



## **Desktop Publishing Pioneer Meeting Day 2 Session 5: Seybold Newsletter and Seminars**

Moderators:  
Burt Grad  
David C. Brock

Editor:  
Cheryl Baltes

Recorded May 23, 2017  
Mountain View, CA

CHM Reference number: X8209.2017

© 2017 Computer History Museum

## **Table of Contents**

BACKGROUND AND PHOTOS OF EARLY DESKTOP PUBLISHING SYSTEMS .....	5
INCEPTION OF SEYBOLD PUBLICATIONS .....	18
SEYBOLD PUBLICATIONS CONTENT .....	20
SEYBOLD SUBSCRIPTIONS .....	21
SEYBOLD EDITORIAL CONTENT .....	22
SEYBOLD TUTORIALS AND SEMINARS .....	23
ATTENDANCE AT SEYBOLD SEMINARS .....	23
SEYBOLD SEMINAR AND PUBLICATION TOPICS.....	25
SEYBOLD SEMINAR GROWTH.....	27
SEYBOLD TRADE SHOWS.....	28
THE FONT WARS .....	29
SEYBOLD SEMINAR EXPERIENCE .....	30
INTERNATIONAL DESKTOP PUBLISHING .....	32
CUSTOMER FEEDBACK AND USER GROUPS.....	33
SEYBOLD PUBLICATIONS ET AL. AS A BUSINESS .....	35
SEYBOLD VERSUS OTHER INDUSTRY EVENTS AND PUBLICATIONS.....	36

## Desktop Publishing Pioneer Meeting Session 5: Seybold Newsletter and Seminars

**Conducted by Software Industry Special Interest Group**

**Abstract:** The first session of day 2 of the Desktop Publishing Pioneer Meeting focuses primarily on the *Seybold Report* and Seybold Seminars and trade shows. Jonathan Seybold gives background information on the organization and its founders, explaining their vision for the up-and-coming desktop publishing industry. He then explains when and why the Seybold publications took shape. The session participants also describe their exposure to the publications during the 1980s. The discussion then turns to the growth of the Seybold seminars, their attendees and how they served the industry, as well as when and why Seybold industry trade shows were developed and their role during this period. Lastly, the session participants discuss their experiences at the Seybold Seminars and trade shows and explain their importance to the growing desktop publishing field.

### **Participants:**

<u>Name</u>	<u>Affiliation</u>
David Brock	Moderator, CHM Center for Software History
Burton Grad	Moderator, SI SIG
Chuck Bigelow	Typography
Paul Brainerd	Aldus
Liz Crews (nee Bond)	Xerox PARC and Adobe
Chuck Geschke	Xerox PARC and Adobe
Steve Kirsch	FrameMaker
Donald Knuth	TeX
Butler Lampson	Xerox PARC
Lee Lorenzen	Ventura

Martin Ruckert	TeX
John Scull	Apple laser printer
Jonathan Seybold	Rocappi, Seybold Newsletter and Conferences
John Schoch	Xerox PARC
Bob Sproull	Xerox PARC
Larry Tesler	Xerox PARC and Apple
John Warnock	Xerox PARC and Adobe
Richard Ying	Atex
Thomas Haigh	Historian, University of Wisconsin/ Milwaukee
Matthew Kirschenbaum	Historian, University of Maryland
Dave Walden	Historian
Ann Hardy	SI SIG
Mike Humphries	SI SIG
Doug Jerger	SI SIG
Ed LaHay	SI SIG
Hansen Hsu	CHM, Historian
John Markoff	CHM
Paul McJones	CHM, Software Preservation Group
Len Shustek	CHM, Chairman
Dag Spicer	CHM, historian
Marc Weber	CHM, Internet curator

## Background and Photos of Early Desktop Publishing Systems

**Burt Grad:** We handed out a folder with pictures from Jonathan Seybold to all of you. Jonathan believes that looking at these will give you a better picture of what was happening in the early days of the automation of printing and publishing.

**Jonathan Seybold:** The pictures are labeled. I had some slides scanned from my huge slide collection because I felt that most of the people here would never have seen newspaper systems, and it's hard to visualize stuff that you've never seen. So, this is a quick run through of what we were talking about yesterday.

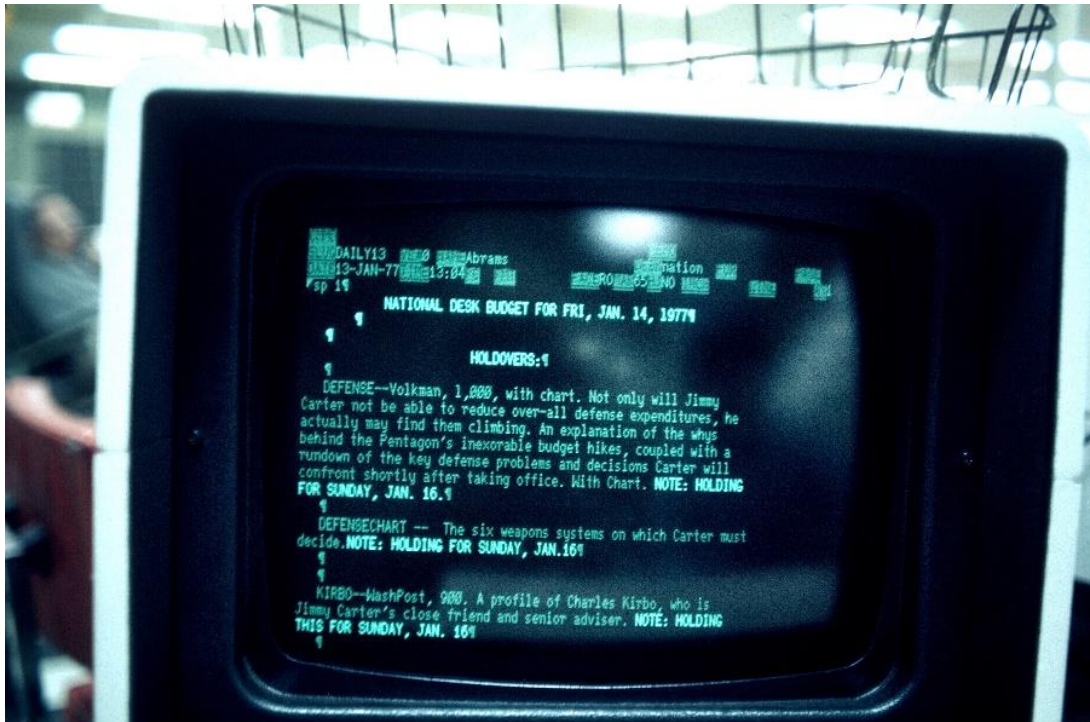
1. The first picture is a newsroom at *Newsday*, which I believe was Atex's first major newspaper installation. You can see the working environment they were dealing with here. As Richard Ying had said, those boxes with the CRTs (cathode ray tubes), that's all they've got in them because all of the electronics are back in the computer.



2. The next picture shows the connections for each of the terminals. It's a patch panel type connection, so if something goes down, you patch them into another frame in the rack.



3. The next picture is a screen that is showing a news budget rather than a story. I put this up to show that it was not just a really important writing and editing tool; it was also a management tool. Notice that this shows monospace type but you have light and bold, and you've got reverse-non-reverse, underline, non-underline. You end up with eight different permutations you can show on your screen, and you can show differentiation that way. You can show headlines different from body copy and so forth. You don't see the topography, but at least you're seeing that you've got the right kind of material.



