

## The Age of the Enlightened

*Topic:* On the occasion of the turn of the millennium, a look back at what the historic role of the graphic arts has been. Included are Dan's picks for the graphic artist of the decade, the century, and the millennium—and, in the same categories, the company, the woman's face, and the stupidest mistake.

*Column first appeared:* December 1999, *Electronic Publishing* magazine.

*Source of this file:* The author's draft as submitted to the magazine.

*Author's comment:* This is possibly my most popular, and certainly my most inspiring column, even though it has nothing to do with any of the techniques that I usually write about. The history of the graphic arts is a very distinguished one, and we should be properly proud of those who have gone before us.

This archive, to be released over several years, collects the columns that Dan Margulis wrote under the *Makeready* title between 1993 and 2006. In some cases the columns appear as written; in others the archive contains revised versions that appeared in later books.

*Makeready* in principle could cover anything related to graphic arts production, but it is best known for its contributions to Photoshop technique, particularly in the field of color correction. In its final years, the column was appearing in six different magazines worldwide (two in the United States).

Dan Margulis teaches small-group master classes in color correction. Information is available at <http://www.ledet.com/margulis>, which also has a selection of other articles and chapters from Dan's books, and more than a hundred edited threads from Dan's Applied Color Theory e-mail list.

Copyright© 2000, 2008 Dan Margulis. All rights reserved.



# The Age of the Enlightened

The invention of publishing was the invention of knowledge. That makes our profession the most significant in history. Here's a look at some high (and low) points of the millennium—and what they teach us.

In 1663, a printer named John Twyn stood trial for “imprinting a certain seditious, poisonous & scandalous book, entitled *A Treatise of the Execution of Justice*.” The pamphlet’s politics had irritated the British government.

As printers are wont to do, Twyn blamed it on his client, testifying, “I did never read a line of it in my life.”

The prosecutor, unimpressed, argued that the very presence of the word *Execution* must mean that Twyn advocated executing King Charles II. Advocating this was high treason.

This improbable legal theory would have been blasted to smithereens by Twyn’s lawyer, but the law of the time didn’t permit him to have one. The jury would probably also have rejected it, had not the judge, a political appointee serving at the king’s pleasure, advised them that they would find themselves in jail if they dared try it.

Twyn was, not too surprisingly, found guilty. As the law of treason prescribed, his sentence was, among other indignities, to be hanged but cut down before death. Still living, he was castrated, disembowelled, and finally (and mercifully) decapitated. What little was left of him was cut into four quarters, each of which, along with his head, was impaled on a pike and posted on one of London’s bridges as a warning to other incautious printers.

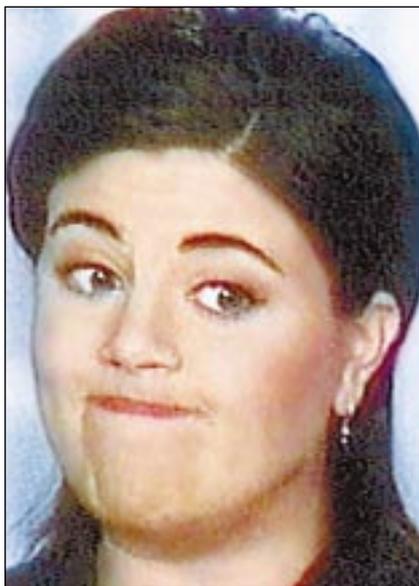
Such measures demonstrate how well the government understood the power of our profession of publishing. And while we know that many of us have devoted our lives to that distinguished profession, as the millennium approaches we should take a moment to remember those who have in fact sacrificed their lives for it.

This column’s normal purpose is to render practical advice for the intelli-

gent practitioner. Inasmuch as I do not expect an opportunity to comment on the end of another millennium, a slight variation may be justifiable this time: a discussion of some of the distinguished history and most talented people of our profession.

