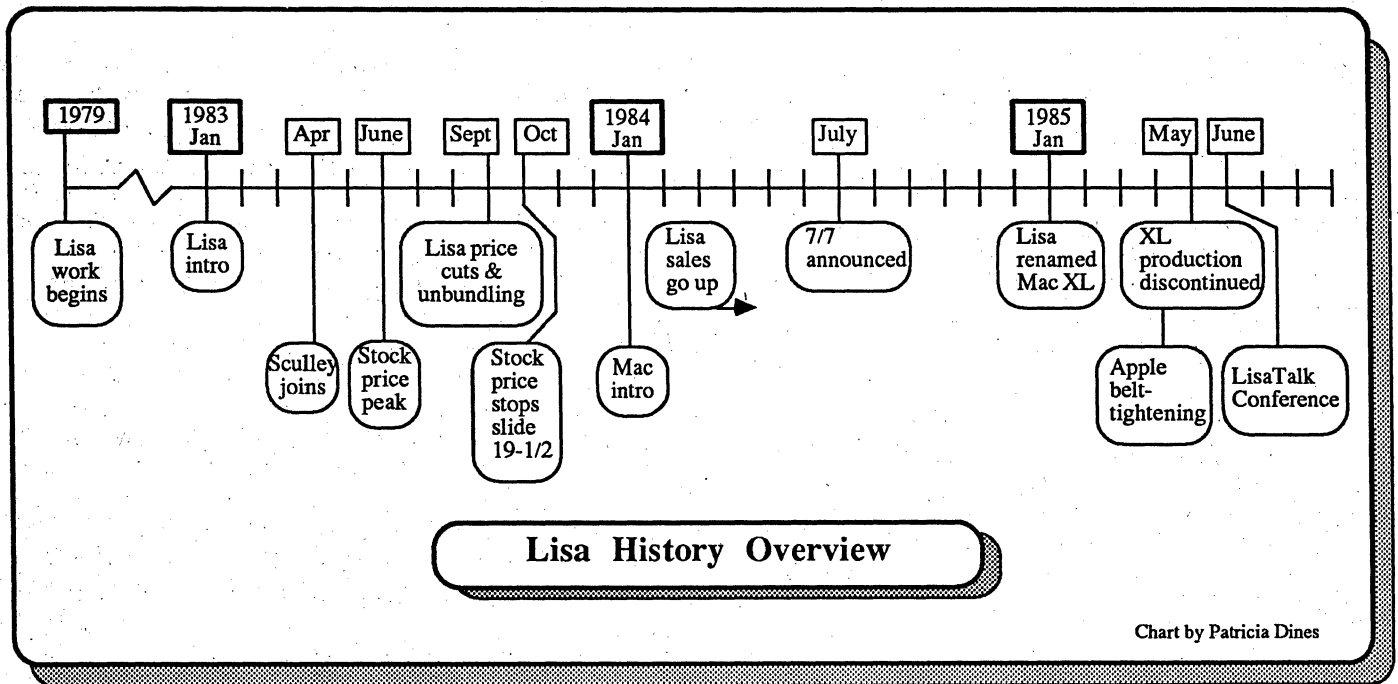


THE LISA: A CASE HISTORY

by Patricia Dines

In January, 1983, Steve Jobs and John Sculley declared that Apple "was betting the future of the company" on their new Lisa. In May, 1985, the mother Lisa was put to pasture, as the Mac carried on the flame. What happened in this two and one-half years? And what is to become of those who believed and bought the computer? Settle down, dear reader, to hear a most interesting tale about the computer called the Lisa.



January 1983: The New Baby

In January of 1983, after four years of work, Apple released the baby Lisa to the world. At \$9,995, this new personal computer paradigm included one megabyte of internal memory, a five megabyte hard disk drive, two 5-1/4" disk drives, and six core software programs: LisaWrite to write, LisaDraw to illustrate, LisaCalc to calculate, LisaGraph to show those numbers to others, LisaList to store and sort information, and LisaProject to map the journey. All integrated. Moreover, Lisa (an acronym for "Local Integrated Software Architecture") was the first personal computer to use a

mouse, and its graphic interface, reminiscent of the Xerox Star, was deemed revolutionary in its price range. And it was the first major PC to have within its "command center" a 32-bit microchip (the MC68000), the same chip now used in the Mac. Because this chip could carry twice the load of the then-current 16-bit chip, it could carry the baggage of the now-famous "user-friendly interface."

