Bill Jay tells the following anecdote: several years ago, his young daughter was having a birthday party and Bill had recently purchased a new digital camera. He buzzed about the party, like all parents do, taking snapshots of the event, his daughter, and her friends. He asked one young girl if she would like to see the picture he had just made. When she said yes, he showed her the image on the view screen on the back of his camera. With enthusiasm he then said, “I can make a print of this for you if you’d like!” She replied matter-of-factly, “No, thanks. I’ve already seen it.” I know it’s risky to make predictions based on the offhand comments of a 10-year-old, but her indifference to the photographic print says something about photography as an artifact in this new age.

With all the fuss over media these days, I find myself thinking about the simple property of artifact inherent in the photographic print. There is, I believe, buried underneath the analog/digital debate an even deeper issue about the photograph as a precious physical entity. The real debate here is not silver versus ink, not analog versus digital, but rather artifact versus image. All of today’s debates and hand-wringing over technology and change are really a lesson that points to the real core of photography as a creative medium – the image is more important than the artifact. No one ever said it better than Ansel Adams when he said, “There is nothing worse than a sharp photograph of a fuzzy concept.”

Why do I think the importance of the artifact is being challenged by technology? Consider this question first from a purely technical frame of reference. Simply put, the physical qualities of a fine art photograph are not particularly extraordinary today. Let me explain …

I remember, as though it were yesterday, the visceral experience I had viewing for the first time an original fine art photograph by a genuine master printer. Until then, the only “photographs” I had seen were from books. When I first became interested in photography in the 1970s, I treasured books like *Tir a Mhu’rain* by Paul Strand and *The Decisive Moment* by Cartier-Bresson or *The Masters Of Photog-
raphy Series by Aperture. Thinking these books were photography, one day I innocently wandered into the Weston Gallery in Carmel and was thunderstruck by the difference between the images I knew from these books and the luscious, sensual, rich, detailed, magic of the original fine art silver photographs I saw on the gallery walls. I remember the physical reaction I had – electric and stunning, a literal take-your-breath-away kind of experience.

The March of Technology
Looking back on it now from the advantage of 30 years of hindsight, I realize that my reaction was primarily to a mere difference in technology. In the late 1960s and early 1970s there was a quantifiable difference in tonalities, sharpness, and dynamic range between an ink-on-paper reproduction in a book and a gelatin silver photograph. These differences were so substantial that looking at these two media was a completely different physical experience.

Technically speaking, these differences can be mathematically quantified. Those early books were printed in halftone screens, usually with 175 dots-per-inch. Compared to the, roughly speaking, 5,000 silver clumps per inch in original photographs, the image in a book seems a coarse and poor substitute. Maximum ink densities in a book (measured in density units) averaged about 1.65. Gelatin silver photographs typically run 2.2 or even a bit more. Bright white printing press papers are not nearly as white as photographic paper with its optical brighteners. The duller paper, lack of ink densities, and coarse dot structure combined to create ink-on-paper reproductions that just couldn’t show the detail, depth of tones, or contrast range possible with gelatin silver.

Naturally, photographers, publishers, and printers were understandably motivated to narrow this disquieting difference. With painstaking work, pioneers like printers Sidney Rappaport at Rappaport Press and Dave Gardner at Gardner-Fullmer (now Gardner Lithograph) worked with the leading photographers of the day to push the technology of black and white printing beyond all previous limits and developed better and better books and reproductions. Throughout the 1970s the difference narrowed, but still the gap between ink and silver was more a chasm than a gap.

Since then, there has been an ongoing revolution in image reproduction. I’m not talking about digital photographs or desktop printing. I’m referring to the use of high-speed computers in the commercial printing world. In 1970 books were often printed 175 dots-per-inch; with today’s high precision presses and computer printing plates books can be printed with stochastic screens and 10 micron dots
— about 2,500 dots-per-inch. In 1970 the blackest blacks in a book measured 1.65. With today’s printing technologies and inks it’s not uncommon to find a book or poster with densities as black as a gelatin silver print, sometimes even blacker. The difference that was a chasm is now a sliver, if noticeable to the naked eye at all. What used to be an A or Z experience is now an A or B experience.

I’m not proposing this, I’ve measured it. This became strikingly clear to me as we were recently involved in a promotional poster project. The differences between the high-end lithograph and the original silver print were so small as to be negligible, both visually and quantitatively. What will the next 10 or 20 years of technology be able to produce?

So, what are the consequences of this explosion in technological prowess? I believe one of the most profound implications is that we’ve lost that sense of magic that used to surround that rare and precious commodity of a gelatin silver photograph. In 1970, when I saw a great silver photograph I was stunned because it was so different from what I had access to in books. Now we can see every day – in hundreds of publications – printed images of such quality that they rival the quality of photographs that hang on the gallery walls. What I used to drool over, a younger generation now accepts as nothing special.