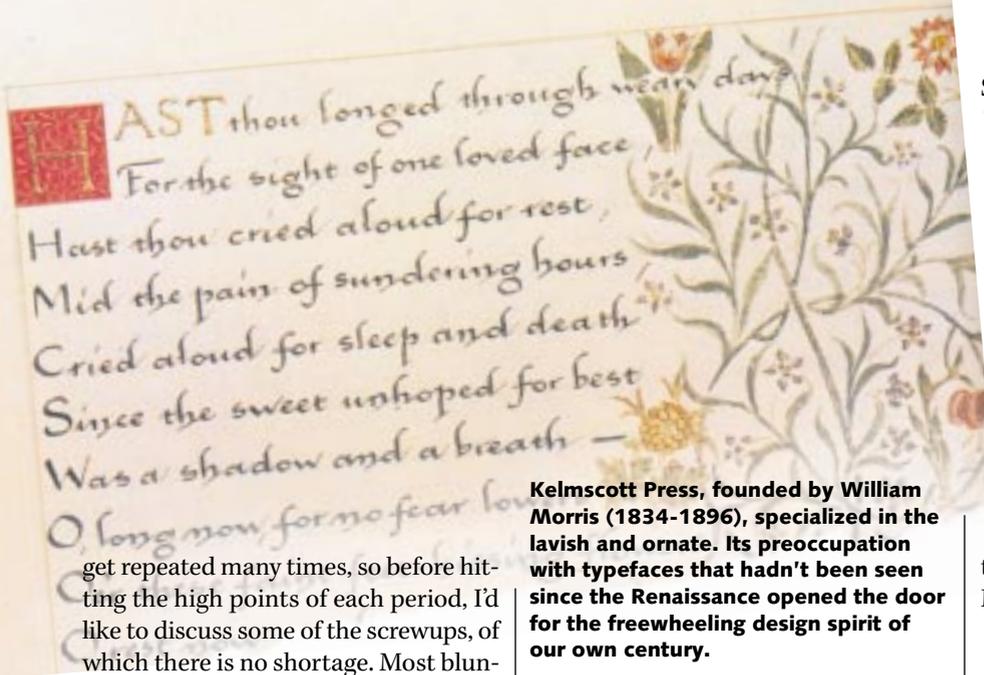
In doing such a retrospective, one must remember that not only are we ending the millennium, but the most dynamic *decade* in the history of the graphic arts. And, of course, the *century* has been quite active too. Maybe we are only second-best here; the fifteenth century eclipses the twentieth in terms of graphic importance, the advent of commercial printing being only one of its many advances. But we are at worst runner-up.

Anyway, studying graphic history is one of the best possible pieces of practical advice. The same mistakes



**The faces of the century, decade, and millennium. The ones at left and right are familiar to users of CorelDraw and Adobe Illustrator. We know the woman in the center because of the stupidest blunder in the history of the graphic arts.**

## LOVE FULFILLED.



get repeated many times, so before hitting the high points of each period, I'd like to discuss some of the screwups, of which there is no shortage. Most blunders, however, don't have a lasting impact. Here are some that did.

### The dumbest mistake of the...

A while back, an imbecile working for IBM was too cheap to offer a certain Mr. Gates a flat fee for his operating system, and instead gave him a piece of the action on all future sales. In most centuries, that would win the foolish-mistake competition hands down. Not in ours. Ours has to be the refusal of unions, during roughly 1960–1990, to grasp that advancing technology could not be wished away. They were joined in this lunacy by most of the experienced craftspeople in the typography and prepress industries.

This head-in-the-sand decision wiped out the very people who should have been at the forefront of the digital revolution. Desktop publishing started its reign with nobody over the age of 40 in it. The "experts" in our field generally have no pre-DTP production experience. Almost every graphic software supplier has made horrendous mistakes in this decade that would never have happened had they been able to hire more experience.

That goes double for many large service providers and in-house operations. Ten years ago, the presidents of most companies knew enough to make their own hardware and software decisions. Today, desktop technology

**Kelmscott Press, founded by William Morris (1834-1896), specialized in the lavish and ornate. Its preoccupation with typefaces that hadn't been seen since the Renaissance opened the door for the freewheeling design spirit of our own century.**

has become so unfathomable that management often has to defer to the advice of some propellerhead whose knowledge of software is matched only by his ignorance of the real world.

And it goes triple for the Web. HTML and XML are very like the coding used in old typesetting systems. Both are ridiculously easy to anyone with such a background—almost none of whom work in the graphic arts any more. Plus, although they used pretty lame computers by end-of-millennium standards, they were the most computer-literate class of people then extant. They should have wound up as the monarchs of the Web.

For all these reasons, the self-destruction of the experienced class has had a deeper effect on the industry even than the IBM idiocy that created the Microsoft we all know and love.

Speaking of blowing a chance to own the Internet, the dumbest move of the decade belongs to the board of directors of Apple Computer, who frittered away the twelve most crucial years in graphic arts history with a decision that this historic trendsetter should be run by beancounters. During the reign of the three stooges who ran the company almost into the ground, the Internet lacked the emphatic leadership that desktop publishing had gotten a decade before when Apple embraced PostScript.