After four years of work (200 person-years) and \$50 million of investment, the thoughts at Apple must have included: Would they like it? Would they see its power? Would they buy enough? Well, two out of three isn't bad.

(1) **Hey, Mikey - they liked it!** In March, 1983, John Eckhouse commented, "Consumer interest [in the Lisa] remains high, as evidenced by the tremendous crowds that have gathered around Lisa at the few recent trade shows where it has been exhibited." Many a user saw for the first time a computer such as they had only imagined - one they actually felt excited about using. In the six months after the introduction, Apple's stock rose from 33-5/8 to 62-5/8.

(2) **And - they saw its power.** "The arrival of the Lisa has revealed a new dimension in the processing of research data," said Apple User magazine. Said D. R. Goodman of the Bay City Business Journal, "Apple's Lisa featured advanced 'software integration'; but more important, Lisa was innovative in 'demystifying' the technology. Apple promised to make computing accessible to ordinary people, no matter how technologically naive - an advance that was expected to revolutionize the industry."

The Seybold Report devoted 26 out of 32 pages of its January 1983 issue examining the Lisa. They said, "Even before it was announced, Lisa proved to be one of the most controversial new computers in many years. Everyone seems to have an opinion ... On one hand Lisa has been hailed as a miracle machine ... More commonly it is damned by critics who say that it will never work, that it is over-priced ... We do not agree with either point of view. Lisa may not be a miracle, but it is certainly a milestone 'event' of great importance. It may not instantly obsolete everything else on the market, but we believe that after Lisa the professional computing world will never be the same again."

In remembering the history of the Lisa, some would not forget how personal computers looked before and after Lisa arrived, and what her user interface and ease-of-use showed us was possible. Even IBM would come to follow that lead - a few years later.

(3) **"Would they buy enough?"** And this was the crucial question - not to be answerable until the Lisa shipped later that spring. But many wondered how much volume the \$10,000 price tag would be able to create.



April 1983: The New President

On April 8, 1983, the San Francisco Chronicle's headline rang, "New President and Computer Shine at Apple Presentation." They went on to say, "John Sculley, Apple Computer's new \$2 million president, impressed security analysts yesterday, and Lisa, the company's new \$10,000 computer, has apparently done the same thing among customers." Included in his compensation package were 350,000 shares of Apple stock. The excitement was still running high about the new accessibility that the Lisa offered. Sculley often mentioned a prospective

"family" of 32-bit computers, seeming to add stability to the prospects of the Lisa.

Yet even then Mac's name was starting to surface. But Sculley refused to comment on the rumors of an unannounced "less expensive version, supposedly called a Macintosh." Apple's stock had gone up nearly 6 points since the Lisa introduction (from 33-5/8 to 39-3/8) - and Lisa was the star product of the hour.

↓ June 1983: Apple's Stock Price Peaks - and Plummet

On June 6, 1983, Apple's price peaked at 62-5/8, nearly doubling its Lisa introduction price of 33-5/8. This would seem to imply great faith in Apple, its Lisa, and the future and financial stability of the company. Surely, many smiles were worn during this rise.

Unfortunately, this joy would not last. In the next four months, Apple's price lost all of this gain - and 14 points more - to reach on Thursday, October 13, 1983, the terrifying low of 19-1/4. Many factors influenced this drop, including Osborne's bankruptcy, the collapse of the computer stock group, and the "disappointing Lisa sales." But, whatever the cause, this drop was surely unsettling for Apple investors. Even more importantly, for someone with a financial background like John Sculley - not to mention 350,000 shares of Apple stock - this must have signaled a time for drastic action.



September 1983: Lisa Price Cuts and Unbundling

On September 21, 1983, Apple made a number of important changes to the Lisa. They lowered the price of the Lisa by 18 percent and unbundled the six software packages. The Lisa could now be purchased for \$6,995. The six software programs could be purchased individually at prices ranging from \$295 to \$395 each, or \$1,195 for the set. Clearly, Apple was answering two of the major complaints about the Lisa - the price tag, and the slowly-developing third-party software community. Unbundling the software would leave more room for competitive third-party products. As Apple told the press, "selling Lisa's hardware and software separately gives customers flexibility in choosing software application packages which best meet their needs."

At this time, Apple also announced that 165 third-party developers were developing software for the Lisa. Additionally, they spoke of increasing support for their "expanded dealer base," who had been far outselling their nascent corporate sales force. Certainly they expected these two changes to assist dealers in selling their product. Within a month the stock price stabilized.


