

METHODS FOR CREATING A STEREO PAIR

(see below for workshop info)

The stereo pair will be viewable in 3-D using special glasses available at the conference or here:
<https://www.berezin.com/shop/5300>

PREPARATION

Make sure you have a shooting subject that is has near, medium distance and far objects.
Try to shoot in daylight or in bright interior light.

SHOOTING METHOD 1: DSLR + tripod (*cha cha* method)

If you are a photo student you most likely will have access to a DSLR. If not see other options below.

CAMERA SETTINGS

- jpeg or RAW file format (of course – if possible, always shoot RAW!).
- Color space Adobe 1998 (even if it will end up BW)
- Low ISO (regardless of lighting), use tripod if necessary.
- Aperture priority, f8, f11, 16 or smaller for the greatest depth of field (this is crucial).

Use a tripod or table top or tripod with rail that allows you to smoothly dial the camera to move sideways. You will shoot one image from the left and one 2 inches to the right keeping the camera level. See diagram below.

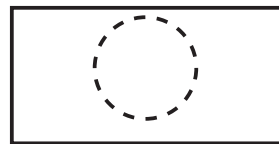
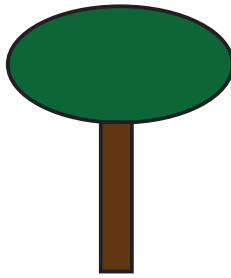
Set your camera on a table or level support (tripod), focus, take a picture, move it 2 - 2.5 inches to the right or left, and shoot again. If using a tripod make sure to keep the camera pointing in the same direction. Also make sure the tripod is set on a level surface (not on a hill). The distance is measured from the center of the lens to the center of the lens in its new position (see image below). But do not worry too much, you can also eyeball this for practice. Now you have a 'stereo pair', consisting of one image taken from the left and one from the right of the subject. Do not twist or turn the lens sideways, keep it pointing forward when you move it to the side.

See this youtube video: <https://www.youtube.com/watch?v=8-JIDDv2esI>

How to is at 3:52 time mark.

The average ocular distance between most people's eyes is approximately 65 – 70 mm (2-1/2 inches). This works well for most subjects that are somewhere between 8 – 20 feet in front of the camera. Beyond this distance, the 3D effect starts to diminish.

NB: Although they may look identical, if the camera was not moved, the 3-D effect will not work once the pair is viewed. The images must be taken at least 2.5 inches from each other.



2.5 inches / 65 - 70 cm

Left view of stereo pair

Right view of stereo pair

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SHOOTING METHOD 2: Cell phone

See above but use your handheld phone. Do all the same things as above, shoot a lot!

You can also try these apps:

Camarada (requires two phones): <https://www.youtube.com/watch?v=qrlT71l20xw>

Makeit3D

<https://www.youtube.com/watch?v=aCzEKnoS2EE>

3-D Steroid Pro

<https://www.youtube.com/watch?v=JKC5zVIZLvU>

SHOOTING METHOD 3

You can turn a 2D image into 3-D. We do not recommend this, but if you have very unique images and or historical ones you can work on creating them into 3-D images in this software.

<https://www.leiapix.com/>

VIEWING, EDITING, LINING UP

Please contact Rebecca Hackemann and we can arrange for a workshop in person or zoom in the KS area. Images need to be edited for color balance, turned into black and white (if you wish!) and otherwise adjusted as all your photography would.

Then bring the left image next to the right image (left on left right on right side) into one photoshop layer. The final "pair" should be in one document and saved at 300 dpi (see information on entry sheet).

After aligning them in photoshop (or stereo photo maker) they can be viewed using a side by side viewer like these:

better: Lornette Viewer:

<https://www.berezin.com/3d/cardvwr.htm>

You can also make them into anaglyph red/cyan views and see them with these types of glasses (anaglyph glasses). The quickest way to create anaglyphs is by using stereo photo maker software:

Anaglyph glasses:

<https://www.berezin.com/shop/544>

Stereo photo Maker:

<https://stereo.jp/eng/stphmkr/>

SUBMIT Example

No you do not have to have rounded edges or a gap in between, but horizontal elements must be lined up on the horizontal axis! You can use photoshop guides to help line them up.



Contact: Rebecca Hackemann: 917.864.2155, rebecca212@ksu.edu if you would like to have a workshop done in your class!