

Mastering Mounting



by
Chris A. Paschke,
CPF, GCF

Digital Hoopla

A six-year-old child is sitting on the sofa with his mother looking through a family photo album... “Where’s my picture, Mommy?” “We bought the digital camera right after you were born, sweetheart,” she says. Wow, the world of digital cameras has taken strolling down memory lane to a whole new level. For many, flipping through old family photos on the overstuffed sofa in the living room has been altered to an activity that requires sitting on straight backed chairs around a computer monitor in the home office.

The Times, They Are A Changin’

The current digital photo revolution began with computers. With the onset of digital photography we have been allowed the pleasure of taking photos, then viewing them immediately. Historically, we were prisoners of rolled analog film that required dropping at the local drugstore and waiting days for developing, only to find our limited photo skills had captured out of focus images and closed eyes. We were thrilled with the onset of one-hour developing, though to many that was even too long a wait. Now we can do it all ourselves. Shoot the image, download it, manipulate it, alter its size, tweak its color, edit its content, open closed eyes, and then e-mail it to Grandma all in the same day. What a deal! The digital revolution is here to stay and getting more powerful by the day.

The Hoopla Over Digital Photography

I came across an interesting article earlier this year, originally published in November 2002 by Durst-Pro-USA, Inc. (durst.com) which discussed potential reasons behind the origin of digital photography during this technological age.

From a commercial point of view, a photo image of a product is only needed for a limited period of time. It is produced specifically for the promotion and sale of a product, and not designed for long-term display, documentation, or as an emotional keepsake. In that venue, digital photography is perfect. It is immediate, cost effective and may turn from the shot of a product to an oversized vinyl banner for a store window by that afternoon.

Although ideal for commercial applications, digital photography was never really meant for long-term fine art applications. Therein lies the problem. In our immediate and disposable society we want to see the photos right away, often not patient enough to wait two hours when one-hour developing is the promise.

Does any of this matter? Of course it does! As much as any new media needs to be explained in order to be better understood. In order for framers to be able to figure out what the limitations are, and in turn how then to mount,

mat, and frame an image, we must first be able to understand what it is made of.

The Birth of Digital Photography

Digital photography was not developed to make photography better, but rather to make photography more interactive and customer-friendly. It appears to have been developed by a group of companies like Samsung, Intel, Epson, and Hewlett Packard to take over market share from the traditional photo companies like Polaroid, Kodak, Agfa, and Ilford. Use of digital photos also breeds the purchase of affiliated products, including printing papers, inks, printers, CD, and, hopefully, picture frames or preservation scrapbooks.

Today, many people print out many of their images, but they may not be using pigmented inks or even digital photo papers. And even when not on high quality photo papers, these prints may still end up in scrapbooks or framed. This is why we, as framers, need to be able to advise them on their digital photos. (See sidebar on next page for some questions to ask.)

Cost and Permanence

I've found that digital imaging was not invented to save the customer money, nor was consideration taken for its lightfastness, longevity, or permanence. It is wonderful to be able to scan and save digital images and files to CD-ROM, but CDs are currently only guaranteed for a lifespan of 20 years. Hence that six-year-old at the opening of this article will not have images of himself for his grandchildren if saved to a

"vintage" 2000 CD. Digital photos are evolving and experiencing the same growing pains of early resin-coated (RC) photos. Fading, reactions to environmental conditions, and framing intolerances are all common issues.

It is rumored that Sony is working on a whole new CD-ROM format that will be able to hold four Gigabytes in the same space that currently holds 600MB today. The new format is thought to be replacing all other formats including CD-ROM and DVD, which have already replaced 5¼", 4", and 3" floppies, and ZIP drives. Digital software has a lifespan of three to five years before being considered outdated. Even if you have your digital images saved to CD or DVD and they survive 20 years without digital dust and deterioration... will your computer in 2020 even be able to read it?

Digital to Image

In the late 1990s, consumers repeatedly stated the only reason for having a digital camera was to send e-mail photos. By the year 2000, 63% of consumer digital images were being saved to computer hard drives. In 2001, it was up to 68%; in 2002, it was thought to be 71%. Then, during late 2002, it was reported by PMA Market Research in *The Path From Pixels to Print* that 78% of digital camera users were now using their cameras for the preservation of memories. This means that the previously computer locked images (previously only on hard drive) were finally being printed for viewing away from the computer monitor.

In an additional report by

Brian Longheier, (*Photo Marketing Magazine*, June 2003) he stated 20% of all digital images were now being printed as viewable images away from the computer, over the 14% in the previous year. These statistics are based on in-home printing. Digital photo kiosks have been available since 2001, but only a tiny percentage of digital images are being professionally printed for the consumer. Retail developed digital prints still account for only 6% of the total retail photo prints in 2002, over the low 2% in 2001. We still have a long way to go.

The real problem is that most digital camera users are not even aware of the printing options available at a retail level for their digital images. So they continue to print on their desktop home printer. New photo printers (see *PFM*, June 2003, "An Eye on Digital Technologies") and new technologies are capable of printing either traditional film or digital photographs from camera, disk, or chip, to traditional photo paper. In January 2003, Kodak released an ad campaign promoting the developing of images from a digital camera card being dropped off just as you would a roll of film. And Sony is in hot pursuit. It all boils down to the re-education of the consumer. Who knew?