 **October and November 1983:
More Products**

October and November saw a series of announcements and releases for the Lisa. On October 4, Apple started shipping versions of the Lisa to Australia, New Zealand, France, Germany and Britain. These shipments came from the new international Lisa plant in Cork, Ireland. On November 1, the programming language used to develop the Lisa Office System (Lisa Pascal) shipped at \$595.

On November 16, Apple announced and had available two communication products for the Lisa: LisaTerminal (\$295) and the Apple Cluster Controller (\$4500-\$7000). LisaTerminal was Apple's software for communicating on-line with modems. The Apple Cluster Controller allowed up to seven Lisa users to communicate with IBM mainframes. (More technically, it was a "protocol converter" to "emulate" the 327x type cluster controller, allowing up to seven Lisas to hook up to the IBM 3270 network.)

These appear to be the actions of a company supporting and planning the expansion of the Lisa. Yet already internal wheels must have been at high speed for the Mac introduction. Could it have been this early that Apple's energy shifted from the Lisa to the Mac?

On November 11, 1983, the columnist John Dvorak was whispering rumors of "the possibility of Apple dropping the Lisa computer line ... While internally the computer may be a Lisa, it may be sold as a Mac - of some sort. Reports have it that Apple intends to phase out the unsuccessful Lisa computer." He mentioned no source, but could it have been Apple insiders revealing internal discussions? Although the Lisa had apparently been successful for between 10,000 and 20,000 buyers, sales were not up to the in-house target, said to have been closer to 40,000 units. But there was one more function that Lisa was to perform - to get the Mac off the ground.

 **January 24 1984: The Mac is Introduced**

And what a gala event it was! The auditorium was filled far before the announced starting time - and not just with the stockholders. In fact, some stockholders were shut out of this much-anticipated event by curiosity-seekers, Apple-lovers, and the press. I was there. The energy level was high. We now were to know the computer of the ad, and the family to which Sculley had referred last April - the Apple 32 SuperMicro Family (named after the 32-bit MC68000 microchip).

With much fanfare, the *new* baby was announced - with words that are in hindsight chilling to any Lisa owner. They were betting the future of the company on the Mac now! But with

only one Mac on-stage with three Lisas, who would suspect the survivor to be the Mac alone? In nearly all of their discussions of the Mac, in the press releases, the Mac was described relative to the Lisa. "Apple Computer today unveiled its Lisa 2 series - higher-performance versions of its pioneering Lisa computer... Apple's Lisa 2 series and the new Macintosh form the basis of an expanded family of products incorporating Lisa Technology." And so on.

The Lisa had put into our minds a name for the interface style and an awareness of its usefulness. Now with the Mac we had what we really wanted - a cheaper Lisa. Said Apple, "[the] Macintosh computer takes the technology even further and incorporates it into a system that is competitive in price and size with systems using older technologies."

Bill Atkinson, a primary programmer and chief interface designer of both the Lisa and the Mac, said, "Initially we thought of it [the Mac] as a 'VolksLisa.' We had something really neat in the Lisa, but it was just too expensive to reach many people... I think of the Lisa as ... a prototype Mac. We shipped it and it was a good machine, but our next round of building and development was a whole lot better. We built on top of what we knew, incorporating all the good stuff, but we streamlined it ... making it more compact and more personal."

Moreover, three major software developers were on stage with the machines, to show the excitement about and commitment to the Mac by the software developers. The Lisa had brought Apple many lessons. "Accessible" means economically accessible, too. Prove to me you know how to sell it. And - we need to see the third-party support.

With the Mac, Apple finally had the right answers. The Lisa had been a marvelous springboard.

 **Lisa Sales Go Up**

To the surprise of some, Lisa sales skyrocketed after the introduction. Inventories were emptied. Infoworld reported, "Mac's Success Rubs Off on Lisa." Dun's Business month said, "Analysts estimate that 75,000 units of the Lisa... will be sold this year." Maybe the old girl had life in her yet! But why did sales go up? It seems that people loved the Mac - and the Lisa was billed as a big Mac. Apple described the four computers as a family, so one could start at the price point of one's choice, from \$2,500 to \$5,500, and expand from there as needed. The Mac was the lower-priced gateway.

At this time, the Mac with a 9" screen and 128K internal memory (RAM) was \$2,495. For one thousand dollars more (\$3,495), one could get the Lisa 2, with 512K internal memory, and a larger 12" screen. For one thousand dollars more

(\$4,495), the Lisa 2/5, with the external five-megabyte hard disk drive, was yours to keep. Another thousand dollars (\$5,495) and you could buy the "top-of-line" Lisa 2/10 with the 12" screen, the 512K RAM, and an internal ten-megabyte hard disk drive. In short, Apple offered a pleasant range for a salesperson wanting to assist a consumer with a choice between price and features.