Since the 1997 rehiring of Steve Jobs as "interim" chief executive, Apple has resumed a provocative presence in the market, but one can only guess how much faster the Web would have developed had he been there all along.

There can be no doubt as to the dumbest move of the millennium: the 1764 Stamp Act, imposed by the British government on its American colonies. Contrary to current belief, it had nothing to do with the postal system: the colonists called it "a tax on knowledge," an effort to squash dissent by a traditional method, introduced by the Tudor monarchs. Namely, put the bite on the printer.

It was a tax on paper.

The colonists declined to pay it. This led to the arrival of British troops and, eventually, a revolution.

The principal rebel group, the Sons of Liberty, borrowed the British tactic. They had supporters inside the various colonial governments, and even more than today, government-sponsored publishing was the lifeblood of many printers. The Sons of Liberty controlled the flow of that work. It will perhaps come as no great shock to learn that the Sons of Liberty's tracts were, as a rule, printed free of charge. To this day in U.S. print shops, jobs that are printed gratis are referred to as "government work."

The American Constitution is a document of concepts, not of specifics. The screaming exception is a series of clauses to prevent Stamp Acts, and, especially, trials of John Twyns. The Constitution says one cannot be forbidden a lawyer. It says that a jury cannot be punished for its verdict, nor can judges be fired for impolitic decisions. Of all the murders, arsons, and assaults that might have been written in, only one crime is specifically defined: "Treason against the United States, shall consist only in levying war against them..."

And one last thing. "Cruel and unusual punishments" are prohibited.

The enduring legacy of the Stamp Act is a system of such unremitting hostility to government intervention in publishing that it permits outrages

worse than the ones the colonial government was trying to suppress. Neither the American government nor its courts can tell the press not to print something. And American politicians have basically no legal protection at all from any kind of criticism, regardless of how hurtful, false, or malicious.

The significance of the British blunder, therefore, can hardly be overstated. It helped bring about the American Revolution, but it also brought us the young lady pictured at bottom center of Page 22. Her ascent to the front pages could have occurred in no other country. Had she been the paramour of the prime minister of, say, Britain, where the laws are much tougher, most of the stories about what she did would never have appeared.

**But you could give odds forever**

Fashion and romantic images are quite important in our work. Given the dreary inevitability of who must be our face of the decade, I have a more agreeable nominee for face of the century.

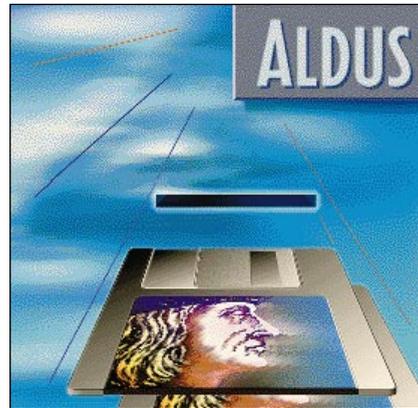
The image of Hedy Lamarr is a tour de force of late-century technology, based on a 1938 photograph by John Hurrell, but now an intricately detailed piece of line art. It was created in CorelDraw in 1996 by John Corkery, and won the grand prize in Corel's World Design Contest.

The flower child on the right may look twentieth-century, but she is in fact a Renaissance Woman. Her name is Simonetta Vespucci, she lived in the fabulous fifteenth century, and in principle her claim to fame is the same as the woman at center: a romantic entanglement with the politically powerful, in this case Giuliano de Medici, a member of Florence's ruling family.

Simonetta died young, yet she lives, not because she was loved by Giuliano, but because she was painted again and again by a court artist, Sandro Botticelli. Here, he portrays her as the goddess of spring. Elsewhere she is the Madonna, or even Venus, in which guise she graces the packaging for Adobe Illustrator, as Hedy Lamarr does for Corel Draw. She is the poster

child for the Uffizi galleries in Florence. She is the face of the millennium. Far more people would recognize her than the name of Botticelli.

Which all goes to show the influence of luck in the graphic arts. Simonetta attained immortality because she had the good fortune to attract the attention of Botticelli, who was smitten. Botticelli, a talent of the very first magnitude, is somewhat neglected to-



**The company most associated with the early growth of desktop publishing named itself after the first commercial printer, the shrewd fifteenth-century businessman Aldus Manutius.**

day because he was unlucky enough to live at the same time and in the same city as the guy responsible for the hand of God pointing to the headline of this column, the most spectacular talent of his or any other century, the obvious choice for visual artist of the millennium, Michelangelo Buonarroti.

