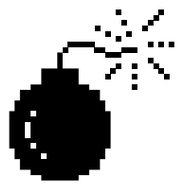
Timeless Icons

Susan Kare



“Icon design is like solving a puzzle, trying to marry an image and idea that, ideally, will be easy for people to understand and remember.”

The birth of an icon

Susan Kare, known as the “woman who gave the Macintosh a smile,” has spent her three-decade career at the apex of human-machine interaction. Through her intuitive, whimsical iconography, she made the graphic user interface accessible to the masses, and ushered in a new generation of pixel art. In the early 1980s, Kare-then a sculptor and tech-world outsider-pivoted to a graphic designer role at Apple. There, she created some of the most recognizable icons, typefaces, and graphic elements in personal computing: the command symbol, the system-failure bomb, the paintbrush, and, of course, “Clarus the Dogcow.”

With little more than a few dots on a screen, Kare created a canvas of approachable visual metaphors that are instantly recognizable decades later. Early on, Kare found a sanctum in fine art. After earning a Ph.D. from New York University, she went west ward to take a curatorial job at the Fine Arts Museums of San Francisco. She soon migrated down to Palo Alto—the birthplace of Apple and other Silicon Valley giants. In 1982, Kare received a call from Andy Hertzfeld, a high school friend whom she’s known since age 14. Hertzfeld, then one of the early members of the Macintosh team at Apple, was looking for a designer and had Kare in mind.

Apple’s first icon designer was artist and graphic designer Susan Kare, who designed some of the most recognizable today.icons that we still use

Once at Apple, Kare was entrusted with a daunting task: to use iconographies to make the Macintosh feel less like a machine and more like an easy-to-use, relatable workstation. As the first lowcost personal computer for nontechnical consumers, it was imperative that the Macintosh icons be universally inviting and intuitive. Over the years, Kare’s design work has been described episodically in various Steve Jobs biographies, Apple corporate histories, and a handful of newspaper and magazine features.

How it all began

In 1982, Kare received a call from Andy Hertzfeld, a high school friend whom she's known since age 14. Hertzfeld, then one of the early members of the Macintosh team at Apple, was looking for a designer and had Kare in mind. An artist at heart, she was working on a welded sculpture of a life-size razorback hog as a commission for a museum in Hot Springs, Arkansas at the time.

"My ideal life would be to make art fulltime. I had the chance to do that with this commission," Kare said in an interview with Stanford University in 2000. "I really enjoyed making this sculpture; but it was kind of solitary, so it was interesting for me to segue from that to working at Apple.

"Once at Apple, Kare was entrusted with a daunting task: to use iconography to make the Macintosh feel less like a machine and more like an easy-to-use, relatable personal computer for nontechnical consumers, it was imperative that the Macintosh icons be universally inviting and intuitive. Since Kare had scant experience designing in the digital realm, she drew from her experience with mosaics, needlepoint, and pointillism. Each of the 1,024 squares represented a pixel, mimicking the bit-mapped display of the early Apple interface. She proceeded to hand-sketch many of the early Apple icons, pixel by pixel. Every sketch began with a computer function, like "boot" or "debug."

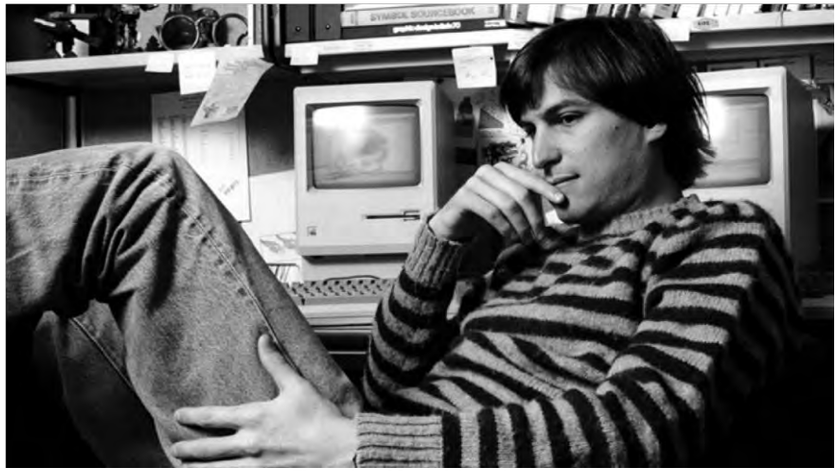
Utilizing an eclectic pool of sources ranging from pirate lore to ancient hieroglyphics, she then conceptualized the jargon into a digestible visual metaphor. The command symbol was conceived when Kare pored through old symbology books for hours and saw the Saint Hannes cross. An ancient symbol also used by Scandinavians in the 1960s to mark locations of cultural interest. Kare also pioneered the first proportionally spaced digital font family. Operating under the