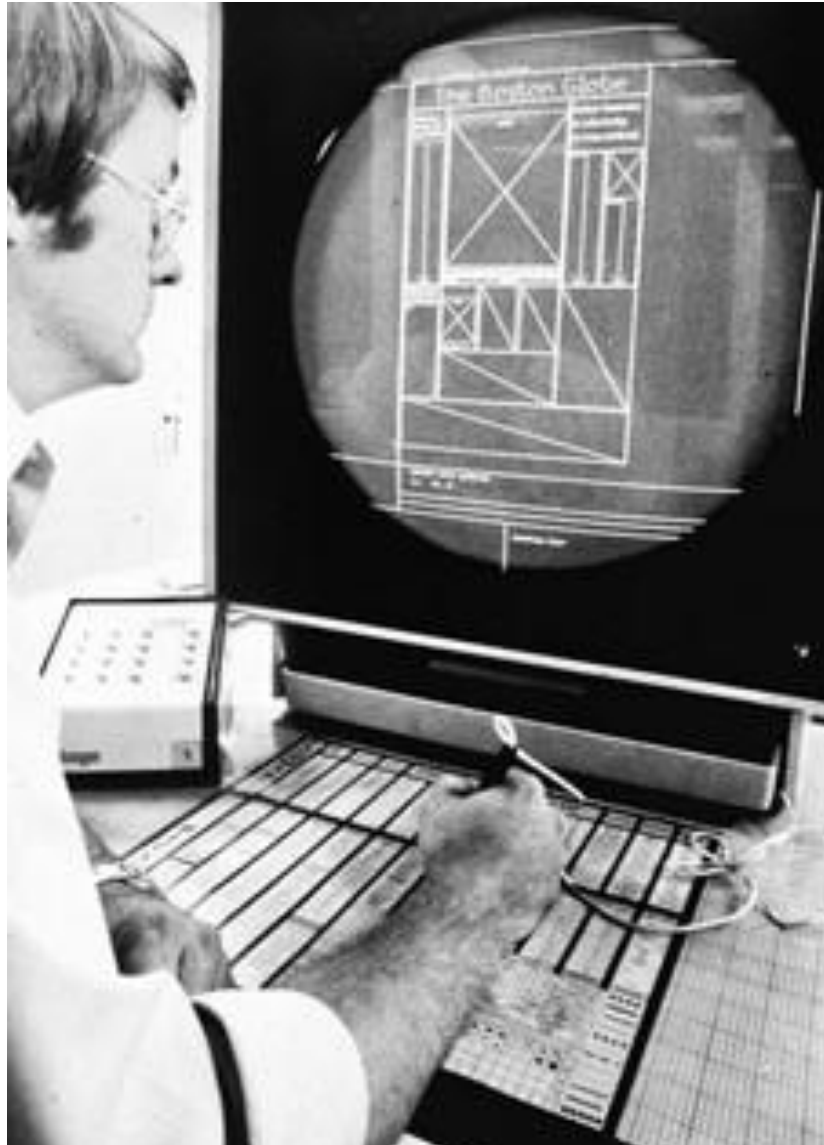
4. The next picture shows a Camex system—the one with the round screen on it. You've got a display ad showing outlines for graphics and the text. This is all done with vectors. This was from pretty early in the 1970s. Camex was a company out of Boston, and it did display ads. These were all proprietary systems.



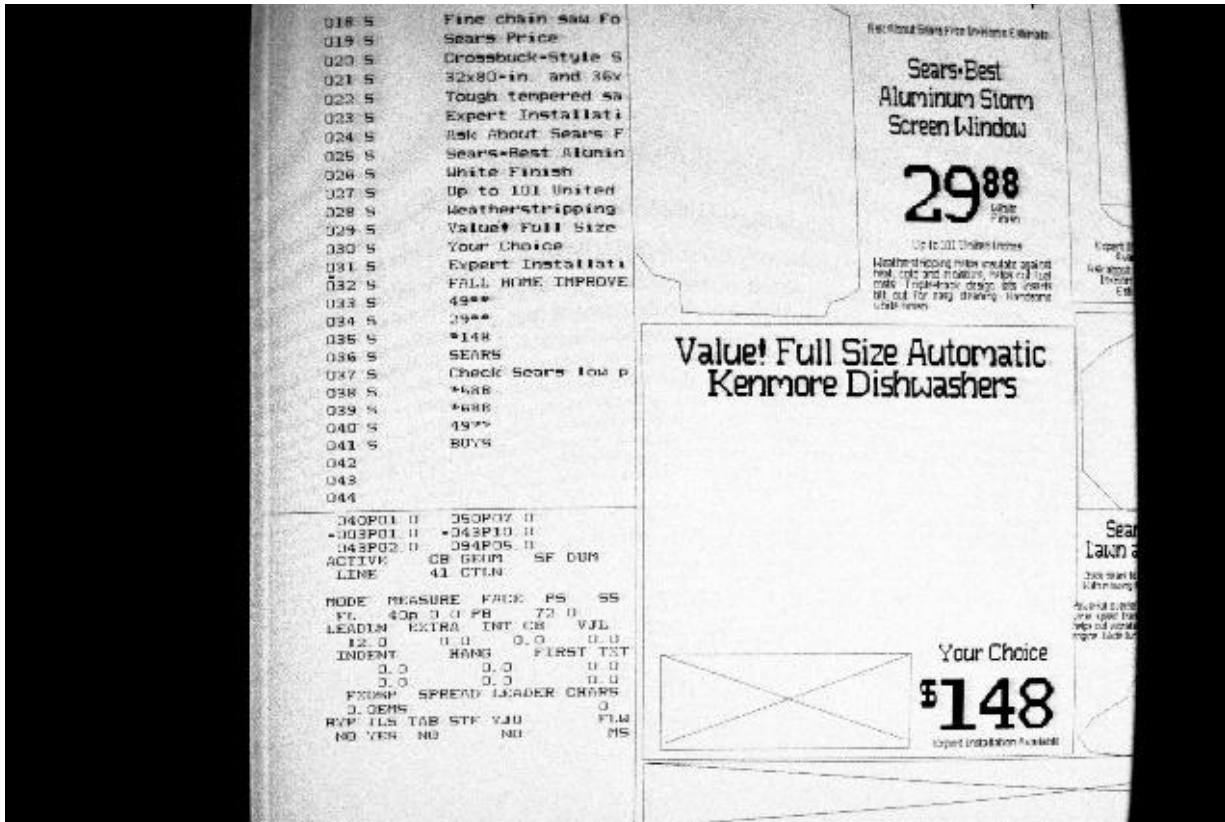
You started with a mockup of a display ad, and you would display that system first. Someone would have given you a mockup of the ad graphically. You'd digitize that; you'd use a mouse type digitizer with crosshairs on it to pick out the coordinates for the different elements on the ad so you could reproduce what the customer wanted on the ad. The user interface was all based upon that, so you end up with this enormous menu of commands, and you would pick from that menu. It looked intimidating, but people actually got pretty proficient. They knew geographically where things were.



5. Here you can see the screen they were working with to do page layout, and you can see the typical thing where you create boxes and then you fill the boxes. Text composed on a system like Atex would be broken into the requisite number of lines for that story. There would be a news hole that may flow to multiple pages, and it gets linked where you flow that story into that news hole.



6. The next picture is a Raytheon Raycomp display ad system. It worked somewhat differently and had a raster screen. You can see text elements on the left-hand side, and the text elements are placed on the page on the right-hand side. They had a lot of very specific buttons on a large keyboard for specific commands.



7. The next picture is a company from England called Xenotron that had a less expensive system. I didn't show you the whole system, but this shows a UK ad for a grocery store ad being composed on the Zenitron system. This was probably late 1970s.