**The Renaissance Man defined**

The loose phrase "Renaissance Man" describes a multitasking person, comfortable in several cultural disciplines. The archetype is Michelangelo, who would have to be considered one of the world's finest architects and painters (and no mean poet, either) even if he had never created the works that proclaim him history's greatest sculptor.

The artist of our century, even though he never lived in it, is also a Renaissance Man. William Morris, a disciple of Botticelli who died in 1896, wove spectacular tapestries, created stained glass, wrote passable poetry and, above all, led a publishing com-

pany dedicated to bringing back the lavish spirit of the fifteenth century. This was quite a change, because Morris's century was a great one for music and for literature, but a horrible one for printing and for design. Its only significant new typefaces came in the early 1800s, from Giambattista Bodoni. These were used, tediously, unimaginatively, and to the exclusion of all others throughout the rest of it.

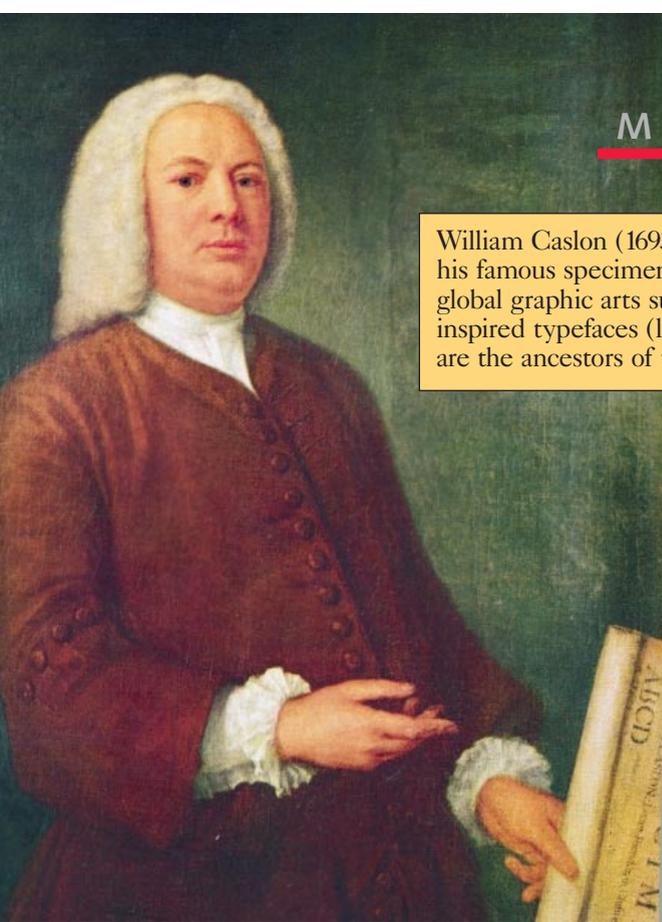
Morris, not one for understatement, called Bodoni "the most illegible type that ever was cut." His alternatives—one of which is on the facing page—are not notably readable themselves. They are so contrived that they would be laughable, were they not so pretty.

The point is, Morris woke everyone up to art forms that had languished for several hundred years. The development of the design of type, among other things, in this century is basically a reaction to Morris.

The greatest artist of the decade is tougher. I'd nominate the movie producer Steven Spielberg. This is the age of multimedia and special effects, which is to say, it is an age of a lot of rope for artists to hang themselves with. Spielberg has taught us that the fact that we can doesn't mean that we should, an artistic lesson that might otherwise have taken several more decades to be learned. When he needs a horrifyingly realistic and hungry-looking dinosaur, the special-effects team gets a well-deserved workout. When artistic adventurism gets in the way, he ratchets it down. *Schindler's List* is shot in black and white.

**The most important event**

If there were nothing more than the system of freedom of expression that is the legacy of Messrs. Twyn and others, that would secure our place in history. But there is actually quite a bit more. Our industry continually takes the lead in technology. Typesetting was the first trade to computerize in the 1960s, and had completed its transition before most of the rest of the world knew what a computer was. And the incredible speedup of modern



William Caslon (1693–1766), shown here with his famous specimen sheet, became the first global graphic arts supplier. His Dutch-inspired typefaces (like this one, Caslon #540) are the ancestors of today's Times Roman.

mankind could advance. The advent of printing changed everything.