Constraint of only 9-by-7 dots per letter, Kare was able to avoid the jagged, pixelated look of monospaced computer typefaces by enlisting only horizontal, vertical, or 45-degree lines. One resulting typeface, Chicago, was used on the Macintosh and iPod for more than two decades.Through all of her challenges, Kare always operated with a whimsical charm and an independent streak.

Computers could operated with lines of code. Icons were an important step in making computers accessible to mainstream users. **only be**

She once festooned Apple's office with a pirate flag, complete with a signature rainbow-colored eye patch, an ode to the team's infamous motivational quote: "It's better to be a pirate than join the navy." And no colleague, not even Steve Jobs himself, was safe from being rendered in pixel art form by her. Once at Apple, Kare was entrusted with a daunting task. Using iconographies to make the Macintosh feel less like a machine and more like an easy-to-use, relatable

workstation. As the first low-cost personal computer for nontechnical consumers, it was imperative that the Macintosh icons be universally inviting and intuitive. Since Kare had scant experience designing in the digital realm, she drew from her experience with mosaics, needlepoint, and pointillism. procuring "the smallest graph paper" she could find in an supply store, Kare drew out a 32-by-32 grid. Each of the 1,024 squares represented a pixel, mimicking the bit-mapped display of the early Apple interface. She proceeded to hand-sketch many of the early Apple icons, by pixel.



