Why is the origin at the upper left corner?

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Via the Suggestion Box, Dirk Declercq asks why the default client-area coordinate origin is at the upper left corner instead of the lower left corner. (I assume he also intends for the proposed client-area coordinate system to have the y-coordinate increasing as you move towards the top of the screen.)

Well, putting the client area origin at the lower left would have resulted in the client coordinate space not being a simple translation of the screen coordinate space. After all, the screen origin is at the upper left, too. Windows was originally developed on left-to-right systems, where the relationship between client coordinates and screen coordinates was a simple translation. Having the y-coordinate increase as you move down the screen but move up the client would have just been one of those things you did to be annoying.

Okay, so why not place the screen origin at the lower left, too?

Actually, OS/2 does this, and DIBs do it as well. And then everybody wonders why their images are upside-down.

Turns out that the people who designed early personal computers didn't care much for mathematical theory. The raster gun of a television set starts at the upper left corner, continues to the right, and when it reaches the right-hand edge of the screen, it jumps back to the left edge of the screen to render the second scan line. Why did television sets scan from the top down instead of from the bottom up? Beats me. You'll have to ask the person who invented the television (who, depending on whom you ask, is Russian or American or German or Scottish or some other nationality entirely), or more specifically, whoever invented the scanning model of image rendering, why they started from the top rather than from the bottom.

Anyway, given that the video hardware worked from top to bottom, it was only natural that the memory for the video hardware work the same way. (The Apple II famously uses a peculiar memory layout in order to save a chip.)

Who knows, maybe if the design of early computers had been Chinese, we would be wondering why the origin was in the upper right corner with the pixels in column-major order.

Bonus chatter: Even mathematicians can't get their story straight. Matrices are typically written with the origin element at the upper left. Which reminds me of a story from the old Windows 95 days. The GDI folks received a defect report from the user interface team, who backed up their report with a complicated mathematical explanation. The GDI team accepted the change request with the remark, "We ain't much fer book lernin."

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