In fairness, the above quotation, from book historian Douglas McMurtrie, dates from the 1930s. He was therefore unaware of the Web, which is the one development that may eventually be seen to rival the invention of printing in terms of its importance for humanity. The advent of printing brought literacy to much of Europe. The Web brings

information to the fingertips of the entire world, and is in its way as important as the invention of printing.

**A half-millennium of type**

Printing history and typography are so intertwined that we should take a moment to honor the best at the craft.

The typeface of the millennium, 507 years young and still in use, is Bembo. The guy who commissioned it, Aldus Manutius, was the shrewdest graphic arts businessman of the millennium. He was the first commercial printer in Venice. He made sure he was also the *only* one, by convincing the ruling council to give him a legal monopoly.

Aldus had strong opinions about type, but he wasn't a designer himself. So the typographer of the millennium is William Caslon, whose company supplied most of the rest of the world with high quality fonts for nearly 200 years. The American pamphlets that brought about the Stamp Act (and thus, the Revolution) were printed in Caslon. Every time we choose Times Roman today, we honor its ancestor.

The type designer of the century is Frederic Goudy, whose faces show Morris's influence. So does the face of the century, Hermann Zapf's Palatino.

While time will tell what the typeface of our decade is, I'd nominate the one you're reading right now, the scrupulously legible Kepler. Its father, Adobe's Robert Slimbach, would be type designer of an ordinary decade. Ours, however, has another clear choice, Zuzana Licko of Emigre Fonts. Emigre's spirited and skinny display designs have captured the imagination of designers everywhere. They are likely to stand the test of time.

**Follow the Money**

It's so much fun to talk about the romance of our profession that we can forget it is also a business. The lesson of the millennium is, money talks.

That fifteenth-century Italy is the source of much of our artistic heritage is no coincidence. Rather, it's because the ruling Medici family of Florence, and the immeasurably wealthier Vatican, were inclined to lavish large sums on artists. When the money dried up, so did the masterpieces. Wealthy patrons started to favor music rather than graphic arts, so we got Haydn and Mozart, but no new Raphael or Aldus. And, so, with exceptions such as the well-paid artists of the court of Spain, we had 300 years of relative stagnation.

By the late nineteenth century, there was money to be made in automation. Ottmar Mergenthaler invented the Linotype in 1886. His company dominated typesetting for a century, introduced the imagesetter that made PostScript service bureaus a reality, jumpstarted the type design program of the leading DTP software company, merged with the foremost name in drum scanning and finally was absorbed by the leading manufacturer of presses. Since, except for Caslon's type foundry, no other company has had such a worldwide presence for so long, I would make it our company of the millennium.

The current century's theme is that the law of supply and demand works. As the price goes down, demand goes up, creating more supply. The real price of publishing has been gliding down throughout the century but it

computers is largely due to demand from those of us who deal with large images or in multimedia.

And yet, certain publishers have an inferiority complex, wishing they were more creative. If only I were a Mozart, and not a printer! A Shakespeare, not a mere Web-page constructor!

Forget such romanticism. Listen: "In the cultural history of mankind there is no event *even approaching in importance* the invention of printing with movable types. It would require an extensive volume to set forth even in outline the far-reaching effects of this invention in every field of human enterprise and experience, or to describe its results in the liberation of the human spirit from the fetters of ignorance and superstition."

I agree. The invention of printing was in effect the invention of knowledge. Before it hit the western world in the 1450s, almost nobody knew how to read. What would have been the point? Those few books that existed mostly dealt with religion, because the church was the only entity with the wherewithal to corral monks into the months of scribbling needed to produce a single copy. And with an illiterate population, there was no way



has been dropping like a rock over the last 15 years. And, as the laws of economics dictate, the amount of materials published has skyrocketed.

So the company of the century, with apologies to runner-up Kodak, is the first one to realize that cheaper is better and that much cheaper is much better. We know it now as a giant, the graphics division of Agfa. It started in the sixties as Compugraphic, with the heretical idea that if typesetters could be made for a fraction of the competition's price, a lot of people that the competition didn't imagine were potential buyers of typesetters would turn out to be precisely that.

Every year, some manufacturing executive will say something like, you can't make a quality scanner for \$2,000! Or, you can't possibly make an inkjet printer accurate enough for a contract proof for less than \$500!! Or, only a crazy person would think about making a professional-level field digital camera for less than \$10,000!!!

The historically aware person always responds as follows: wanna bet?