F01 H0000 M0000 P140 H140 L140 020 U00560

**SALE - SALE - SALE**

**COME TO KINGDOM STORES FOR BARGAIN**

1, 128.3888

**XSELENT FOODS**

VEAL SHOULDER CHOPS	1 99 lb	PRINGLES POTATO CHIPS	1 09 pkt
MARJID FROZEN CHICKENS	1 29 lb	FRESHMANS SOFT MARGARINE	1 15 pkt
FISH DEPT. TURBOT FROZEN	1 59 lb	NORWEGIAN CREAM CHEESE	2 09 lb
DADS OATMEAL COOKIES	1 19 pkt	CRISPO COOKING FAT	1 59 pkt

**Sparklin' Wines from Corsica**

*From grapes picked on the slopes of this sun-kissed region, a sparkling wine is produced that will delight discriminating imbibers. From the special occasion - for any occasion.*

**Local Stockists**

LONDON - Fortress & Jason  
Harads Delicatessen

BIRMINGHAM - Joes Disco Bar

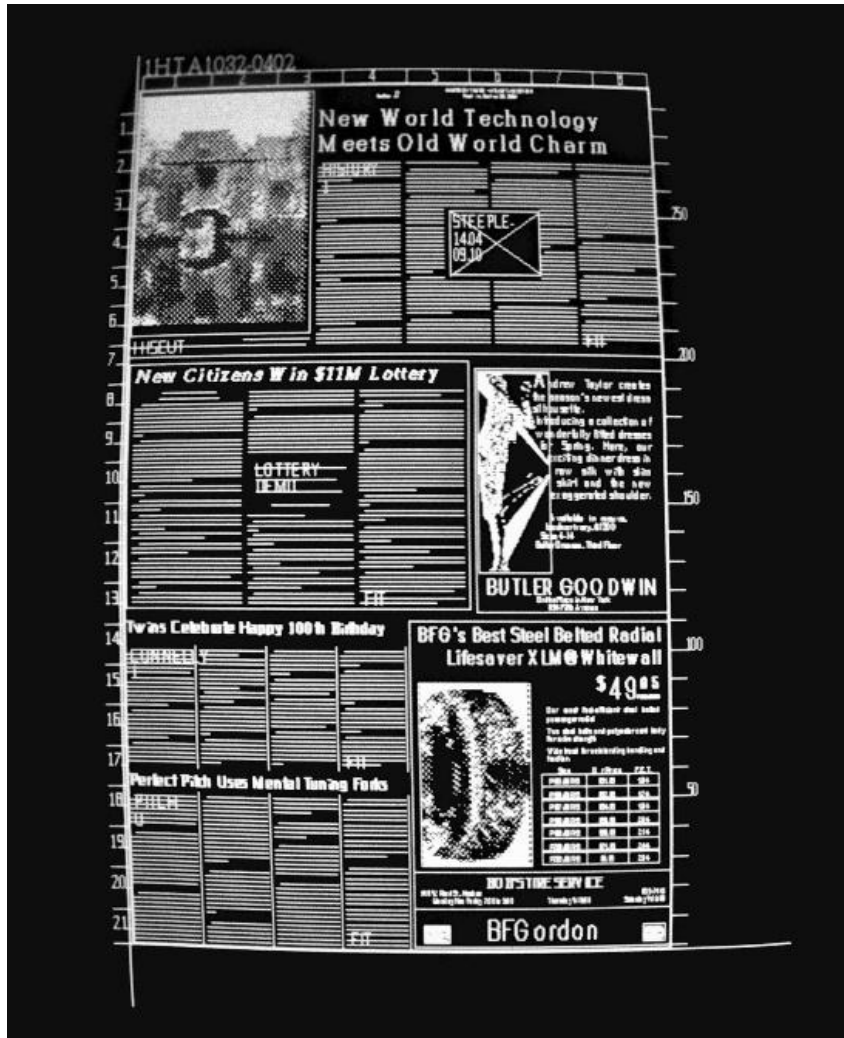
CARDIFF - O'Reillys Store

BEST QUALITY AND LOW PRICES  
ALL OFFERS SUBJECT TO AVAILABILITY

8. The next picture is Hastech, which was in the same business. You can see a text screen on the left and the page layout on the right. Again, you're seeing the columns and the boxes and that's where things were supposed to go.



9. And then you see the next one; you can see things flowed into that. Now you didn't have enough resolution here to be true WYSIWYG, but you did get a graphic sense of what the page was going to look like.



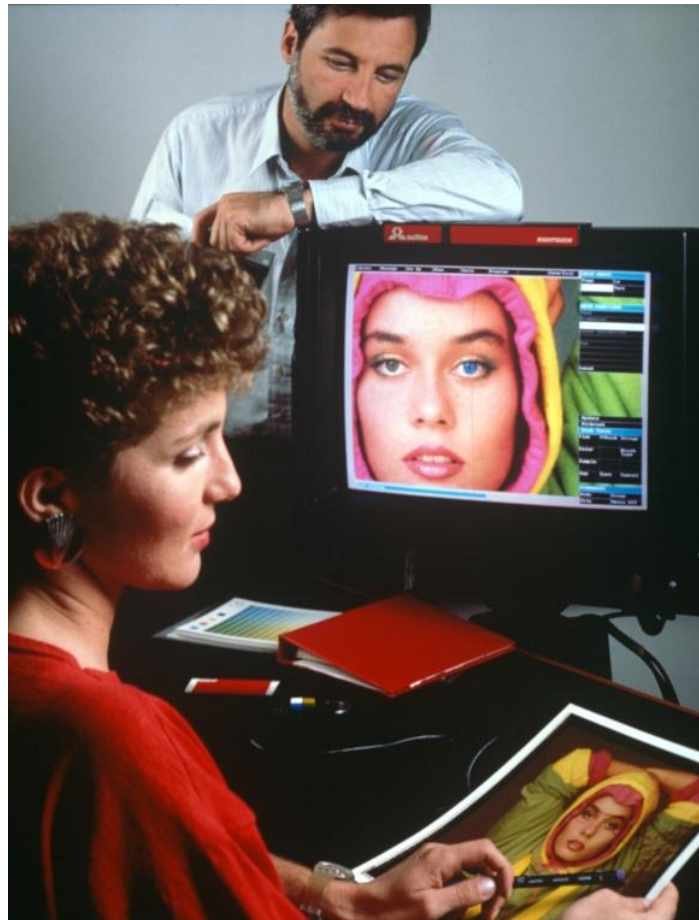
10. This is onto Atex. Paul can talk about this also. This is page layout on the Atex terminal, and here is copy flowed into the terminal. You can see a text terminal on your right and the graphic terminal on your left.



**Paul Brainerd:** The guy on the right is a young version of myself.

**Seybold:** I picked this specially, Paul.

11. I've got several pictures here from the second generation of the Scitex Color System in the 1980s. I have these up really to show you where all the development work that led to what you need to do to work with images on a computer came from. Again, it started with high-end systems, and then it came down to the desktop. In the image portions of this, the heritage leads pretty directly to Photoshop.



12. The thrust of what Scitex was doing was just image manipulation. Later, and there's a picture of that, they put images onto a page to do some very complex page type of stuff as well.



**Brainerd:** Scitex was out of Tel Aviv, Israel.

**Donald Knuth:** I'm curious about the color halftone on this first screen, the printed version of it, because I didn't know of any good way to get such output on paper. Is that on paper? Is that on a kind of film or something like that? I think I was at Adobe in 1989 or so, and we had this meeting where all the graphic designers came, and Kodak had just shown a printer that would make a halftone look like good quality. It was the first time I'd ever seen a printer do that. We could see all the line graphic, all the line art and everything working fine on paper, but it wasn't until the 1990s that I would ever have thought of using it to print a book that would have color photographs or anything like that.

**Seybold:** I scanned slides and then gave them the scanned image, so this is printed from slides.

**Liz Crews:** He's talking about this image down here. That probably wasn't generated directly.

**Seybold:** No. Although that was a big issue in the late 1980s, and Adobe was heavily involved with this, as was Scitex and other people involved in the high-end graphic stuff were basically dealing with color space and how you render the same color accurately on different



devices that have different color spaces. I can recall going to a seminar on the math behind this at Adobe and having a sort of déjà vu moment, of having math that I'd forgotten about from college suddenly become really relevant.

