

## Pin Hole photography & printing



For a number of years now at Christmas time I will buy myself a present. It's not that I am scared of what I might end up with from other sources, it's just something I do as a bonus for making it through another year in this fickle industry.

My gifts are not always photographic, but most times are or relate to photography. Books mostly, a laptop (kind of photographic), a lens, one year a ride on mower (definitely not photographic), but I think my most satisfying purchase to date was a pin hole camera that I bought at the end of 2005. Why you might ask when the whole world is going digital? Well relax I bought one of those later in the year out of necessity.

For a few years now I have been intrigued by the pin hole image and more often than not have liked the images I saw until I went searching all the pin hole sites. Maybe more on that later.

A Pin Hole camera is basically an apparatus, usually a box, that enables one to make an image without the use of a lens. Light passes through the tiny aperture (pin hole) remains unbent and forms an inverted image on the rear of the "camera" where either film or photographic paper is placed. Sounds simple enough, but in truth I think good pin hole photography is far from simple. In fact good photography is far from simple so why should this be any different.

It seems that most people tend to make their own pin hole cameras from a variety of materials. Coffee tins, paint tins, shoe boxes etc etc. I contemplated making my own, but could never find the time to devote myself to making a camera that I didn't have to load and unload every time I made a photograph. What I mean by this is that if you have made a camera out of an old coffee tin then you need to load the film or paper into the tin, expose it then unload it if you wanted to make another shot. The same if the camera is made out of an old shoe box. I just couldn't image wandering around a forest, for example, just with a pin hole camera, wrestling with a dark bag to load and unload after every shot. Not really my idea of a good time.

So it was about 18 months before I bought my pin hole camera that I saw one that was owned by my fellow workshop instructor Jeff Moorfoot. His was a 4" x 5" size that was designed to take film holders. That's what I need, I thought, so got the details. After

thinking about it I thought it silly for me to buy a 4" x 5" when I already had a 4 x 5 camera. And anyway it didn't take much thought to realize that I could easily convert my Linhof 4 x 5 into a pin hole if I wanted to.

Further investigation told me that there was also an 8" x 10" available as well with the same mechanism to hold film holders so all I had to do was find some 8 x 10" film holders and I would be away. Well it took me 18 months to get around to finally buying the camera and part of the reason I did was that Christmas was approaching and I was contemplating what I could buy myself that particular year. I thought that by buying an 8" x 10" it would be much different to what I was use to and also I would be able to contact print the negatives and end up with a size print that I was comfortable with.

Having bought the camera and then tracking down some film holders, 6 in all (which incidentally cost me more than the camera. (\$350 as opposed to \$250) I then started sourcing film. Well of course that was becoming a dirty word at some stores I contacted and so I thought the best way was to have it shipped from the UK or the USA. Are you loosing interest? Don't. The world is a small place now when you need something.

At the same time I was gathering all this information I recalled an article that a chap in England had sent to me about paper negatives. I had filed it in my "knowledge to obtained at a later date" file. I retrieved it, read up on it, sourced other information, made some test "paper negs" and low and behold I was away. To hell with film I thought, I'll just use paper.

For those of you who are unfamiliar with paper negatives or for that matter what they are, basically what you are doing is substituting film for darkroom printing paper. You load the film holder with paper instead of film, or if you have made your camera from a shoe box or coffee tin then open it, place it inside and close it up again, expose it in the normal way and develop it as you would in a darkroom situation if you were making a print.

Plastic or RC paper is best as it keeps much flatter and is thinner than fibre paper. The texture of the paper can also be a consideration as it will be transfered to the print when and if you come to do one. Also you need to avoid printing paper that has it's name emblazoned on the back of the paper. When printing this shows through quite easily. To say that one is better than the other I think would be presumptuous of me as tastes will vary quite considerably. As a guide, Ilford RC or Forte RC work pretty well and have a plain back.

If you are using paper that is 4 x 5" or larger then you can contact print (remember it's emulsion to emulsion) or even if you have an enlarger big enough, place the negative in the negative carrier of the enlarger and then make a print the normal way. With contact prints dodging and burning is still possible although sometimes made more difficult because it is hard to see the image on the base board, but all normal darkroom applications are possible when making a print.

One of the things that scare a few people off from using paper negatives is that it is much slower than film. Tests will need to be done to determine the speed, but it can be up to 5 to 6 stops slower than TRI-X, which incidentally is the film stock I am using. Also the pin hole size will determine what your aperture is which will of course determines the length of time

you leave the shutter open, I mean leave the hole uncovered. It's getting interesting don't you think?