And the lesson of the decade is, forget hardware limitations. There were those who said that the Web could never get off the ground, because obviously nobody would ever own modems faster than 9600 baud. Or that multimedia could never move to the desktop. Twelve years ago, before anybody worked with photographic images on the desktop, theoreticians of prepress said it would never happen. In our opinion, they would intone, PostScript is such a verbose, cumbersome language that it would be useless for serious imaging unless computers got 50 times faster.

They were right.

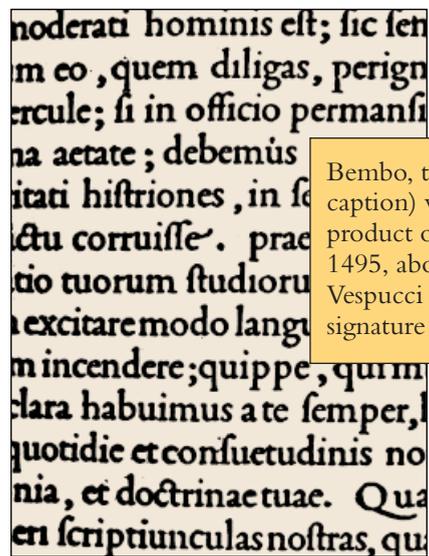
The company of the decade, Adobe Systems, is the source of the aforementioned PostScript. Adobe's software completely dominates image management, but pervades every area of electronic publishing.

Photoshop itself is one of the better examples of the trend of the decade. Remember when some pundits were saying, it needs a low-resolution prox-

ing system, to let us work with very large files without dying of old age waiting for Photoshop to respond? They suggested that unless Photoshop got this, it would lose market share to competitors Live Picture and xRes. Obviously (they said) there's no way people will ever be able to work on a hundred-megabyte file in real time!

Try buying a copy of one of those proxy-based programs, next time you're making a casual purchase of a few 256mb DIMMs.

Even those who are normally quite prescient about these things fall victim



Bembo, the oldest typeface still used (as in this caption) was first seen in the book at left, a product of Aldus Manutius's press. The date was 1495, about when Botticelli painted Simonetta Vespucci as Venus, which later inspired the signature art for Adobe Illustrator (above).

to the syndrome. For some time, it's been obvious that, as enough computing power has developed to handle even very large still pictures, movie editing on the desktop will be next. In October, *Wired* magazine ran a story noting that even though an hour of high-quality video can take 15 gigs of storage, this isn't that much these days.

"But you're out of luck if...you have more than 80 hours of digital video," the article reports. "That would take an impossible 1,000 gigs of hard-drive space. Not even Bill Gates has that kind of storage."

Wanna bet? If Mr. Gates could scrape together \$1,500, he could have it. That terrible terabyte wasn't available at the time of the *Wired* article, but it's announced to ship by the turn of the millennium: a 200-DVD jukebox, from Ensient, Inc.

**The fall of the specialist**

Printing as we know it was first demonstrated in the 1450s. The trend of the millennium in all related fields has been one of increasingly narrow expertise: the printer, the typesetter, the art director, the scanner operator, the stripper, the salesperson.

Our century belongs to another specialist: the photographer. The image has become more important in the publishing process than the word is.

The 1990s, however, have been hard on the specialist. In the face of the best economy of our lifetimes, many photographers are having a tough time making ends meet. As with the prepress people mentioned earlier, they were late making the transition to dig-

ital. They paid a dreadful price. The few remaining conventional strippers and scanner operators pull down salaries a fraction of what they made ten years ago. Dot etchers, darkroom technicians, and board-bound art directors have ceased to exist altogether.

After 500 years, we have come back to the age of the Renaissance person. The multidisciplinary artist is, at least in this decade, in the catbird seat. The Web designer who can also manipulate photographs, the service bureau employee who knows four applications well, the photographer who understands offset printing, the designer who knows how to configure not just a workstation but a network: the very mention of such people causes potential employers to salivate.

Not that they can afford to hire them, mind you. The economics of technology have created an elite of small groups and top freelancers. In pre-DTP ages, a truly skilled craftsman could produce perhaps half again as much quality work as a mediocre one. Companies knew this, and the

good employees got extra pay—not 50 percent, mind you—and a variety of other perks that kept them happy.

By the latter part of this decade, this model lay in ruins. A really good desktop practitioner is now four or five times as productive as her mediocre counterpart. Can a large company afford politically to pay such a person four or five times as much as anybody else? Plainly not. And so our age is dominated by freelancers, consultants, and small groups of the highly skilled, rather than large companies of them.

