on the depth of field and how sharp the background is.



If your glass is a close group set-up, you may not be using all the background you created, so if you create a blue base background, flip it 180 and save a second version with the blue on the top. You can't have too many backgrounds.

Of course not every idea you have will work. This one on the left

worked fine in my head, but not so well in practice, too fussy, but nothing ventured nothing gained.

Subjects

Most people will be able to find suitable glass subjects around the home, but if not, pop down to your local charity shop and for a very small amount of money, you can come back with an assortment of glass objects that will keep you busy for hours.

There is another advantage in a visit to the charity shops, you don't want to break the best family crystal and you don't need special glass for this. There will be breakages, the one below was not intentional, but waste not, want not and that broken glass created a few good images.



Looking at the two examples below, you can see why the glass broke. I experimented by heating the stem to bend the glass and I was successful with that. However, I bent it a bit too far and it became top heavy. From there it was just a matter of time, but at 50c in the charity shop I won't lose any sleep over it. In fact I may break another and try some more broken glass shots



Camera – Lens - Tripod

We generally don't need anything special and almost any camera will do. If you're using an SLR, try a mid range zoom lens like a 28~135 or a 24~105. If you have a macro lens try that, but we don't have to use the Macro lens at it's macro end, but we can if we want.

We will need a cable release, because although we can use the time delay to fire the shutter, that gets tedious shooting the number of image you may do here. A compact camera will work just as well. We definitely need a tripod as we will be focusing very close at times and the shutter speeds will often be long. Far too long to hand hold a camera.

Exposure

Exposure isn't a problem at all and at first I used all small apertures like F22 and f32, but that is not always to our advantage. The smoothness of the glass and backgrounds show up every dust particle, so for most of the general glass captures I used 100iso and f8 and f11, but I did vary the aperture from time to time. I kept the iso constant at 100 because I didn't want noise softening those sharp edged glasses.

Setting the camera to Aperture Priority (AP) allows the shutter to take care of itself and as our camera will be firmly clamped to a tripod, AP is fine. The shutter speeds/exposure will vary depending on the background used. So, keep a watch on the LCD as sometimes you may need to compensate your exposure. I found with some backgrounds I needed to adjust by 1 stop and sometimes 2. Generally speaking exposure is fairly easy.

If you're shooting against a white background then you will need to increase exposure about 2 stops or your glass will go grey and lose it's sparkle. So, increase exposure and keep that glass sparkling. If you're a Raw shooter, then continue with that because it gives you lots of scope when you get the images into Lightroom or Photoshop



Shooting Tips

Turn off the room lights and draw the curtains and if there is still a fair amount of stray light coming in, wait until dark. If not, your glass may pick up a myriad of unwanted reflections from overhead lights or what is coming in around the curtains.

You will need to do some spotting of the glass, but you don't want to add lots of unwanted highlights that may be harder to get rid of.



Work Super Clean

If your chosen glass subjects are not delicate or a priceless art object, put them through the dishwasher and at least you will start off with sparkling glassware. Even so you will still need to do some spotting. Glass has lots of imperfections and they can look remarkably like dust on the finished image. Use PS/LR spot healing brush, it's all you need

Focusing and Live View



In some cases focussing can be tricky, but when you're really close to a subject it's sometimes easier to move the subject rather than the tripod/camera/lens. We often need to move the tripod a very small amount and that is the difficult part, so why not slide whatever your glass is sitting on, backwards and forwards on the bench until you see it pin sharp or it's positioned correctly in the frame.

One of our greatest assets is our LCD screen and if your SLR allows Live View, then that will help too, not only allowing you to compose and see the effects of colour on your glass, but for critical focusing and composition too.

Remember, when live view is activated we can zoom into the live view for real critical focusing. Given we will be close to our subject most of the time and depth of field could be an issue, good focus of the subject is essential and live view helps a lot.

An added bonus with live view is that the mirror locks up to activate live view, so any in camera vibrations are also minimized. Using live view will drain batteries a little quicker, so if you have

spares, get them fully charged before you start.

Composition

Composition is everything, so make sure you do take account of those composition rules as they will work for you almost every time with still life. If you can get your rule of thirds grid showing on your LCD, that will help a lot.

If you place the rule of thirds over this image, you will find the bent glass is on the right third upright, leaning in of course not out. The red glass is on the left third upright. This is an important part of this technique



Speed up the process and give yourself lots of variations

To speed up my shooting of the glass set-ups, I put all the images containing abstract colours into a slide show. (I have made and supplied a number in our download below) I have set the slideshow up so the colours only change from slide to slide on a manual keystroke. These slide shows have been created for PC and Mac and there are a number of different sets.