**Crews:** Well, one thing that EFI addressed was the color mapping, and that's because of Efi Arazi's work at Scitex.

**Seybold:** The most difficult issue in color was color fidelity across devices and across media. It was a really, really difficult issue.

**Bob Sproull:** Yes, but just to be clear, this had been going on for years, long before anything was digital.

**Brainerd:** Yes.

**John Warnock:** One of the experiences that will never leave my mind is when I took a tour of the R.R. Donnelley plant in Chicago that did the old Sears Roebuck catalog. It was an extensive tour where you walked through huge buildings and saw people sitting there with color negatives and color positives and retouching inks; they would retouch individual photographs using these transparent inks. Then these were put into this gigantic Gahr machine that would engrave the copper disks that would actually go into the print room. They would run a test sample, and then guys would go in with abrasive pumice onto the Gahr plates and rub them down to slightly change the color balance between the magenta, cyan, yellow, and black. When they got all of these huge rollers that would do this, they would run the catalog. They would take out all the color in a white shirt, for instance. They would only leave the black. Hundreds of people were doing this color work. All you could say to yourself was, "There's got to be a better way." That experience left an indelible mark on my brain.

**Chuck Geschke:** So, I used to visit my father and grandfather in the 1940s at a photoengraving business where they were working, and my dad was a proofer. The proofer's job was to make sure he had the same paper that the customer was going to use, and it couldn't get too old. Otherwise it wouldn't be accurate. He'd have to have the same inks that were going to be used, and he would go on to this press after they had made a copper plate and do exactly what John was describing on the four-color plates because there had to be separation between the magenta, cyan, yellow, and black. He would rub a pumice stone on the halftone that was engraved until he got all the colors right. There would be somebody from the advertising agency who would be in the room and look at it and say, "You know, that purple isn't sexy enough" and "I need a little redder in that." My dad would go and basically take out the blue. That's the way it would work.

**Butler Lampson:** What would he do if he rubbed too much?

**Geschke:** He'd start it over.

**Warnock:** They were very careful.

**Geschke:** No, no, no. When the engraving took place, you would make new plates if you really went way too far.

**Sproull:** It was a lengthy process and an expensive process.

**Warnock:** That's right.

**Knuth:** In 1990 I had a color book printed in Singapore. I went and did all the color proof checking myself. I still have samples of the cover, and it was not a combination. It was one solid color, and they had a blue-green ink. They could turn the dials, and I have three samples that look like three absolutely different colors. Without having me there to approve it, they wouldn't have known how to make the cover of the book. I had to leave Singapore after two weeks. They didn't finish the book in time, so some of the pages of my book that I didn't have a chance to proof came out rather badly. I think that was called a press check.

Because these things are nonlinear, it took a lot of work to get them into the software. But I wanted to make one more quick comment. We were talking about color, but Bob Sproull mentioned yesterday that he had the halftones done also nondigitally. We didn't use digital stuff for halftones in books until rather late in the game, I think.

**Grad:** Thank you. That's a very interesting thing.

### **Inception of Seybold Publications**

**Grad:** Each of you has a handout that includes a couple of pages about Seybold Publications and Seybold Conferences. We'll be talking around that. Seybold Publications was an outgrowth of what had been done before. When did that start?

**Seybold:** I left ROCAPPI in 1970. My father left at the end of the year. I came to the West Coast, and he was on the East Coast. Then we started up this newsletter. Originally, it was done for what became known as the Graphic Communications Association, which was a group under the PIA (Printing Industries of America). The first year or so we wrote it and they actually produced it and mailed it and distributed it. After that first year, we took over and did it ourselves, and we moved the production to my father's office in Southern New Jersey.

**Grad:** How did you finance it? Were there any issues with that, or was it just self-started?

**Seybold:** Basically, we were making our living doing consulting. Bear in mind that was the whole mindset here. When we had ROCAPPI, we had a company, we were competitors, but we were also evangelists. I wrote a book. I did a video. We had frequent tours through the company. All of the information that I handed out yesterday about the company and how we did things and so forth was available publicly in more depth than what I handed out yesterday.

**Grad:** You were promoting the publishing industry, is that a fair statement?

**Seybold:** As I said yesterday morning, I had a vision of this revolution, and the revolution was going to take a lot of people and a lot of collaboration. From the beginning, our view and my view especially were that our role was to try to push things forward. That meant we did it ourselves first of all — and that was useful because at that point we'd run a development operation and dealt with programmers and all the problems and so forth. When I dealt with companies later on, I'd been there, I'd done that, I knew that.

The next step was to move beyond what we were doing ourselves because now there were more and more people doing stuff. The next step was to try to disseminate the information so that we could evaluate what was going on, we could share it with other people, and we could all learn from each other.

**Grad:** When did any of you first hear of Seybold or Seybold Publications? Let's go around. Larry? Early 1970s? Late 1970s?

**Larry Tesler:** Mid-1970s, I'd say.

**Crews:** Early 1970s. I was working with the publishing companies and the Xerox Education Group. He was the source for what was going on, and we were trying to find out what technology would apply to those companies. It was essential to be involved.

**Grad:** How about you, Paul?

**Paul McJones:** I got involved because they were the source for all this information. I had to automate the student newspaper in college, and I needed to know the information in detail in order to purchase the equipment and install it.

**Grad:** How about the people at Xerox PARC?

**Warnock:** We all knew of Seybold, quite early.

**Geschke:** I don't remember exactly the date, but early 1970s.

**Grad:** Jonathan, back to you. Who was the company?

**Seybold:** Initially just me and my father. As we grew, he began to build up the production staff in New Jersey, and then he moved it to Pennsylvania.

### **Seybold Publications Content**

**Grad:** What do you mean about your production staff? Did they publish the newsletter, write the articles, what did they do?

**Seybold:** Initially, it was to help edit and publish. Then we began to add editorial staff as well. We just kept growing. We never marketed anything; it was word of mouth that spread it. There were no marketing people or anything of that sort. It was just us writing the stuff and then we had people who managed subscriptions and customer things, and we had people who did the production, which was typeset from very early on.

**Grad:** What do you mean by editorial?

**Seybold:** Well, for example, by probably 1974 or so, we added Steve Edwards, who was actually the son of my father's college roommate. Steve was basically the copy editor, although that is too little a word for it. He oversaw the language, the copyediting, the fitting. A lot of the selection of the news stories was done collaboratively, but he made the thing we produced. Any regular publications have people whose job it is to get the thing out the door, and that was his job.

**Grad:** How thick was your newsletter typically?

**Seybold:** Typically, the main article ran 14 to 16 pages, and then we would have new stuff in the back, so a typical issue would run 24 pages.

**Grad:** How often?

**Seybold:** Twice a month.

**Grad:** You kept it up for how many years?

**Seybold:** I stopped being involved in 1995, and it was still going strong and we had added more newsletters. Later on, we were doing one a week, because we were doing that one twice a month, and then from the mid-1970s on, we were doing at least one more. So, it got to be basically one a week.

**Grad:** Who were your sources? I'm staying with the one for the publishing area.

**Seybold:** Because we had been sort of evangelists to begin with, we knew an awful lot of people, so we just worked from there.

**Grad:** You were traveling to meet the people?

**Seybold:** In the 1970s, we traveled a fair amount. I never took any net salary out of Seybold Publications. I always put more money in than I got, so this was not a wildly profit-making enterprise. In the 1970s, my father and I were doing a two-day tutorial for industry people about once a month. There were 10 a year in the U.S. run by GCA. We did them in England for a company called Pira. I went to Australia and New Zealand in 1975 and did a bunch there by myself. We were doing things that put us out trying to teach people all the time. We were consulting for companies like *U.S. News and World Report*, and people who wanted to install these systems. We were consulting for people who were trying to design these things. The whole idea was that if you want to push things along, you want everybody to do the best possible job, so you try to help everybody and give them as much information as possible.

