



Apple Lisa Computer Comments by Frank Ludolph

Final Demonstration of Xerox Star -- June 1998

Ludolph was part of the Lisa development team and worked on the Lisa Desktop Manager ("Finder") and Lisa Clock application.

Source:

<http://www.stanford.edu/~hodes/Xerox/ReStarDemoAncmt-5-FrankLudolph.txt>
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Date: Thu, 4 Jun 1998 12:00:20 -0700 (PDT)
From: Frank Ludolph <frank.ludolph@Eng.Sun.COM>
To: Multiple recipients of list <exxerox@whyanext.com>
Subject: Re: The final live demonstration of the Xerox 'Star' computer

Jeff mentioned the CHI joint Star/Lisa demo. As one of the presenters it was a blast to do. Most of you have experienced 'Oh, I should have said...' Jeff's comments give me the chance to say it, though to a different audience. :-)

> From: jeffjohnson@igc.apc.org

- > ...
- > 2. When Frank Ludolph was giving the formal Lisa demo, he edited a graphics file. When he tried to close the file, a dialog box appeared, reading "Do you want to replace the document that you last edited 7 years ago?" The audience got a laugh out of this, but I think it was quite noteworthy for two reasons, one of which Frank mentioned and one of which he didn't. Frank said that the document had in fact been last edited 10 years ago, but Lisa's clock stopped advancing in 1995. In other words, Lisa didn't have a year-2000 problem; it had a 1995 problem. What Frank didn't point out was that the dialog box gave the elapsed time in years. Most systems in this situation would have given a specific last-edit date, or displayed the elapsed time as "2555 days". Whoever programmed that dialog box thought to convert very-long time intervals into years. What foresight!

Thanks to Larry Tesler. I always thought it was a great feature.

- > 3. During the Lisa demo, Frank Ludolph at one point duplicated a file that he meant to move. He was quick to point out that Lisa (and Mac) use the same UI for moving and copying documents, and that this was sometimes a problem for users, but usually did what users want.

Actually, Mac and Lisa used the same drag-and-drop action, but Mac does a copy when the destination is a different disk while Lisa always did a move. The Mac get beat-up for being inconsistent, but Lisa's consistency lead to difficult to correct errors when an item was dragged from hard disk to diskette - the item was removed from the hard disk and the diskette may have been physically taken to another location.

- > ... Behind me in the audience, a fellow suddenly said: "Hey! Those two files have the same name!" No one else picked up on this, so I told him that in both Lisa and Star, filenames have no particular significance to the O.S. and users are free to give multiple files the same name if they want to. He found that hard to swallow.

I considered mentioning this but cut it from the demo as time was tight. Near the end of the demo I mentioned that the object icons (docs, folders, tools, etc.) were **not** diskfiles and behind an icon could be 0-n diskfiles. (The unique naming being a requirment of the file directory.) This enabled the Lisa to keep two versions of an edited document, 'saved' and 'edits'. The Mac ignored this but NeXT picked it up for their applications and, at 3.0, for other objects as well. This both reduces the number of superflous icons and prevents accidental corruption of the object (move/copy/delete). Removing the 1-1 icon-to-diskfile relationship is one that I'd really like Apple and Microsoft do.

- > 4. During the question-answer period, one audience member said: "Seeing these two amazing systems makes me wonder what we've been **doing** for the past 15 years. We have color now, what else?" Neither the Star demoers nor the Lisa demoers gave him much of an answer. In my opinion, what "we" have done over the past 15 years is put these kinds of UIs on the vast majority of the huge number of PCs that are in daily use (the "we" being

- > mostly Microsoft and Apple, with a little help from unix system vendors).
- > The audience member who raised the question was of course thinking more of
- > innovation than of proliferation, but in my view the proliferation is a
- > more useful and tangible advance than further innovation would have been.

Having flubbed the answer then, I would have answered that we have spent the time, with diminishing returns, on evolving the UI mechanisms.

Unfortunately we have been unable to prune off the earlier mechanisms and the result is some rather baroque UIs. I believe that we could build a very good bitmap/mouse UI now if we could do it from the ground up without having to include everyone's favorite feature.

Jeff's comment about proliferation addresses a flubbed answer to a comment from Dave Ungar who said that "these system's really cared about users in a way that today's systems don't seem to." (Or words to that effect.) In those days we were trying to convince people to use computers, that they *could* use computers, in an office environment. Now days, not being able to use a computer is like not having a driver's license in Los Angeles - you can't get by without it. Today users are over a barrel. They have to invest the effort to learn how to use the machine no matter how difficult - it's part of the job requirement. And in the end useability issues rank in priority no higher than 3rd behind features and performance. Just read all the reviews...

When I look back at the technical achievements of Star, well, it is just awesome! It took about 15 years for desktop products to begin to match the overall feature set.

Frank

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