So, we set up our subjects carefully, focus critically, then turn off overhead lights and fire up the slideshow. Change from image to image, firing the shutter via a cable release as we go. The worst that happens is later, you dump the images that don't look so good and keep the ones that do.

However, before you dump those which are not so good, think of blurring them and using them as your next batch of backgrounds on the monitor. Recycling in action. It's doing this where I found that some glass images, blurred with a vertical blur, seemed to work quite well as you will see from the image below. Note the composition here too.



Ideas/Tips

Don't forget that you can add other objects to your glass creations. In the image below, I thought it looked almost like we were looking into a sky, so I dropped in a flock of geese and the moon.



Triptychs

The Triptych technique lends itself well to the glass images. Shoot the glasses individually in portrait format, or simply crop upright shots from your landscape sets.



Soap bubbles.

You have seen soap bubbles used above, but be aware that you're using slow shutter speeds and soap bubbles will slowly collapse and need to be blown up with a straw from time to time. Tease the bubbles over the edge of the glass for interest and composition and make sure they don't break the edge of the frame.





Adding Flowers or fruit

The power we get from our monitor, is sufficient for transparent subjects like glass, but not so good when you introduce a flower or a piece of fruit. The light isn't strong enough to light those subjects from behind.

With the image below, I overcame the problem to some degree, by taking a second exposure just for the fruit. Later in Photoshop I used the fruit from one shot and the rest of the content from the other.



Painting with Light

Another alternative is to use a torch and paint in light as I did below. To do this you will need exposure time and just a little experimentation. So, close the aperture down so that the exposure is quite long. You need a few seconds to move the torch light over the flower subject, but as you can see below it can give a good result. Modern LED torches do have a powerful light and it works.

Of course you could also use the technique described for the fruit above, make a second exposure, just for the flower



Liquid in Glasses

For the most part, water is all we need, because a glass containing water will reflect the background colours and textures quite effectively. However, applying a little food colour is another obvious choice we have. There are two ways to use the food colour.

We can capture the drop of colour as it spreads through the water, before it's fully mixed in. Of course the issue we have then, is fairly long exposures and moving colour. So, with our example below it works up to a point, but you can see slight movement, even in this small image as the coloured clouds sink through the water.

Using a white background where we have maximum light helps to keep shutter speeds short, but the technique does not work so well with coloured backgrounds. Coloured backgrounds will extend those shutter speeds considerably.

The better option to capture this idea is probably flash. We need the speed of flash to freeze and movement as that cloud of colour descends into the glass. Having said that, we could shoot outdoors against a white card and then we could expect faster shutter speeds.



Once the colour is mixed, it can be used with white backgrounds or coloured ones.



Audio Visual

I have picked out a few of the glass images I have created using these techniques and you can view them in a slideshow called "Sand, Soda and Limestone" The basic ingredients of glass. The slide show is available in HD for PC – Mac - YouTube

Photoshop/Lightroom

Of course Photoshop and to some degree Lightroom offers many post processing techniques too. Copy and paste, or just paint colours onto a new canvas with a brush.

Add Photoshop filters to your brush strokes, just allow your creativity free reign.

Third party filters are also an option and below you can see one result from the **Topaz Impressions** range. If you own any third party filters of this type, try them on both your glass images and also when preparing backgrounds.



The Flood Filter

One filter that does seem to work well with our glass images is the Flood filter made by Flaming Pear.

It gives a great reflection effect and also many ways to adjust those reflections. We took a standard glass show, added some extra canvas at the base of the image and applied the Flood Filter.

The filter settings allow us to set the dividing line where the reflection starts, but that is an easy thing to do. This image below could be called Long Cool Glasses



Straight Image Backgrounds

We can use natural images as our backgrounds, but they can often be a little contrasty for our use in this technique. They often work better if we add a degree of Gaussian Blur to the image first. It's fair to say that I had more failures using images as backgrounds, but the example below works reasonably well.



To make using real images as a background, we would need to carefully select the images to use. Those that are not too fussy, but can still support the glass. With the image below I cheated a little by taking a black and white glass shot and blending it with the background image using Multiply in Photoshop layers.



[View the Slide Show HERE](#)

[The Tutorial Video Collection is available for download HERE](#)

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