### **Seybold Subscriptions**

**Grad:** In the 1970s, how many of you at this table were subscribing to the newsletter? Four. Nobody from Xerox PARC was bothering to subscribe. Why not?

**Warnock:** We were aware of Seybold, but it was expensive.

**John Schoch:** I think it was in the library. At this time, we had a pretty good library, and this was a world of weekly quasi-newspapers and newsletters. I remember *Computerworld* and particularly *Electronic News*. These were not research publications. I got interested in the computer business, and it's different from computer research, because on the way to lunch I'd stop and read *Electronic News*. It would talk about who had won the contract for the N27 missile control system or whatever; that was on a whole different side of the library. The library had all of the research publications, and then there was Ben Rosen's *The Rosen Electronic Letter*. There was a technology letter that Dick Schaeffer did. There were the *Seybold Newsletters*, and there was *EMMMS*, Ken Buzzenworth on early electronic mails and stuff. You'd sort of drop by, and then as you moved to the business side and go, "Oh, shit. This is more important, and I

really need to pay attention." Then you'd start to pay Gartner Research money and other people and all of those things you had to do. There was this undercurrent of monthly or semimonthly newsletters and other things that were coming out.

**Grad:** So, you weren't subscribers. How many of you were aware of it? You were, Paul. So, a number of you were aware of this other material.

**Seybold:** This was an interesting issue. In the 1980s, *Publishing Systems* was \$350 a year, and we knew that the actual circulation was more than 10 times what our actual paid circulation was because companies typically would take it and photocopy it. There was a guy in Australia who had a circulation of 1,000 pirated copies, but we never could turn him off. We knew that was happening, but we did the math and said, "If you reduce the price, how far down did it have to go so that people would actually pay for the thing?" The market wasn't big enough that it really seemed to make sense for us, so we had to live with pirating.

**Grad:** When did you hit 1,000 subscribers?

**Seybold:** Somewhere right in the beginning of the second year.

### **Seybold Editorial Content**

**Grad:** The Seybold Newsletter was a real resource, I gather, for some of you.

**Brainerd:** Yes. It was an in-depth resource, because before this in the newspaper industry there was the trade association publication. They had a production section, but it was highly influenced by the advertising. Jonathan and John would publish 16 pages on a system, so they'd go through the justification H and J algorithms and basically say how they worked. I would eat that stuff up because it was the authoritative source. Nobody else was doing the in-depth analysis of these systems and how they were constructed, what the technology was, and how much memory they had—how the H and J algorithm worked or didn't work, for example.

**Grad:** That's an important point. When I asked about "editorial," that's what I was talking about. You were doing analysis work. You were doing in-depth work. It wasn't just news.

**Seybold:** We had the main article in the front and then we had the news stuff in the back. But the news was never just clipping press releases. I had done something like that for six months before, where we did this and you just sort of parroted a press release. The Seybold Report news was always trying to put something in context, so there was a little bit of analysis in the news as well. There was a lot of editorial content in that. The main articles were exhaustively in-depth.

**Grad:** Who did that research on those? Who did the analysis work?

**Seybold:** We did, my father and me. We did 20 issues a year, and in the beginning, I was probably writing 13 of those.

**Grad:** That's a hell of a lot of work.

**Seybold:** Yes.

### **Seybold Tutorials and Seminars**

**Grad:** Did the seminars start in the 1970s?

**Seybold:** We did these tutorial things in the 1970s.

**Grad:** What's a tutorial?

**Seybold:** Basically, it was a class. People would come in for two days to have us tell them what was happening; we'd go through everything that was happening, and there was a lot of interaction among the people as well. My favorite people were the ones who'd show up from an unnamed government agency.

**Grad:** How many of you at the table attended the tutorials? None of you. I'm trying to get to the point where it effectively becomes this common denominator.

**Seybold:** In the 1970s, you'd go to the ANPA show to see the new newspaper systems. You'd read the *Seybold Report*. But by the 1980s, as we begin to see this dawn of new technology coming, it was clear things were going to explode. I had always valued being able to meet with people and exchange ideas, and I just figured the thing we really need now is to have a gathering for the people who are leading the industry so we can all talk about this stuff and exchange ideas. That's where the idea for starting Seybold Seminars came from. We did the first one in February 1981 in Los Angeles, and relatively quickly people came and exchanged ideas. It was great fun, and the thing that made me realize that this was really useful was the level of engagement that took place outside of the sessions, the break stuff. People were talking way into the evening. These were week-long things, and they were very intense. Almost immediately, we added a demo room because people wanted to show off the new stuff and that just kept growing and growing.

### **Attendance at Seybold Seminars**

**Grad:** How many of you eventually went to the seminars?

**Warnock:** Our first one was, I believe, was in 1983 in Los Angeles, and it was fairly small. It wasn't a gigantic thing.

**Seybold:** Yes.

**Geschke:** Then John talked at one in 1984.

**Grad:** Let me go around the room. Chuck?

**Chuck Bigelow:** I think I went to the second one. It was in February 1982, maybe. I had written an article for the Seybolds. I was aware of them in the late 1970s, but I couldn't afford to subscribe. Then John's sister, Patty Seybold, introduced me to her father and Jonathan, and I wrote an article for them in August, I think, of 1981. Then I attended the seminar in 1982. I was astonished with the results of that article. I was a teacher at the Rhode Island School of Design, and I wrote articles for specialized magazines about fine printing and typography. When the Seybold article came out, I was getting calls from people and letters from friends who were in the newspaper business; the sons of friends of my father were calling and saying, "You've hit the big time" with the *Seybold Report* on typesetting. It was electrifying. I think in 1980 I came to a—I don't know whether you called it a tutorial or a seminar but it was at Stanford—and there Donald Knuth showed off the TeX system, which I mentioned yesterday. I met Don Knuth, which turned into a very fruitful and congenial relationship that wound up taking me to Stanford. In 1980–1981, it really seemed to explode into the world of digital typography.

**Grad:** Paul, how about you?

**Brainerd:** I was a poor college graduate student at the University of Minnesota, so it was a big deal subscribing to the *Seybold Report*. I had to write a check for it out of my own bank account, which wasn't very big, for like a couple thousand dollars. I didn't go to the first seminar because I couldn't afford to go to it, but I started subscribing with the volume 1, issue 1. I probably went to the third one, I would suspect, with the *Minneapolis Star and Tribune* paying my way.

**Grad:** How about you, Liz?

**Crews:** I think I might have been at the first or second. I know I spoke about bitmap fonts at probably the second conference. I was one of the speakers.



**Knuth:** Chuck's memory seems to be better than mine. I thought I met Chuck through *Fine Print* magazine in San Francisco. I think John and Jonathan came to see the strange project that we had at Stanford. I sort of remember them coming to my office, and I saw some kind of a write up in the Seybold newsletter, but I don't remember any more than that.

**Lee Lorenzen:** The first public showing of Ventura Publisher was, I think, either December 1985 or the early part of 1986 at the Beverly Hills Hilton. There was a Seybold Seminar with a breakout demo room and kind of a large format display. We had our little table. We drove down in our Dodge Caravan, and it was kind of like hitting the big time. We'd been reading these reports for all these years about how these systems were being measured and judged, and now we were getting to actually show our package for the first time.

**Grad:** You hadn't been there before?

**Lorenzen:** I had not.

**Grad:** Chuck? John? Were you there when you were at Xerox PARC?

**Warnock:** We were at the Beverly Hilton one, certainly. I think as soon as we founded Adobe we started to go.

### **Seybold Seminar and Publication Topics**

**Lampson:** I never went to any of these seminars. I think the reason is that in the 1970s, there was basically, to my knowledge, no significant intersection between the kind of stuff we were doing at PARC and newspapers. Jonathan was concentrating on mostly newspaper-focused publishing at the time. I think the first intersection came as a result of a common interest in typography. Then it wasn't until the Mac came out and products like PageMaker came into existence that people in my world started taking a serious interest in this because now it was very clear that the two worlds were merging. But that was just not true before the Mac came out.

