

## Embracing the Technology of the Day by L. A. Vogel

The switch over from the darkroom to digital  
I have been a fine art photographer for over twenty five years, exhibiting and selling my art nationally and internationally. I have taught workshops and seminars for over twenty five years. I began by teaching darkroom workshops and presenting field workshops with an emphasis on the large format view camera and the Zone System.

I came from the very traditional roots of black and white photography. With this as a background, I developed an aesthetic for the fine crafted image. Although I have made the switch over from the darkroom to digital processing and inkjet printing, the aesthetic of the fine print is still with me today.

Traditional photographs by L.A. Vogel

For the past several years I have transitioned my workshops classes and fine art photography production to an all digital format. Although Adobe Photoshop ® is the technology that I teach, I always put an emphasis on the fine art perspective. Photoshop ® is the how we do it; the aesthetics is why we do it.

Working with a digital medium has transformed the way I work and how I see with the camera. The possibility of what if is so much more possible with the digital process. I know much of what I do now would not be possible without the technology of the day.

Before and after photographs. L.A. Vogel

Before we talk about where we are now, let's talk about how we arrived at this point in time, The Digital Age. A timeline is a great way to see our journey, and it all begins in 1826 with this little gem of an image created by Joseph Nicéphore Niépce.

View Through a Window at Grasse (1826) by Joseph Nicéphore Niépce

Although this timeline is not a complete timeline of photography, I have tried to include some key dates and events.

1826 - Although there are other photo processes being worked on around the same time, this image is generally accepted as the first photographic image created. We are looking at the technology of the day in 1826. Niépce used a polished pewter plate coated with bitumen of Judea (an asphalt derivative of petroleum). He uncovered the lens and after a day-long exposure of at least eight hours. The plate was removed and the latent image of the view from his window was rendered visible by washing it with a mixture of oil of lavender and white petroleum. The result was the permanent direct positive image you see here, a one-of-a-kind photograph on pewter.

1834 - Henry Fox Talbot creates permanent negative images using paper soaked in silver chloride and fixed with a salt solution.

1837 - Only three years later, Louis Daguerre creates images on silver-plated copper, coated with silver iodide and developed with warm mercury. The French Citizens begin using the latest technology of the day, the Daguerreotype.

1841 - Talbot patents his process under the name Calotype.

1851 - Frederick Scott Archer spreads a mixture of collodion and chemicals on sheets of glass and creates the wet plate collodion process.

By now, I imagine a bunch of French photo enthusiasts complaining, "Why do we need a new process, we love the Daguerreotype!" In the world of technology, everything changes.

1855-1857 - Direct positive images on glass (Ambrotypes) and metal (Tintypes or Ferrotypes) become popular in the U.S.

1871 - Richard Leach Maddox, an English doctor, proposes the use of an emulsion of gelatin and silver bromide on a glass plate. This becomes the dry plate process.

1880 - George Eastman, at the age of 24, sets up the Eastman Dry Plate Company in Rochester, New York. In that same year the first half-tone photograph appears in a daily newspaper.

At this point in our timeline we are only 54 years away from that first crude image created by Niépce in 1826 and we have already seen at least six major changes in the technology of the day . . . everything changes.

1900 - The Kodak Brownie box roll-film camera introduced.

1906 - Availability of panchromatic black and white film.

1907 - First commercial color film, the Autochrome plates manufactured by the Lumiere brothers in France.

And the first debate begins on Black and White versus Color.

1914 - Oscar Barnack, employed by German microscope manufacture Leitz, develops a camera using the modern 24 x 36 mm frame and sprocketed 35 mm movie film.

1928 - Rollei introduces the Rolleiflex twin-lens reflex camera which produces a 6 x 6 cm image on roll film.

At this point, I imagine a small group of young romantics gathering in a garage, somewhere in middle-America, pouring toxic chemicals over copper plates and "waxing on" about the great old process of the Daguerreotype and discussions of how "we are keeping the old process alive." More complaints about how this new silver halide film process is "taking over" in a battle of "us against them." And . . . everything changes.

1932 - Ansel Adams, Imogen Cunningham, Willard Van Dyke, Edward Weston and others from group f/64, dedicated to their proclamation of, "straight photographic thought and production."

1935 - 1936 - Development of Kodachrome, the first color multi-layered positive color film. The development of the Exakta 35 mm single-lens reflex (SLR) camera.

And we all know what happens to Kodachrome.....Eastman Kodak Company announced on June 22, 2009 that it will discontinue sales of Kodachrome Color Film, concluding its 74-year run . . . everything changes.

1948 - Hasselblad in Sweden offers the first medium format SLR for commercial sale; Polaroid sells instant black and white film.

Think about it, 122 years after the day-long exposure made by Niépce, we are making exposures in fractions of a second and waiting minutes for an instant Polaroid image to process in our hands! To the modern man, this technology of the day appeared to be just short of a miracle. I am sure the French could not have imagined the technology of the Polaroid back in the day of the Daguerreotype. Everything changes!

1975 - Steve Sasson at Kodak builds the first working CCD-based digital still camera.

Yes! 1975 Kodak is already working towards a no-film camera. Although it will not be available to the public for another 16 years, the writing is already on the wall.

1987 - The popular Canon EOS system is introduced, with the new all-electronic lens mount. Thomas Knoll and his brother John begin work on a graphics program which later becomes Photoshop.

1990 - Photoshop® is released to the public and 19 years later we are using version CS4, which translates to Photoshop 11. Graham Nash and Mac Holbert begin working with the Iris 3047 printer and they lay the foundation for the digital printing revolution.

1991 - Kodak DCS-100, the first digital SLR made from a modified Nikon F3.

1993 - Epson introduces the first Micro-Piezo inkjet print technology. The same technology used today on all Epson inkjet printers.

1999 - Nikon D1 digital SLR, 2.74 megapixel camera on the market for \$6,000. This is the first DSLR to be built from the ground-up by a leading manufacturer.

Now the background noise and chatter begins again, about how the technology of the day is "taking over" and the "this versus that" mentality becomes the talk of the day. Remember . . . Everything changes!

2003 - Compact digital SLR's are introduced with the Olympus E-1; Canon Digital Rebel is introduced for less than \$1,000.

2004 - Kodak ceases the production of film cameras.

2005 - Canon EOS 5D, first consumer-priced full-frame, 12.8 megapixel DSLR with a 24 x 36 mm CMOS sensor for

\$3,000.

2005 - Agfa Photo files for bankruptcy and the production of Agfa brand consumer films ends.

2006 - Polaroid announces it is discontinuing the production of all instant film products, citing the rise of digital imaging technology.

And on . . . and on . . . and on . . .

We are now in the midst of a rapidly changing world of digital technology. So, what is the point? **EVERYTHING CHANGES!**

As artists we need to understand the technology of the day. Knowledge gives us choices with our art and creativity. Staying on top of our medium gives us the ability to create in new and exciting ways. Our advancement of creative thought and the production of our art would not be possible if we refused the technology of the day and remained glued to the techniques of the days gone by. There is a quote that says, "Progress is the enemy of tradition." However, I like to look at it the other way around: "Tradition is the enemy progress."

What do these two images have in common?

Image on left, Niépce, 1826 / Image on right, L. A. Vogel, 2008

Both photographs were taken in France but, separated by 182 years of progress and The Technology of The Day!

If you would like to see more of L. A. Vogel's fine art photographs, please go to [LAVogel](http://LAVogel.com).