

Difference? What difference? **Silke Helmerdig – Workshop paper outline**

Looking at camera models, both photographic and digital, they seem close to being identical. Apparently they use the same settings and tools. The same terms are used to describe the functions.

Only on some models the crank to rewind the film and the little window at the back to see the film carrier through gives the filmcamera away. But although the look is similar, the handling of the camera differs.

Photographers with digital cameras follow their displays, snapping happily away with hundreds of pictures to be stored on their memory cards. The approach of the photographer towards the image has changed accordingly.

Andreas Herzau, German photographer, wrote in a German photography magazine a few months ago, that since photographers can control their images on the display immediately after the exposure they have lost the tension for the next image, for the best image still to come.

Previously, photographers had to live with insecurity, wondering whether there was anything on their rolls of film at all, not knowing if they had already taken the image that would really satisfy them.

But the difference lies also in the creation of the image in the camera.

For a photographic image, light falls onto a light sensitive carrier where it forms, through a chemical reaction, an image, which might be latent until developed, but is already an image.

The light leaves an imprint on the sensitive layer.

Once developed and fixed it will stay an image, readable without any machinery, and even if stained or damaged it can still be identified as a specific image.

In lens-based digital imaging, in comparison, light is let through the shutter, falling onto a sensor that gives a reading of electrical charges. That reading is translated into data and from data into an image. When we shut down the programme, the camera or the computer, the image dissolves into data.

It is not an image anymore. It goes back into a state of complex codes, impossible to be identified as a specific image without the right software and machinery.

If the code is damaged the image can barely be identified for what it was, if it can be identified as an image file by the programme at all.

And everytime the shutter is released, light is read and measured by the sensor. But immediately afterwards, the reading is deleted and the sensor is reset. Nothing is stored. The sensor does not memorise. The image is not an imprint of light.

Since photography became a widespread medium our visual memory has become strongly reliant on photographic images. But nowadays it relies more and more on the fragile imitation of photographic images.

One of the major questions unresolved is, how do we safely store these 'memories' in order not to lose them once the recorded layer comes off the cd or the file format can't be identified any more?

The most obvious and most talked about difference is that of resolution: grain versus pixels.

Silver grain is spread arbitrarily across the image. It forms clusters dependent on its chemical reaction with light. Pixels come in a given order, defined by their location on the sensor. But more than just seeing a structural difference, I wonder how the perception of photographic images is influenced by the resolution.

Looking at the history of photography and its development, it seems that the meaning of resolution evolved with technical achievements.

Grain, frame, proportion, all became, in the long existence of photography, signs for a certain approach of the photographer towards the image. The high resolution, straight framing and proportions of large format photographs are read as signs of the distanced and more neutral approach of the photographer compared to the more involved 35 mm photography with its grainy images, unsteady framing and the 2:3 proportion.

Looking back in the history of photography we can see, that aesthetic changes often followed technical developments and that the aesthetics of the image stand in relation to the handling of the camera.

Photography is a medium of industrialisation.

It has changed perception in the same way as other achievements of industrialisation had an influence on perception: like new approaches in building and architecture, new ways for moving around with previously unknown speed.

Photography has greatly influenced ways of seeing things. The stop motion photographs of Eadweard Muybridge brought a new conception of understanding, seeing and painting motion.

Just by the effect of long exposure times, the always busy Parisian boulevards appeared, in early photographic images, empty in broad daylight, unseen by the photography viewer's eye.

Depth of field seems nowadays a common way of working with the representation of space in a two dimensional image. But this focus has only been around since lenses started to be used for image making.

Only from our experience with lens based imagery can we understand and read these signs.

Aperture and shutter speed are two means of expression in photography, that are clearly imitated by the programme of digital cameras as a result of perfect cooperation from software engineers and the camera construction departments.

Digital imaging, in comparison to photography, is not so much about mechanical reproduction any more, as it is about information. It is a medium of the information age.

Another difference is - at least in the file - the way colour is represented. Although the meter reading comes only from red, green and blue pixels, each pixel has an individual colour output from a range of 16.7 million possibilities.

Only the analog version of the image, which is visible for us, is represented in rgb again (on the monitor) or in cmyk in print.

In analog photography we have three different colour layers. Just because the eye is too inert to differentiate dots under a certain size, we believe we see mixed colours through the dispersion of the grain.

What the digital technique and the differences to photography will bring for the aesthetic of photography remains to be seen.

To me, the most interesting suggestions for an aesthetic of lens-based digital images, result from an awareness of the differences and specific uses of its immanent qualities.

Just as the handling of the cameras and the creation of the images have changed, so too, the handling of the image has changed.

Photography was, for a long time, a keeper of private memories. Special occasions were held on film, the pictures were privately kept in albums. The photographs, well staged with great effort, were proof of what had happened in one's life and who was part of it.

With lens based digital imaging and the opportunities provided by the world wide web, the private world of the photo album has gone public.

Digital images seem to be proof of ‚being there‘, rather than proof of ‚having been there‘.

Photography is in the direct sense of the word „drawing with light“. Lens based digital imaging can perfectly imitate what we have known from photography, but it produces images only through a translation from electrical charges into data into an image, and is very much dependent on software engineers to find the right parameters for representation.

Consequently the major difference lies in the image as such. In photography, light leaves an imprint on a light sensitive layer. The result is an image, that will always be an image and nothing other than an image.

The digital output of light hitting a sensor is data, not an image. The underlying binary code is the same for anything that is digitalised. It could be translated into text or sound or image. So it is not necessarily an image, it is information in the first instance.

Both methods of image production create what Flusser called „technical images“. Photographs, still being valuable industrial objects, are the connecting link to pure information that we find visualised in digital images.