One of the benefits of using paper negatives is that you can do your test, go into the darkroom and develop the paper as you would if you were printing and inspect. If it's wrong go out and do another one. Too dark, then just give it more time. Most exposures are into the seconds and even minutes. I tried a self portrait recently which was 4 minutes. A landscape for 12 minutes. Coffee anyone! I should say that we are dealing with apertures of F180 to F356, hence the long times.

One of the other challenging aspects of Pin Hole photography is that you don't really know what you are going to get on the negative. There is no view finder (although it is possible to rig up something to give you an idea) so when you frame up there is a certain amount of guess work. It didn't take me long to work out how to get an approximation of what the scene will look like. It's all in testing and that begins when you are trying to establish your ISO rating of the film or paper you are using.

Paper negatives are more contrasty than film negatives so be aware of this when and if you do your tests. Sometimes taking the paper from the developer before it fully develops is a good idea, but a keen eye is required for this and consistency with darkroom lighting is essential.

A pinhole can effectively be made from any existing camera, even digital cameras. For 35mm and even medium format all you need is another body cap, a pin hole in the centre of it and you are away. You will also need to check for vignetting if you do this. 4 x 5 cameras can be used by purchasing another lens board and converting it to a pin hole. Using the bellows will give you varying focal lengths, but you will need different hole sizes and probably different lens boards. In fact pin hole lenses are available from the USA I believe. Go to Google.

The dreaded internet is full of pin hole sites, (Google again) some good and some a waste of time (in my opinion), but you have to wade through them all to decide for yourselves which is which. What I found mostly was that because the image had been taken with a Pin Hole camera then that alone gave it merit and deserving of the right to be seen. Ordinary and awful are just that and careful scrutiny of ones images is essential, what ever the medium chosen.

Finding the correct pin hole size can be an arduous task in itself. Again there are sites that tell you how to determine the correct size for the hole or you can do it yourself by trial and error. Too big a hole will give you and unsharp image. In fact all pin hole images are slightly unsharp. The bigger the hole size though the worse the image gets. It is the nature of the beast, but if you get the correct size then the images are very acceptable and the good thing is that the same degree of sharpness is maintained from front to back within the image.

As a starter drill a hole about 2 or 3mm in size, place some industrial strength alfoil over it and make a pin size hole in the centre of it and then try it. If the hole ends up being too big then start again. Make sure when you make the hole you do it on a hard surface and then

sand off any burrs that may come through the other side. Be gentle and careful and it will work fine.

Alternatively you could purchase a pin hole camera from some of the sites on the web or you could contact the people who made mine and place an order with them. (See below) Mine is well made of first quality plywood, comes with 3 "lenses", a wide angle, a normal and a telephoto and tripod sockets for both horizontal and vertical. Also you have a choice between a 4" x 5" and an 8" x 10" model. Both have the capacity to hold regular double dark film holders so you don't have to load and unload after every shot.

If you have a 35mm camera and want to try a pinhole camera then I would recommend the 4" x 5" size as film holders are readily available and so is the film and they are cheaper than the 8 x 10 and it is a good way to start.

The past year and a bit I have had heaps of fun making images with my pin hole camera. It has been a great addition to my growing arsenal of camera equipment. Again it's not for everything or probably everyone, but just another way to record ones vision. If you go for it, then have fun with it.

Cheers till next time.

For hand made Pin Hole Cameras contact Peter Bowes at Obscurasearch Phone # 03 9431 4089 or email: [bowes@bigpond.net.au](mailto:bowes@bigpond.net.au)

Some Pin Hole Web sites: [f295.org](http://f295.org) [bobrigby.com](http://bobrigby.com) [pinholesolutions.co.uk](http://pinholesolutions.co.uk)

Richard White lives in the North East of Victoria. His main subject matter is the Landscape and people in their environment. He is a Master Photographer with the AIPP and in 2003 won the Landscape section of the Victorian Professional Photography Awards and was awarded a Victorian Art Council Grant for overseas study. He conducts photographic workshops around the state and interstate and also overseas. For more information or a current illustrated brochure on these workshops write to Richard at P.O. Box 425, Mansfield, Vic 3722, phone / fax 03 5776 9533 or Email: [ragwhite@mcmedia.com.au](mailto:ragwhite@mcmedia.com.au) Alternatively fill out the reader information card and circle the appropriate number. Richard's web site is [www.richardwhite.com.au](http://www.richardwhite.com.au)