

STEREOSCOPY and STEREO PHOTOGRAPHY

3D drawings are known to have been made in the late 1500's and early 1600's.

Charles Wheatstone demonstrated his stereoscope to the Royal Society in 1838 to view pictures in 3D. Separate left and right images viewed by the left and right eye via the use of mirrors. The viewer was in the centre with the left image at 90 degrees on the left side and the right image at 90 degrees on the right side. This was two years before photography was invented.

David Brewster produced a stereoscope and the first 3D camera in 1849. One of his stereoscopes was presented to Queen Victoria at the opening of the Great Exhibition at Crystal Palace in 1851. 250,000 stereoscopes were sold in London and Paris in 3 months of that year.

In 1853 anaglyphs were invented using red and green filters (much later replaced with red and cyan filters for a better more balanced view). This allowed the left and right images to be printed as one overlapped picture and be viewed through the red and green filter glasses.

In 1858 the first touring shows using lantern slide projection brought anaglyph 3D shows to major towns and cities.

The Stereoscopic Society was founded in 1893 and has had a strong membership ever since then. The majority of members are based in the UK but there are members in most countries of the world.

By 1920 there were more than 12,000 3D photographers with more than 50 million stereo-view cards sold to the public. Lots of homes had collections of these cards which were viewed with a Holmes viewer (the most popular viewer to this day).

It was the introduction of the Movies which caused the rapid loss of interest in 3D.

When 35mm film became popular 3D also became popular again during the 1950's. Lots of cameras, viewers, projectors, beam splitters and other gadgets were produced by many different companies.

Due to the need for viewers, special glasses and the difficulty of correctly aligning the two images for projection, 3D has always remained an interest for the dedicated worker only and a novelty to the rest of the public. Passing a viewer around a group to all view one picture and then change it and pass around again would have been very acceptable to the Victorians but would not suit our modern high-paced society. Television, video and computers have distracted people, although it is now easier than it has ever been to take and view 3D images and video with the use of computers and readily available software (some of the best software is free).

With the exception of projection which needs to be done with a silver screen and calls for great alignment accuracy, all other forms of viewing can be successful even with quite marked errors in alignment. In my own opinion there is no viewing system that can match the clarity of projection when it is done well. Now we are in the digital age this is even easier to achieve. 3D images can be produced and shown on a 3D television.

It is interesting to note that 3D systems are being increasingly developed and used in the NHS and also by the Police. Many of the various space probes have also used 3D as in the famous 3D pictures sent back from Mars.

I have had a fascination with all forms of 3D images most of my life and started taking my own pictures in the early 1970's. I have been a member of the Stereoscopic Society since 1998 and the ISU (International Stereoscopic Union) since 2002.

It is sad that true 3D digital cameras introduced by Fuji in 2009 and copied by other manufacturers have all stopped production in 2013 due to lack of sales. I like to believe that production will restart at some future date and even better cameras will be produced.

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Useful 3D websites (February 2016)

UK based:

Stereoscopic Society	www.stereoscopicsociety.org.uk
The London Stereoscopic Company (3D cards and viewers)	www.londonstereo.com

International:

ISU (International Stereoscopic Union)	www.stereoscopy.com/isu
Stereo Photography - the World in 3D	www.3dphoto.net
Phereo (3D image sharing website)	http://phereo.com
Flickr.com - Stereoscopic Society group (Image sharing website)	www.flickr.com
Cyclopital 3D	www.cyclopital3d.com
You Tube - lots of 3D material in several formats to suit various viewing options	

Japan:

StereoPhotomaker (and other free downloadable 3D software)	http://stereo.jpn.org/eng/
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