**Grad:** Before I forget, was there enough technology content in those issues, or was it mostly business content? What was the content from your point of view at those sessions?

**Lampson:** Both.

**Crews:** Both.

**Schoch:** We had more of a computer-centric exposure, so the original Xerox network servers prior to the 8010 were launched at the NCC (National Computer Conference) in McCormick Place in Chicago. If we wanted a place to go spend a week to go rub shoulders, we went to the PC Forum that Ben Rosen and Esther Dyson did. It was a more likely place with a broader sort of universe. Although we were certainly aware of the Seybold conferences, it's not where I would go.

**John Scull:** I went pretty religiously once I got involved, which was in May 1985. From then, for the next 3-1/2 years, I went to pretty much every one down in L.A. Later, we helped with getting a desktop publishing conference. We were kind of the anchor tenant to help make sure stuff like that happened, so it was a big deal, and we were very supportive.

**Grad:** Were there people earlier at Apple who might have gone besides you? I was thinking about Bruce Blumberg, for example.

**Warnock:** I don't think so.

**Scull:** You've got to understand, even with the LaserWriter, publishing was nothing. It was not any part of the psyche. It was all about a shared, really cool printer that made Steve happy. That could get the graphics and fonts onto paper, so it was the Mac Office. It was the whole mentality. We'll get into how that shifted later.

**Seybold:** Yes, the first Apple people who showed up were these two ladies who had been out on the road. I'm trying to think of the first one's name. The second was Katie Cadigan. I'd never seen them before, and they showed up sort of bedraggled. They were the first Apple people to ever show up at a Seybold Conference, I think.

**Scull:** We knew Patty Seybold, since she was more marketing and office automation, which was closer to something I think Apple people could kind of relate to, besides our creative service guys and our ad agencies. We knew Patty but we didn't know the other side of the Seybold family.

**McJones:** In the *Seybold Report*, did you run an article on the Alto system back in the late 1970s?

**Seybold:** That was all under nondisclosure. The first time I could write about what was happening at PARC was when Star was introduced. We had a practice of trying to do things like that on the day something was introduced because we had the information beforehand. The first publication that had anything about the Mac was the *Seybold Report*. They had the ads on Super Bowl Sunday or something, and we were already in the mail. Steve Jobs had given me a

prototype Mac back in the fall previously, and I had written the article and done everything before that. When we wrote news stories, we'd check on the items if we were dubious about something or needed more information. But the full articles always got sent back to the people we were writing the story about to check for accuracy and for them to raise objections. We didn't guarantee we would publish what they wanted, but we wanted their feedback. So, there was a loop in terms of time involved; to be on deadline for that meant it had been prepared some weeks before that.

**Tesler:** I don't remember attending anything or subscribing on a regular basis to anything. I may have been a speaker in 1985 or so, but I don't remember that.

**Grad:** With Apple, one of the things that's always fascinated me was that Apple was so successful because of an application—the Apple II with VisiCalc and the spreadsheet. Yet he's saying, "Hey, we weren't thinking about the uses of the thing entirely." It's just a different mindset. We'll talk about that a little bit more later. If you were a marketing guy; you should have been thinking in those terms.

**Lampson:** Of course, they were thinking about the uses, but it was uses in a different space. What do you think? Paint and Word and Excel and all those things were uses.

**Seybold:** I have a good friend who is fond of saying, "You can't know the adjacent possible,". What he's saying, basically, is that it's really hard for someone doing technology, for example, to anticipate how people are going to use that technology and what's going to happen with it. This happens over and over and over again. But I don't completely agree. I think you can know a lot about the adjacent possible

### **Seybold Seminar Growth**

**Grad:** Let's keep going. The seminars were run twice a year?

**Seybold:** We started once a year in 1981. Then the desktop one that became Seybold San Francisco was started in 1986. So that's twice a year, two a year. Then I started Digital World, which was my real pet one, in 1990. That was once a year also. By that time, it was three a year.

**Grad:** What kind of attendance would you have at the seminars?

**Seybold:** It kept going up. It was hundreds, and then it grew into the thousands—1,000, then 1,200, then 2,000. As it got bigger and bigger, we would break things into more multiple tracks and multiple sessions that were more focused. From the very beginning, we made a real

effort to host and provide housing for and facilities for all kinds of special interest groups. We hosted stuff for the SGML (Standard Generalized Markup Language) people. We hosted stuff for the people working on color space. Since they were all going to be there anyway, we tried to make sure that all the people who were working on problems would have their own space to have their own discussions.

### **Seybold Trade Shows**

**Grad:** You mentioned earlier that you had you would bring in vendors; they would pay for space.

**Seybold:** Initially, it was just demo space, and it was just for demoing things for the people who were coming. Then basically it morphed into a trade show. The first thing we did from scratch that started as a trade show was the desktop publishing one. It started in 1986 in San Francisco. At that point, we knew we were in the trade show business, so we were just blatant about that: this is a trade show. You had a conference and a trade show that ran concurrently. By 1993 in San Francisco, we were up to about 2,000 people at the conference and about 40,000 at the trade show.

For contrast, we had moved the spring one to Boston so as to have one on the East Coast and one on the West Coast. The East Coast was more of a high-end focus, but there were 17,000 people at that trade show. Because it was more high-end stuff, that was a smaller market. The bigger market on the West Coast focused more on the desktop stuff; which was a much bigger market by that time.

**Grad:** Who would come?

**Seybold:** The people that would come would be all these people who wanted to publish. This is the thing that surprised everybody. Publishing is actually a very large industry. All the things that had counted publishing previously had only counted professional publishing. Nobody was counting all the other organizations that publish, and there were more of them than there were people in the professional field.

**Grad:** So, the people that would come to the trade show were people who were doing publishing, not the people who were buying the software.

**Seybold:** The people that would come to the trade show were people who were buying the stuff, which is why people came to show their products at the trade show. We did two other things that were really, really important. Trade shows are the place that people go to show off new technology to potential customers. It's where you want to introduce products, which means

that we worked really, really hard with the press all the time. We had two PR ladies who sat right in the midst of the group in Malibu where the content people were, and their full-time job was to deal with the press. Deal with the press means someone calls up and says, "I'm writing a story about such and such," and we would tell them who to contact. We'd give them the background information and tell them who to contact and who to talk to. If they needed stuff from one of us, they'd talk to one of us about it as well, but Beth and Robbie handled most of that stuff. When we got to a trade show, they would train the people from the companies who were novices on how to do a press conference and how to demo things. They would tell the press people when press conferences were, what the schedule was, who was showing what.

**Grad:** Let me separate two things. From your standpoint, the trade show became a marketing vehicle. Is that correct, for all of you who had products? The conferences though, or whatever you called them by that point in time, were a chance for you all to get together, exchange information, learn what was going on from a technological basis. Is that a fair summary of the differences?

**Seybold:** Just the technology and business.

**Brainerd:** As an attendee at some of the early seminars and also eventually contributing to and getting stuff from the *Seybold Report*, one of the interesting things was that people took it seriously. It was a trustworthy publication because so many of the other publications were either assembled press releases or opinion or hyperbole. But the *Seybold Report* and at the seminars, I remember Jonathan pinning someone down after a talk and asking really clear questions about the implications, getting down to the facts. He didn't put people on the spot in an embarrassing way, but elicited further information so that the audiences could actually judge beyond the presentation about what it implied. The *Report* was the same. They were very trustworthy documents. I'm sure you had agendas and goals and so forth, but more than any other of those high-tech publications, the Seybold ones seemed like they were thoughtful and fair.