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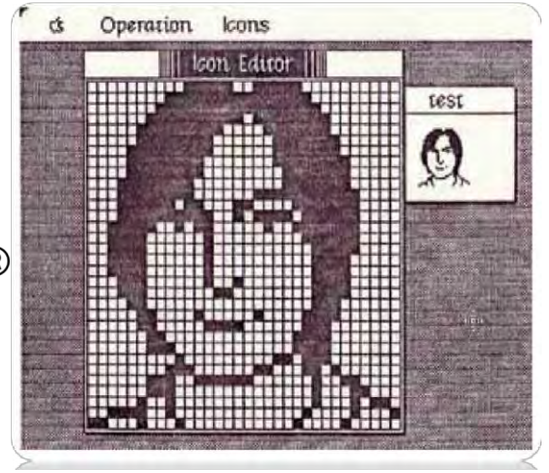
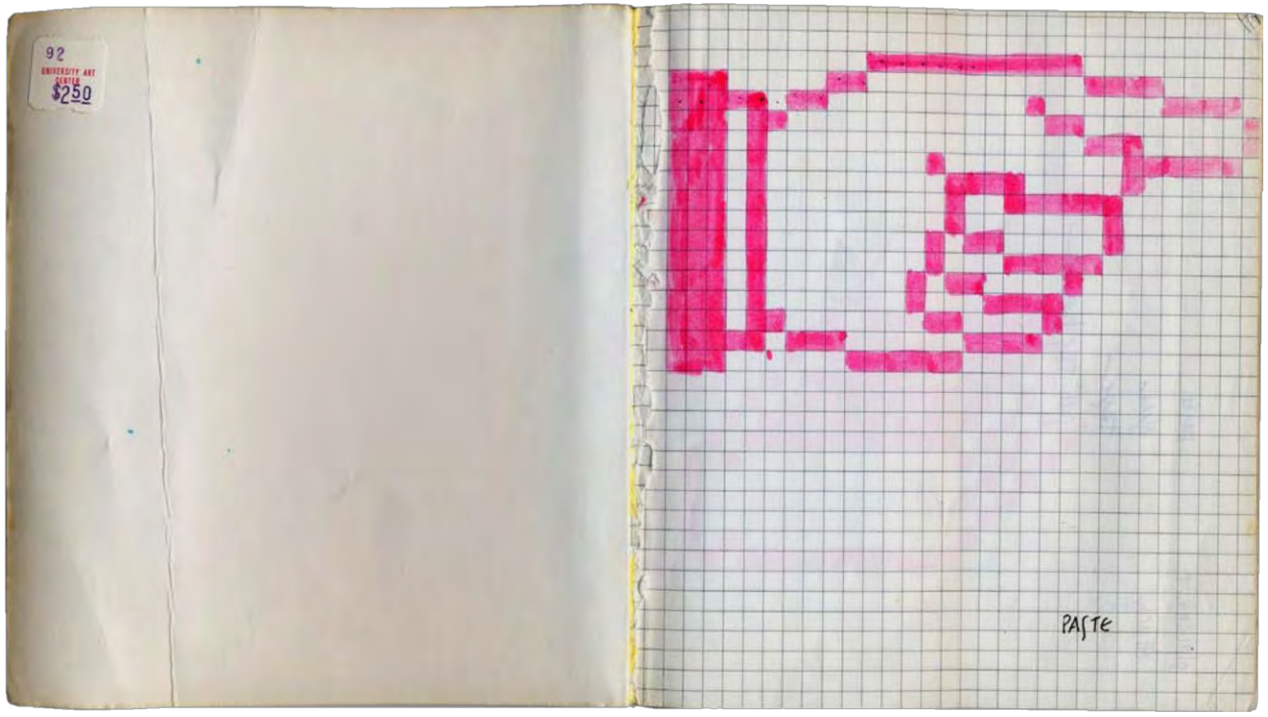
After art

pixel



Grid based graphics

Each pored the by Kare of the 45- was Some of a $2.50 of her pixel and still keeps that title



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I could find and color in the squares to make images. As instructed, Kare went to the University Art supply store

in Palo Alto, picked up a $2.50 sketchbook, and began experimenting with forms and ideas. In this sketchbook, which was recently acquired by New York's Museum of Modern Art, we can discern something of Kare's design process. Kare began with an idea, metaphor, or command instruction she was trying to represent pictorially. Kare would then use a ruler or straightedge to block out a 32 by 32

Square of graph paper. Using a pencil and eraser or black and pink pens, she filled in or left blank those 1024 miniature squares to create images. Eventually Hertzfeld coded an icon editor that allowed Kare to design icons directly on the black and white screen of a prototype Mac. Using a mouse, she toggled the bits on and off, and the icon editor generated the hexadecimal code underlying the grid. Using these simple drafting tools, Kare began to master a peculiar sort of minimal pointillism as she turned tiny dots on and off to craft instantly understandable visual metaphors for computer commands.

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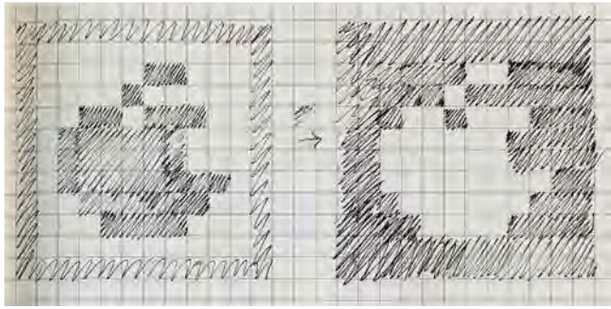

Silberman has written, “The genius of Steve Jobs and the Macintosh team was recognizing a huge untapped market for home computing among artists, musicians, writers, and other creative folk who might never have cared enough to master the arcane complexities of a command-line interface.” Kare agrees that she was a typical customer that they were trying to attract. Someone for whom the graphical side of it would have been attractive.
She also created dozens of icons from scratch following requests from Andy Hertzfeld and Bill Atkinson in the software group. Kare remembers that she took a very common sense approach. People would ask for something, and she would do what she thought would work.