## A few words to the historically wise

The obvious rewards of having multiple skills in the modern graphics world can actually lead us astray. Applications have become so complex that in some cases it's impossible to master even one of them, let alone five or six. Generally, therefore, it's better to concentrate on the big picture rather than on minutiae.

By doing so, it's possible to resist (or rather, to rationally evaluate) the endless hype that pervades our industry. The 1990s have featured one revolution, the elimination of the typesetting industry, and one killer app, Photoshop.

In trade magazines, however, I seem to recall breathless predictions of at least 25 more killer apps and a dozen or so other revolutions.

Those who have fallen for these predictions, should, as they prepare for-sale ads for their Divx disks and 8-track audio tapes, think a bit about history. The right set of circumstances for a real revolution rarely occur.

Typesetting died not just because the new technology was better, but because it was incompatible with the old way, which therefore had to be discarded. The Web, digital photography, direct-to-plate workflows, and PDF, *are* compatible with the old ways, and therefore aren't revolutionary.

But one has to be realistic. The Web won't wipe out commercial printing. It *will* put serious dents in some sections of it. Companies who sell through catalogs won't stop printing them, but the catalogs will

be smaller, and press runs shorter, in response to sales from the Web.

Therefore, there will be lots of printers with

**The whimsical, modernistic typefaces of Emigre Fonts have captured the imagination of 1990s designers. At right, the wisdom of one of America's first printers is set in Matrix Tall, a 1990 creation of the type designer of the decade, Zuzana Licko.**

presses optimized for long-run catalog work who will be looking to fill that void, and cutting prices. Now is a bad time to be considering buying such a press.

The typesetting companies had no choice; they *couldn't* incorporate the new technologies, but we can. This, however, means we have to know new technologies, their strengths, and how they are likely to improve. If you had said in 1990 that Photoshop is incapable of professional work, in 1995 that desktop scanners can't rival drums, in 1997 that the Web was too slow to be practical, or in 1998 that desktop proofers aren't as accurate as a Matchprint, you'd have been right each time—temporarily.

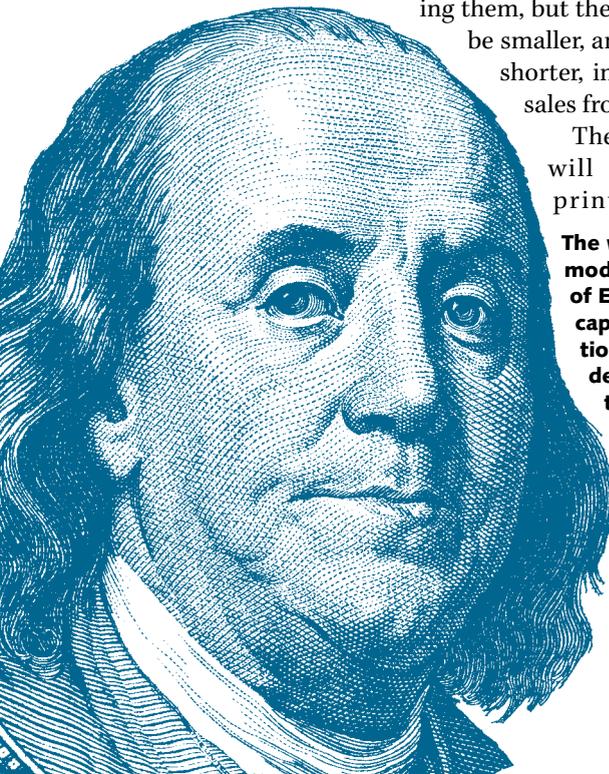
Things get better. And, as they do, their prices usually come down as well, sometimes quite a lot. Deny either of these things, and you're the sort of extremist who gets burned. Act on the assumption that because technology isn't good enough today it will never get there and your life will be a long game of catch-up. Buy more than the minimum necessary of a rapidly improving product, and you will find yourself with some expensive boat anchors, such as the desktop scanners and color printers of five years ago.

How do you know when a potentially useful technology is on the brink of changing everything? The trade press has proven itself an unreliable source. There is little option but to become a Renaissance Person. Regardless of your specialty, you have to understand a fair amount about the graphic arts as a whole—Web, multimedia, photography, printing, prepress, design, hardware.

Without understanding how much time and money is lost in conventional scanning, one can't appreciate why studio digital photography was a sure thing. Without knowing what a search engine can do, one misunderstands the entire Internet. Without knowing what the quality standards are of the print industry one is unable to distinguish something clearly useful, such as digital contract proofs, from something occasionally useful, such as ICC color management, from smoke like stochastic screening. And on and on.