Even if my analysis is a bit premature, you must admit that the gap will likely narrow in the coming years and my contention will be truer as the years pass. The time is coming, and I suspect not too far in the future, when the remaining difference between the printed page and the gelatin silver photograph will evaporate completely.

What if the silver print isn’t special because it’s a silver print? What if the printed images in books are better than the silver originals? Owning a book may then be even better than owning the print – at least from a visual point of reference! (I’ve talked to photographers who have confessed this to me about their books already and I know of print buyers who have returned original photographs because they liked the reproduction in a book better! With that in mind, don’t you know at least one person who has a matted, framed wall art image that came from a book, calendar or poster?)

If you think I’m exaggerating about the progress of commercial printing, let me propose an exercise. You now hold in your hand a $10 publication printed in 25-micron dot stochastic duotone and sold as a “magazine.” Go to your bookshelf, take any book that was published in the 1960s, open it to any photograph and compare the quality of the reproductions in it to those in this magazine. In fact, don’t take
down any book, take down a really well-printed book from the sixties – or even the early seventies – and compare detail, density and that ethereal quality of three dimensionality or “presence.” It’s an amazing thing to do and one that’s even more shocking when you realize that the book from the sixties you are comparing may have been a very expensive art book back then and the magazine you are holding is, at $10, disposable (but we hope you don’t!). I don’t use this illustration to puff-up LensWork and brag about our publication (honestly, I don’t) but I do think this illustrates the point that the explosion of technology in the printing business has thoroughly changed the standards of printing and remarkably reduced the qualitative differences between the photograph and the reproduction. Simply put, while the commercial printing industry has improved quality by leaps and bounds, the fine art quality silver print is basically the same today that it was in the 1950s.

Although I’ve focused on commercial printing up to this point, this technological revolution is not just about books and mass market reproduction; it is just as true for those of us who work in the darkroom or with the computer making one photograph at a time. What has changed for photography now, a genie that will never go back in the bottle, is that photography is no longer a frustrating and difficult technology – at least not like it was to earlier generations. Better cameras, better film and papers, better knowledge and techniques – all have combined to make the task of creating a fine art photograph easier than ever, rather than better. Even a novice can make a good print without much training and certainly without the years of developing one’s craft that my generation endured. This is nowhere more true than talking with young photographers – high school kids – and seeing the technological quality of photographs they can make with the automated and sophisticated tools at their disposal. (Those of you over, say, forty, remember your first prints? – your Yankee developing kit? – your old Kodak mechanical timer?) Anyone – I mean this – anyone can now make a technologically wonderful photograph. Of course, experienced darkroom printers can still make prints that are beyond the reach of beginners, but here, too, the gap between the best and the beginner is narrowing.

Whether we are looking at mass reproductions for the market or individual prints by a photographer working at home in the basement or the computer room, the technical challenges of making technologically proficient photographs are not nearly the barrier they once were. And if this is true, doesn’t this imply that the photographs of the master craftsman are less and less special as physical artifacts as they become less and less distinguish-
able from the mass of photographs being produced?

**Tones versus Content**
Now, this may seem like a gloomy picture (no pun intended). In fact, I think it’s the best possible news for those who are interested in making art. Forgive me if I’ve used this analogy before, but photography is no more about cameras than writing is about typewriters. I’ll go one step further; photography is no more about *pictures* than writing is about *words*. Pictures, photographs, images are only a means to an end – means to bridge the gap between one human and the next, one generation and the next, one individual and the group. The best art – the best “artifacts” – are the ones that bring people together the most successfully.

The key to the future of photographs as artifacts is not a technological one. It is a matter of artmaking and soul-searching, heart-touching and delving into the mysteries and meaning of life. Making great photographs is a great deal more involved than manipulating f/stops or zones, pixels or pyro. That photography today is easier is a statement about mere technology – and volume. That photography today is still a difficult pursuit is a statement about a most positive attribute of photography as a creative endeavor – that photography is a valuable tool to plumb the depths of human existence. Albumen, platinum, silver, ink – what’s best is *what works for the expression*, not what is old or what is new.

Now more than ever, photography is not about making a good print, but rather about making a *meaningful* one. Ultimately, I think this is the best thing that has ever happened to photography. I have no doubt that all of these technologies have unwittingly conspired to focus our energies on the things that count – *what* we say, not merely how we say it. What will be the consequence of so many photographic images of such high-quality being produced by darkroom workers, press operators, webmasters, and digital artists? It is that those artifacts that are kept and valued over time will be those that are the most profound, most meaningful, and most true to the human spirit – those images and artifacts that address the universal questions that have inspired artists from the dawn of civilization. Using technology is fun and virtuous – and necessary with every photograph you make. Using technology for a higher purpose is the core of creativity. Isn’t it better to focus on the meaning of a photograph you are making rather than on the technology you must use to make it? And isn’t it ironic that doing so ends up making the physical artifact more meaningful and valuable?