### **The Font Wars**

**Warnock:** We will never forget the Seybold Seminar of 1989. That's when Apple and Microsoft made war on us.

**Grad:** Just as an aside, in the package that we are giving here, Jonathan wrote a remembrance of what was called the Font Wars.' At the end of the meeting, you'll all get a copy of his views on that. But that was one of the things I was trying to get at. At these meetings, there were 2,000 people. Were these collegial? Were they educational?

**Warnock:** That one wasn't.

**Geschke:** You know, just to add something to it. And this is not negative, but there's nothing that the organizer of a conference likes more than to have a huge controversy like this, because it gets everybody engaged and involved. So, Jonathan's group put together an extra session on the last day with a panel discussing, "Would you rather have Apple and Microsoft take over this industry, or would you rather stay with Adobe?" The person who chaired the panel, whose name I don't remember anymore, at the beginning said, "I'd like to do a straw poll. I would like everyone in the audience who would like Apple and Microsoft to get rid of Adobe for us to raise your hand." Now there were a few Apple and Microsoft employees in the audience, so maybe 20 hands went up, but nobody else raised their hand. The reason is that they knew what we were like to deal as a company, and they knew where we were in terms of moving technology forward. They simply didn't trust that Apple and Microsoft would be able to do what they needed.

**Lampson:** Indeed, they wouldn't have been able to.

**Warnock:** Yes, but this was long after Steve Jobs had gone from Apple, so we were dealing with Jean-Louis Gassée and John Sculley. With John Sculley and Jean-Louis Gassée, Apple was a different company. It was a turning point in the sense that the two largest PC providers were really leveling their guns.

**Seybold:** I knew that Microsoft was going to make the announcement at that conference that they had been working for a year building up to that, and I'd been trying to guide them to choose good fonts rather than bad fonts. I did not know until shortly before this that they had made this last-minute deal with Apple. I couldn't hint to Adobe that anything was happening except to say to John that Microsoft was going to make an announcement, just right before the announcement.

**Warnock:** Chuck had talked to Bill Gates before.

**Geschke:** I got a phone call at home telling me that that's what they were going to do.

**Warnock:** It needed a very serious technical response, and we did that. <laughs>

### **Seybold Seminar Experience**

**Grad:** How many days did the typical conference run?

**Seybold:** Five days. It was a week.

**Grad:** You would devote that kind of time to it?

**Seybold:** Oh, yes.

**Lorenzen:** In contrast to the Font Wars, it actually was a pretty collegial experience, at least most of the time for me. I got a chance to meet Paul there and Jeremy Jake and Ted Johnson, who were key developers working on the Mac and Windows versions. We got to know each other because they were the lead developers on PageMaker and we were the ones on Ventura. You definitely got a chance to interact with people who understood the same set of problems that you were trying to solve. I really enjoyed them.

**Grad:** With 2,000 people, how do you become collegial?

**Lorenzen:** Well, you knew the top products and who the key developers were behind those, so it was pretty easy to find those people.

**Seybold:** See, if you look at the population, you've got users there, you've got newspapers there, you've got book people there, you've got people doing color stuff, you've got people doing tech documentation stuff, you've got people developing systems for this and people developing systems for that—people doing all different sorts of things. It was a big group and while they had some interests in common, there was a lot of stuff going on in a lot of different sorts of subcommunities within that. That's where the collegial stuff was.

**Scull:** John talked earlier about the personal computer industry. The whole technology industry events have played an incredible role, so it's a forcing mechanism for product shipping. It was a place for sales, marketing product, competitors, analysts, and all the PR. Most of us didn't stay five days, but you'd get a chance in three or four days to meet everybody that you wanted to at least twice a year. The key people you saw more frequently, but you got a chance to see everybody, and you got really good feedback. It helped you go back energized about what either had to be done or what was working. It was terrifically profound to new introductions of anything new. You need to have the kind of tribal come together, even though there might be some arguing; but the tribe needed to come together and then move on. Then you set another stake for another major thing to do. In our world here, these were the real galvanizing kinds of events that were needed.

**Grad:** Jonathan, was the trade show run concurrently, or was that run at a separate time?

**Seybold:** The trade show overlapped with the seminar, but the trade show was shorter. Trade shows don't run for that length of time. The seminars did because there was a lot to cover.

**Grad:** You had a lot of subgroups then.

**Seybold:** Yes.

**Grad:** Let me ask the people who were there and participating. Why did you go besides from a selling standpoint? What were you getting out of the communication there?

**Warnock:** You saw the new products. You saw everybody and what they were trying to build and how they were trying to use our products. For instance, how were they trying to use PostScript? Steve was there with NeXT. During the Font Wars, Jonathan had the good taste to bring Steve on the stage, and Steve was very positive which side he was on. You got to see all of the new glimmers of light of new products and new ideas about how to use technology; that's what you did.

**Geschke:** In addition to seeing our competition, we also saw all of our business partners. I mean, we were developing printers for dozens of companies by this time, and they all came to the same conference. We wanted to make sure that that community continued to listen to us and understood why what we were providing for them was so critical.

**Seybold:** At that time, I think we had about 35 OEMs (original equipment manufacturers) that were producing printers.

**Grad:** The OEMs were there?

**Seybold:** Yes, absolutely.

### **International Desktop Publishing**

**Brainerd:** I agree. The customers were particularly important to me. I spent hours learning from our customers about their product needs. Jonathan hasn't touched on the international component of this.

**Seybold:** *The Seybold Report's* circulation was always 25 percent outside the U.S. from the very first months. Even though it was produced in the U.S., we did stuff overseas. We had a lot of overseas people come, and we got to the point in San Francisco where for several years we ran concurrent translation for Japanese—the Europeans, Aussies, and so forth were fine with English, but the Japanese had real problems with it. There were enough Japanese attendees there that we had to offer translation.



**Brainerd:** The reason I bring that up is because I think in yesterday's conversation regarding the technology there was very little credence given to these other countries. In fact, there were international companies doing advanced work, and they had requirements that were very different, particularly the Japanese and Chinese. The size of the publishing industries, professional publishing, in those countries was huge and very important.

**Seybold:** We had correspondents in the major countries, so we were always reporting news from those countries. I'd spent part of my high school years in Europe. I'd gone to high school there, and my parents had lived there for a couple of years. From the beginning, we were always international.

### **Customer Feedback and User Groups**

**Crews:** Well, I want to add to what John Scull was indicating. For me, it was very important and valuable to get the input from our customers. Although we were there selling and showing off our technology, it was the input, the feedback that I took back that was extremely valuable for our marketing efforts. The same people would come every year. I'll never forget, there was a guy from New York, I think from *The Wall Street Journal*. He made a point of coming to see me every year at to see what was happening, and I got his input.

**Grad:** Did you all have user groups?

**Seybold:** Yes.

**Grad:** So that's an addition.

**Crews:** Well, at Adobe, we were the first ones to produce the *Califan*, which is a newsletter. We did it with PostScript, and we circulated to a large distribution list, primarily to every business card I'd ever collected in my life.

**Grad:** You had user meetings then in addition?

**Crews:** No. It just went out to our subscribers. The primary communication was through the Seybold Seminars.

**Grad:** See, that's what's different here. In the case of the other software companies, every single one of them had a user group, not just IBM with Share and Guide, but every other company had user groups, 500 people, 1,000 would come.

**Warnock:** We did for the applications. We didn't for PostScript. For the applications, for Illustrator and Photoshop, we had user groups.

**Grad:** Lee, did you have a user group?

**Lorenzen:** At least for Ventura, we didn't. There was a guy who was an early enthusiast user of the product. and he created a magazine and a user group called Ventura Publisher Users Group. I forget his name, actually, but he was a great service to us because he built a whole following.