The images that are printed from these kiosks are often printed on traditional silver halide photo paper, or one visually similar. For all intents and purposes, they have the look and feel of familiar photos we all have come to know and love. These may or may not be heat tolerant, but are no doubt susceptible to traditional orange

When you think you might be dealing with a digital photo, ask questions. Keep in mind the first step to controlling mounting mistakes is at the front counter, not while completing the project...

Is this a traditional photo or a digital photo? You can also ask, "What type of camera was used?" This is not a question of manufacturer such as Canon, Kodak, or Minolta, but rather an inquiry to determine traditional versus digital print. Sometimes the above question will negate the need for this question, but the point is to get the basic information. If it was shot with a digital camera, ensuing questions will be better targeted.

How long ago was this image printed? Since the dry down time of a digital image can take up to a week, image colors can change during that time making mat matching (et.al.) an issue. Moreover, the heat sensitivity of a newly printed image is greater than that of one even just 24 hours dry. It is safest to mount and frame after one week.

Did you modify this traditional 35mm photo in Adobe PhotoShop before printing? Even if a photo was shot using a traditional film camera, the print may have been scanned into a computer, manipulated in Adobe PhotoShop, and printed on a desktop printer. The resulting photo is now a digital photo and may be of either piezoelectric technology which may tolerate heat, or thermal inkjet which may not.

Was this image modified at a local one-hour photo lab kiosk? A traditional film print may be scanned into a machine to crop, enlarge, manipulate, take red eye out, and then printed. This is different technology from home scanned images of piezo or thermal bubblejet in that the resulting photo image is a digital using a thermal transfer method. This technology may or may not be heat sensitive. Thermal transfer technology encompasses dye sublimation, dye transfer, and dye diffusion processes. .

Do you know the type of printer this was printed on? Knowing the actual brand of the printer, or location so you can call, will help determine the technology and its sensitivities. An Epson will be a piezo inkjet, a Hewlett Packard will be bubblejet inkjet. As mentioned above, one type of print tolerates more heat than the other. A Kodak kiosk will probably be a dye sublimation thermal transfer image. *This one will look so much like a traditional photo you may not be able to tell otherwise. Check the writing on the back of the paper.

Did you print this digital photo yourself? If the image was printed by the customer, then a second copy should be readily available from them. Even though the cost of printing your own photos on the best digital photo paper can be pricey, that expense should be one the customer needs to understand is part of digital framing. By obtaining a second image to test, you can ensure the best possible mounting to treat it properly. This is when you can ask, "May we have a duplicate to test prior to framing?" The request for a duplicate should be stressed not because of a potential disaster, but rather to test to prevent that disaster. This new technology is creating learning situations for everyone.

(A version of this text originally appeared in "Mastering Mounting," PFM, March 2003.)

peel issues just as an RC photo print is.

A Print is a Print is a Print

In the art world, a print refers to a work of art on paper using a planographic technique (i.e. etching, lithograph, serigraph...), or a handmade multiple (i.e. wood block, monoprint...) which has been created by, or supervised by, the artist. An artist print may further be a limited edition reproduction, which is a copy of an original piece of art authorized by the artist

as an edition of multiple copies, often signed and numbered. Traditionally the original plate copy is then destroyed. An open edition reproduction is a copy of an original with no set limit, and a poster is an open edition reproduction with adjacent wording integrated as announcement or advertising.

The operative word in this description is print. In the photographic world, a photograph is also called a print. The negative, slide, or film is the original, and the resulting developed display image is the print, as the oil painting or

watercolor may be the artist original and the reproduction is its print.

At the June International Standards Organization (ISO) meetings, there was an in depth conversation over the title of the current standard we have been working on and whether the title should state "photograph" or "print." The issue and disagreement is over the description of traditional photographs versus electronic images. The word photograph comes from the Greek words "graphos" meaning writing and "photos" meaning light, or writing with light.

So are traditional films and electronic images then photographs or prints? Electronic images include electrophotographic, electrostatic, thermal transfer, dye sublimation, inkjet, LED, and laser. But what about art prints, limited editions, and giclées? Giclées are usually what a limited edition inkjet is called. The original in this case may be an oil, watercolor or graphic, which is scanned into the computer for multiple printing.

What then is a digital photograph? The current dispute is over whether a digital photo (one that has always been made up of electronic data) is the same as a painting or writing with light, as the definition of a traditional photograph. This is the same argument as with computer-generated art, in which there is no actual original, but the electronic information in the computer. The computer is the media, the brush, the tool, and paint used to create the image original. The digital camera is the tool to create the photo image, the computer is the film. The jury is still out on the correct answer.

Epilogue

The 21st century technology requires 21st century definitions. As always the digital hoopla continues, and future articles will address color shifting, photo reactions, and heat tolerances of light, heat, pollution, moisture and handling these new prints. ■

Chris A. Paschke, CPF, GCF, Mounting Editor, owns Designs Ink in Tehachapi, CA, featuring commercial custom framing, fine art/graphic design, and industry consulting. Specializing in mounting, matting, design creativity, and fine art, she works with industry leaders and has taught for the National Conference. She has written two books on mounting: [The Mounting and Laminating Handbook](#) (now in its second edition) and [Creative Mounting, Wrapping, and Laminating](#). She can be contacted at www.designsinkart.com.

To read more about research on digital photos, read this article on the PFM website—www.pictureframing-magazine.com: “Heat Tolerance Testing for Digital Photos,” by Chris A. Paschke, June, 2002.