So, many fell in love with the Mac and bought the Lisa. Why not? It offered the larger screen, the added internal memory (up to one megabyte), and the hard disk drive (which the Mac did not have). And even more, when using the Lisa as a Lisa (with the Lisa operating system), they got multi-tasking (the ability to run more than one program at once) and capacity for Mac and Lisa program development (not yet possible on the Mac).



So, Was the Lisa Really a Big Mac?

As some users were to discover, the glossy gateway from Mac to Lisa was not as smooth as claimed. Infoworld's subtitle on the above article was "Mac Works Compatibility Creates A Little Concern." Although the façades of the two machines were the same, some important differences were brushed under the rug.

- (1) The Mac and the Lisa use different operating systems, and these files and disk formats are incompatible.
- (2) MacWorks, an additional operating system that runs on the Lisa to allow it to run Mac software, has not worked 100% since its release.
- (3) The Mac and Lisa screen size and proportions are different, as are the shape of the pixels (the tiny dots on the screen). Because the pixels are oval on the Lisa and circular on the Mac, such things as elongation of Mac circles into Lisa ovals are common. Architects and graphic artists can find this disconcerting, to say the least.
- (4) The Mac has a sound chip that the Lisa does not, and there is an instruction in the 68000 chip that is different on the two machines.

The statement that Mac software could run on the Lisa depended on two things - that MacWorks functioned, and that developers did not write their programs assuming the Mac hardware, e.g., using a formula for printing to the screen, so that the Lisa could adapt the formula for its screen ratio. Though Apple made the compatibility claim, they only *suggested* to developers that they should follow the compatibility rules.

So the truth is that the Lisa could (and can) run *some* Mac programs, and Apple said that they were working to resolve the problems in MacWorks. And when the Lisa worked - either as a Lisa with the Lisa operating system, or as a Mac with MacWorks - it worked quite nicely, thank you. Its sales were still apparently riding high, on the coat-tails of the Mac.

July 1984: Lisa 7/7 is Announced

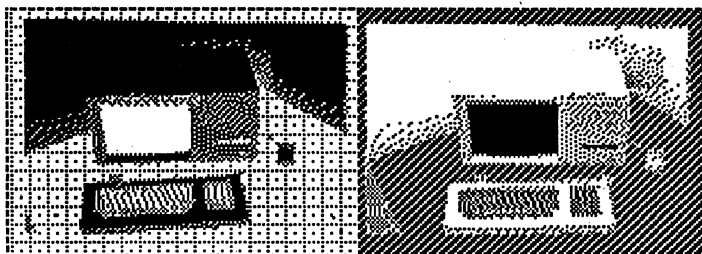
In July, 1984, Apple announced an update to the Lisa Operating System, version 3.0, and updated versions of the application software, called 7/7. Now all of the original six Lisa programs, plus LisaTerminal and a spelling checker, were available for only \$695, and all could cut-and-paste with another. Additionally, users could now format their hard disks to have both Lisa and MacWorks portions - now not having to choose what would get the hard disk space. Some viewed this announcement as a strong competitive move, for it surely was one of the best software deals in the business. Yet Apple's actions, ads, etc., seemed to imply that their focus was now on the Mac. And, without a commitment by Apple to the Lisa, 7/7 meant other things. Semaphore Signal felt that 7/7 was "Lisa's last 'evolutionary' step, after which owners will only see developments growing from the Mac side of the family tree." It would appear that 7/7 was a farewell contribution to the Lisa Operating System.

Yet Lisas were still selling - some on the basis on 7/7, some for use with MacWorks. Although Mac sales were not too shabby, for some the Lisa beat the Mac (the screen size, the memory, etc.), and people bought what they wanted.



January 1985: The Lisa is Really a Mac XL

Hidden within the fanfare of another shareholder's meeting, this one for the AppleTalk network, there were two Lisa announcements. The first informed us that the Lisa was being renamed the Mac XL. Apple said this was "to better communicate that the XL is truly an extra-large Macintosh," making it clear that they were really part of the same product line. The second announcement was not as well-known. Apple was discontinuing the Lisa 2 and the Lisa 2/5, supposedly because the 2/10 had far outsold the other configurations. What made the 2/10 (now the Mac XL) so much more popular? Apparently, users who wanted the Lisa wanted the hard disk drive (which the Lisa 2 did not have). Additionally, users liked the fact that the 2/10 disk drive was internal and hidden, rather than the external drive of the 2/5. Moreover, the price difference of only \$1,000 more than the 2/5 meant a great price for an extra five megabytes of disk drive memory. More important is the resulting family - only two are now left at home - the Mac and the Mac XL. In truth, the winding down of Lisa production had begun; we now know that Apple had decided by then to start getting rid of inventory.