**Grad:** How about you, Paul?

**Brainerd:** Well, the software applications that you're familiar with developed all over the country, and they had application user groups for graphics and design and PageMaker. We would go to those and present, but we didn't have any per se.

**Grad:** You didn't have your own. Okay, Don, you had a comment.

**Knuth:** I just wanted to raise a question. I was expecting to hear more about it before. I think a lot of us remember that there was something called a typewriter, and in the 1970s, a lot of people used typewriters and a lot of things were produced on typewriters. That doesn't happen anymore. I might get two or three letters a year that were made on a typewriter because they had to write to me and I don't have email. This is a huge change. Nowadays people use fonts instead of having just what they got on a typewriter.

In the 1960s, people could get an IBM Selectric typewriter. and they could change the ball, so they could have two or three styles of type. It advanced to the point where the man on the street knew what a font was. Still, I'd like to focus on how this transition went on, because the people who were using fonts and doing a lot of composition before 1980 were mostly in newspapers and book publishers. I read that Herbert Hoover insisted on having his speeches typeset before he would proofread them.

But this was very unusual. Somehow, there was this change and a lot of it took place through the 1980s and 1990s, but this must have been showing up in these Seybold Seminars. You started out with people who didn't use H and J, but then other people started using it because it was available on their computers, so I just wanted to bring that out as an important historical turning point.

**Geschke:** I want to illustrate that point. I got a phone call in the early days from a customer who said, "I love your product. I use it, but the only typeface I use is Courier because if my

newsletter doesn't look like it was produced very quickly, people won't read it, so it has to look like it came off a typewriter.”

**Grad:** That's interesting.

**Warnock:** One other point. When we built the LaserWriter, the LaserWriter code had to be put into mask. In other words, you put it in once and you can't debug it. No bugs. It was a half a megabyte of Masked ROM, but all of the machinery for all of the languages were in that Masked ROM, even though there were no fonts. All the Japanese machinery was in there and all of the backward writing and up and down writing and all of the spacing characteristics. These things were anticipated in the original LaserWriter.

**Grad:** That's unbelievable.

### **Seybold Publications et al. as a Business**

**Grad:** I want to talk about one last thing. How profitable were the meetings? How profitable were the trade shows? Did you become a wealthy man? We'd like to hear about this, Jonathan.

**Seybold:** Because this was evangelical, basically on the publications side, as that grew, all the resources went back into the product. We would add people, we'd add staff people, and we'd make the product better. The publications made enough money to cover expenses, but as I said, I never took more out than I put into it when we were doing the conferences. Then when we were doing the seminars in the 1970s, all of the money we were paid for that went into the publications, and I took out less in salary than I was putting in. That was always viewed as being an evangelical kind of thing, and we supported ourselves with the consulting initially.

Seminars and trade shows in particular are a very interesting business. You have a very high fixed cost to get the thing off the ground, and if you don't make the fixed cost, you're in deep trouble. Once you go past that, then you become very profitable.

**Grad:** So, did you make money?

**Seybold:** Yes, but not with the scope of what these guys did. I mean, the value of our company was a rounding error compared to the value of these guys' companies.

**Grad:** Let me go with that. You eventually sold the company.

**Seybold:** To Ziff Davis, in 1990.

**Grad:** Was that profitable for you?

**Seybold:** Yes, it was profitable. I had done profit sharing from the beginning in the company, with Seybold Seminars in particular, so it was profitable for me and for the employees because they all got a share in that too. About half of that went to the employees.

**Grad:** You don't have to answer this question, but it'll be asked of each of the companies as we talk. Are you willing to tell us how much you sold it for?

**Seybold:** I'm not sure I want that on the historical record. I feel odd about that, but I will say that it was a rounding error in the values that the software companies went for.

**Grad:** You might or might not consider it a rounding error. It's one of those things; the numbers people were paying for companies changed so dramatically by the time you got to the 1990s. I was doing merger and acquisition work with a lot of software companies, and originally if we could get to \$1 million selling the company, we thought we did well. Then, it was bad if you couldn't get \$10 million. Then finally, you had to have a bunch more zeroes. And companies went for \$100 million and more: and now we talk billions of dollars for some companies. It changed so unbelievably during that period of time.

**Seybold:** It was not that many zeroes.

### **Seybold versus Other Industry Events and Publications**

**Lampson:** For the historians, it might be very interesting to compare the evolution and structure of the Seybold Seminars with the standard conference and trade show for interactive graphics, which is SIGGRAPH. It had very different origins and was not inspired by the same sort of concentrated evangelistic spirit that got you going. But I think there were also a lot of similarities in that the trade show grew to attract 50,000 people.

**Grad:** Talk about it.

**Lampson:** Bob can talk about SIGGRAPH.

**Sproull:** Well, I was thinking as you went around the room asking who had gone to Seybold Seminars that I had not, but I was a SIGGRAPH baby. In fact, I had withdrawal when I stopped going. The interactive graphics world grew up in that way and their activities, for example, were things like standards for device independent graphics packages and so on. When the people in Utah figured out how to do realistic imagery, suddenly that became where all the people like Pixar and so forth started to gravitate. The conferences increasingly turned to

fancy rendering rather than interaction or systems around graphics. It became a settled topic or a set of settled topics. Today, it's primarily for the media and entertainment synthetic graphics, synthetic imagery folks.

**Seybold:** I was going to say one more thing. To give you a picture of how you know what you're dealing with in a nascent industry. We found that most of the companies we were dealing with, the people who were running marketing and things of this sort, were young and totally inexperienced. The people who ran our trade show started what they call Camp Seybold, and they would have these people in before the show to train them on how to do what they were supposed to do because they didn't know. Everybody was sort of making it up as they went along.

**Thomas Haigh:** I'd like to follow up on that on the business model side. Looking at the history of computing more generally, Dick Canning's EDP Analyzer was a pioneer in a user and application tech savvy focused model. I was wondering, were you familiar with that or with any other successful newsletter-based businesses in other areas? Did you try to emulate that business model, or from your viewpoint, was it something you were making yourself?

**Seybold:** I had seen other newsletters and so forth. I'm not aware of anyone who was doing what we were doing, how we were trying to do it. —We were not copying anybody else; we were doing what we thought was appropriate for our particular situation.

**Haigh:** Not even in other industries?

**Warnock:** Jonathan had a monopoly in his space.

**Crews:** There were clones of Jonathan's work for portions of it. For example, the *Jaffe Report* was an example of somebody who “appreciated” what Jonathan was trying to do and produced an accurate technically astute evaluation on what was going on in the market. I think Perry Jaffe tried to do that. The circulation of his report was much smaller, and it was aimed more toward the graphic arts industry. There were people that cloned some of the things Jon did. They just didn't pull it off like he did.

**Seybold:** I want to say one other thing here that I feel very strongly about. Nobody who worked for us was allowed to have any financial interest in any company that we covered, not remotely related. We also were very careful about relationships—you can be friends with people, but you can't be too intimate with people because you can't build favoritism. Based on my brief exposure to the press, that was not true, generally. I never understood how you could be objective if you didn't do that because I just knew too many people who had to be compromised by what they were doing.

**Scull:** I don't know. You're just asking others coming out of the personal computer industry. We were actually quite used to there being a person like Jonathan. We had Ben Rosen who did it first, and he had a newsletter—very thoughtful, very impartial. He had a gathering—kind of everyone going to Mecca <laughs> once a year. Then Stewart Alsop did the same and kind of continued it. We were kind of used to that, so it felt very comfortable when we got into this new world, and there was our Ben Rosen, if you think of it that way, or our Stewart Alsop. Very, very evangelical, you know, really bought into it. Brought people together and was bipartisan, which was really great.

**Seybold:** They were two close analogies, but they didn't do the in-depth analysis, but they did a lot of the other stuff.

**Grad:** The point is, though, that in so many of these application areas there always seemed to be an evangelist, someone who brought the message and helped to bring the people together.