Above all, history both recent and ancient makes clear that we are an industry that doesn't like change. If a new method shows up that is clearly much better than the existing way, we adopt it, reluctantly. I repeat, with extra emphasis, *clearly much better*. If it's only a little better, forget it.

What usually happens is that, if new products are suc-



*If all printers were determined not to print anything till they were sure it would offend nobody, there would be very little printed.*

—Benjamin Franklin

**Mergenthaler  
Linotype**

An  **ALLIED** Company

 **compugraphic**

  
**Adobe**

**Only a few enterprises can really be said to have had a global impact on the publishing profession. Background: Caslon's specimen; foreground, the most influential graphic arts companies of our own century.**



Successful at all, they fill niches. That is, they are clearly much better under certain conditions. That is why direct-to-plate, PDF workflow, and digital presses, have caught on. They aren't the answer to every worry. For certain types of work, however, they're really, really better than the old way, and no amount of pining for the good old days will stop them from making further inroads.

### The good old days?

The Renaissance-obsessed William Morris provoked one of his contemporaries to pen a song lampooning "the idiot who praises, with enthusiastic tone/all centuries but this, and every country but his own."

That barb may not have been fair, but it's an apt description of many in our field today. How often do we hear people lament the decline of standards, and tell us how much better quality used to be?

Speaking as someone who was actually there in the aforementioned old days, allow me to point out that this is a crock. In printing, in photography, in Web design, in image manipulation, in typography, in computer-generated art, quality—at least at the top level of the field—is incomparably better than at any point in history.

The naysayers reply, correctly, that every hack with a copy of Microsoft Publisher now can make a hash of jobs that probably could look quite nice if done by somebody who knew an em dash from a cancelbot. But a decade ago, such work would never have been published at all. It's only natural that the professionally produced jobs of the 1980s look better than amateur work

of today. The comparison is unfair.

Granted, some of the people producing this work don't care that it's garbage. Many others, however, do care and only fail because they don't have enough experience. This opens up another huge opportunity for the truly skilled, in training those who want to do better. And I am fairly sure that the prospects for someone who does know a lot of graphic disciplines continue to be brighter than at any time during this past eventful millennium.

A word of caution. Our technological backbone is highly vulnerable to wars, plagues, and other catastrophes, especially those of the man-made variety. If our civilization fails to progress at the same rate as its technology, the entire structure may—perhaps deservedly—come tumbling down.

### An epitaph and a prophecy

In the U.S., we still occasionally jail journalists, but there's little chance of an outrage comparable to that perpetrated on John Twyn. Parts of the rest of the world aren't so fortunate, and use their courts and other, "unofficial" thugs to intimidate, jail, or even kill those involved in publishing things the powers that be do not approve of.

Ignoring the lessons of history, certain countries also are trying to get the Internet genie back in the bottle. They restrict access to URLs, slash the number of Web-capable computers available, and threaten those whose sites espouse the wrong point of view.

With great respect to these dictatorships, their efforts will fail. The world hungers for information; we publishers provide it. We have been doing this for the better part of a millennium, and are thus the most influen-

tial trade in world history, the trade that brought knowledge, the trade that made the difference.

The leading Renaissance Man in American history is known today as a scientist, politician, writer, philosopher, patriot. But when the time came to write his epitaph, he chose none of those labels. Here's how he wanted to be remembered—as one of us.

*The body of  
Benjamin Franklin, Printer,  
Like the cover of an old book,  
Its contents worn out,  
And stript of its lettering and gilding,  
Lies here, food for worms!  
Yet the work itself shall not be lost,  
For it will (as he believed)  
Appear once more  
In a new and more beautiful edition,  
Corrected and amended by its Author.*

And with these shiveringly lovely words, let us remember that art is not merely for the Michelangelos and that the achievements of publishing are shared by more than the Caslons, Goudys, and Mergenthalers. These names were only bit players in the overall production. It was the millennium of the enlightened, which means it was the millennium of publishing, which means it was ours.

The next millennium will be a very different one. With luck, a sense of history, and the help of Mr. Franklin's Author, it may yet be ours as well.

For further graphic arts reading, contributing editor **Dan Margulis** recommends the works of some Renaissance Men: Leonardo da Vinci, Ogden Rood, Ansel Adams, Henrik Willem van Loon. Dan can be reached at 76270.1033@compuserve.com. For information on his hands-on color-correction tutorials, visit [www.ledet.com/margulis](http://www.ledet.com/margulis).