 May 1985: Battening the Hatches

On May 31, 1985, Apple euphemistically announced that it was streamlining its organization. Said CEO John Sculley, "Apple was among the first to recognize that the growth rate of the computer industry was slowing, and quickly took steps to respond... The slump in the personal computer industry is significant and Apple has taken aggressive steps to bring our organization in line with these conditions. We've made the tough decisions necessary to create a unified, cost-effective company focused on our key markets."

This was a very busy time for Apple. Founder Steve Jobs was "relieved" by Sculley of his day-to-day duties - his only role was that of Chairman of the Board. Major layoffs (1,200 people), a fundamental reorganization, plant closings and other cost-cutting measures occurred in May and June. And still, the end of June found Apple with a quarterly loss, (amazingly) the first in the company's ten-year history. Apple's stock price had slid from just over 30 in January to just under 20 in May.

Another of the events to occur at this time was the May 7, 1985, announcement by Apple that it was discontinuing the Lisa. "[Apple] will phase-out production of the Macintosh XL (formerly Lisa) computer this Spring prior to introducing an external hard disk drive for the Macintosh in the Fall." Clearly, there were economic and strategic reasons for the move. Surely their Lisa plant in Texas (now no longer operating) was not as automated as the famed robot plant for the Mac, consequently limiting the amount the price could be cut.

Although they will not reveal the exact number of Lisas sold (it could be anywhere from 20,000 to 70,000), it is clear that there was not the volume they deemed necessary. Now that the Mac had 512K and would have an Apple hard drive, and now that serious programming could be done on the Mac, the Lisa's role was less important. And in a time of economic stress, it is usually prudent to focus your limited resources on a few clear targets - like the Mac and the Apple II - in order to simplify advertising, support, product planning, etc.

Needless to say, users who had purchased the computer thinking it would be around for a while were surprised and upset. Some complained that Apple had still not made the Lisa a big Mac, noting the problems mentioned earlier in this article. But

discussing the "fairness" of that decision is beyond the scope of this piece. Suffice it to say that Apple perceived it as a necessary move to ensure their survival. The "Lisa Technology" was now to live on in the offspring.

And then there was one - the Apple 32 Super Micro family was now just the Mac. By October, 1985, Apple's stock price had stabilized around 15 and was starting to climb again.



The Legacy, and the Possibility,
of the Lisa

So we have a story of a computer that introduced a new paradigm into the domain of personal computers, who brought industry attention to the real issue--Can the user use it?--and who spawned the Mac and a generation of lookalikes. How many lives has she (and therefore her creators) impacted? I'd say she's done all right, this Lisa.

Could this really be the end of her tale? Perish the thought! Only the manufacture has ceased. Your machine is still there on the desk, right? David Redhed still talks about her in his MACazine column, right? Even better, a private company has released Bit-Fixer, to fix the screen ratio - a product far outselling Apple's Screen Kit. The long-awaited Migration Kit (to move files from the Lisa to the Mac formats) is due from Apple this month. And there is now a periodical devoted exclusively to the Lisa - right now in your hands. Could it be, maybe, that third parties, looking for a market opportunity, are starting to tuck that orphan under their wings and keep her flying high? It could be. Maybe Lisas are enough of a market that Mac software manufacturers will label their products as being "MacWorks tested."

Sure, there are some details that Apple has left undone, but more important is the question--Is a computer's future really up to the manufacturer alone? And--Has Lisa given all she can?

Regardless of Apple's actions, many of us will continue to use the Lisa. And some will keep it as a collector's item, to give our computer-literate grandchildren, fondly telling their astonished eyes of the olden days when both computers and we were young - and the contribution that the Lisa's birth has made to their everyday lives.



Patricia Dines is a regular contributor to Mac and Lisa periodicals. Through her company, Complete Computer Solutions, she assists users in applying computers to reach their personal and business goals. Her involvement with computers since 1976 has included receiving from Duke University a B.S. in Computer Science. She has been serving the Mac/Lisa community since the Mac introduction in January, 1984.