Kare drew out a grid that has a total of 1,024 squares. Each one represented a pixel as a way to mimic the bit-mapped display of the early Apple interface. She proceeded to hand-draw the design of early Apple icons.

From paper to program

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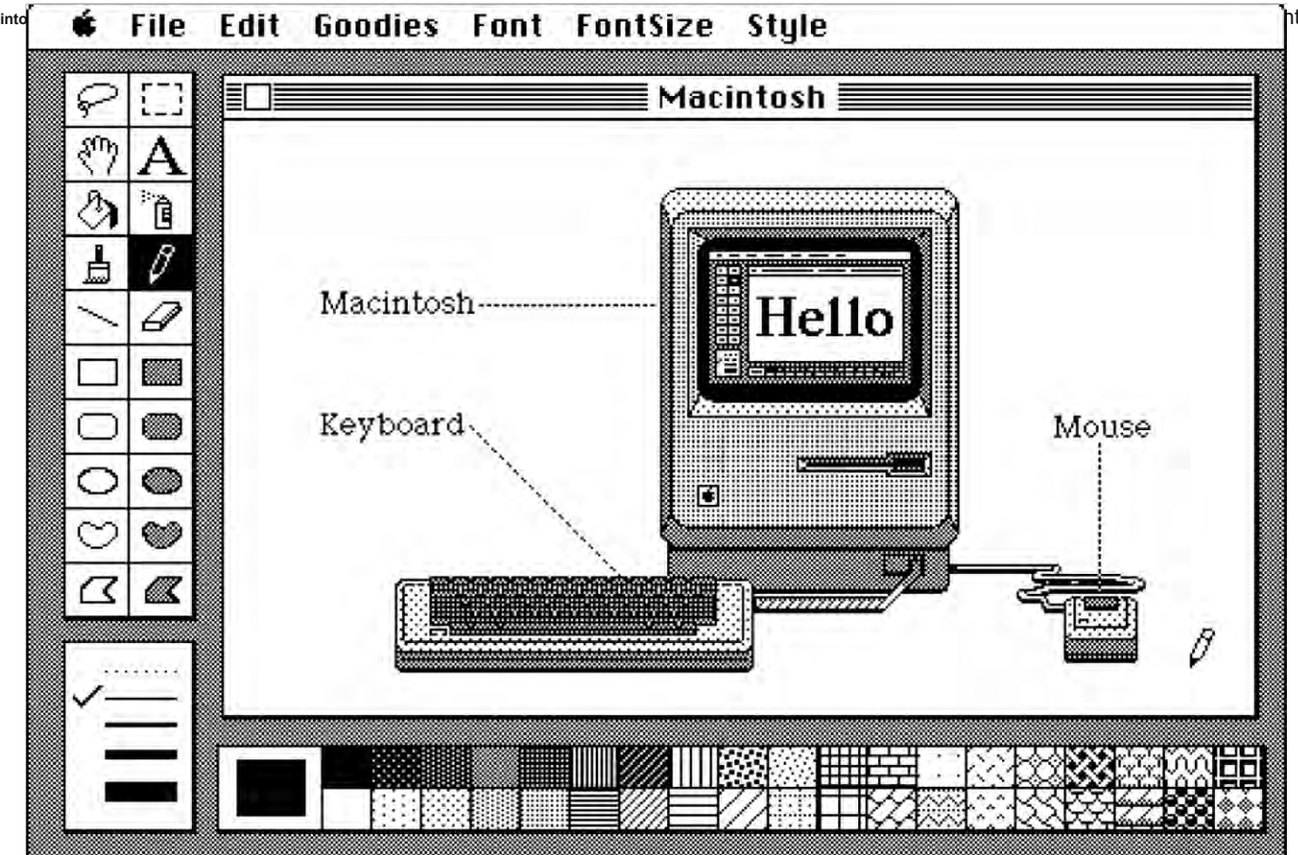
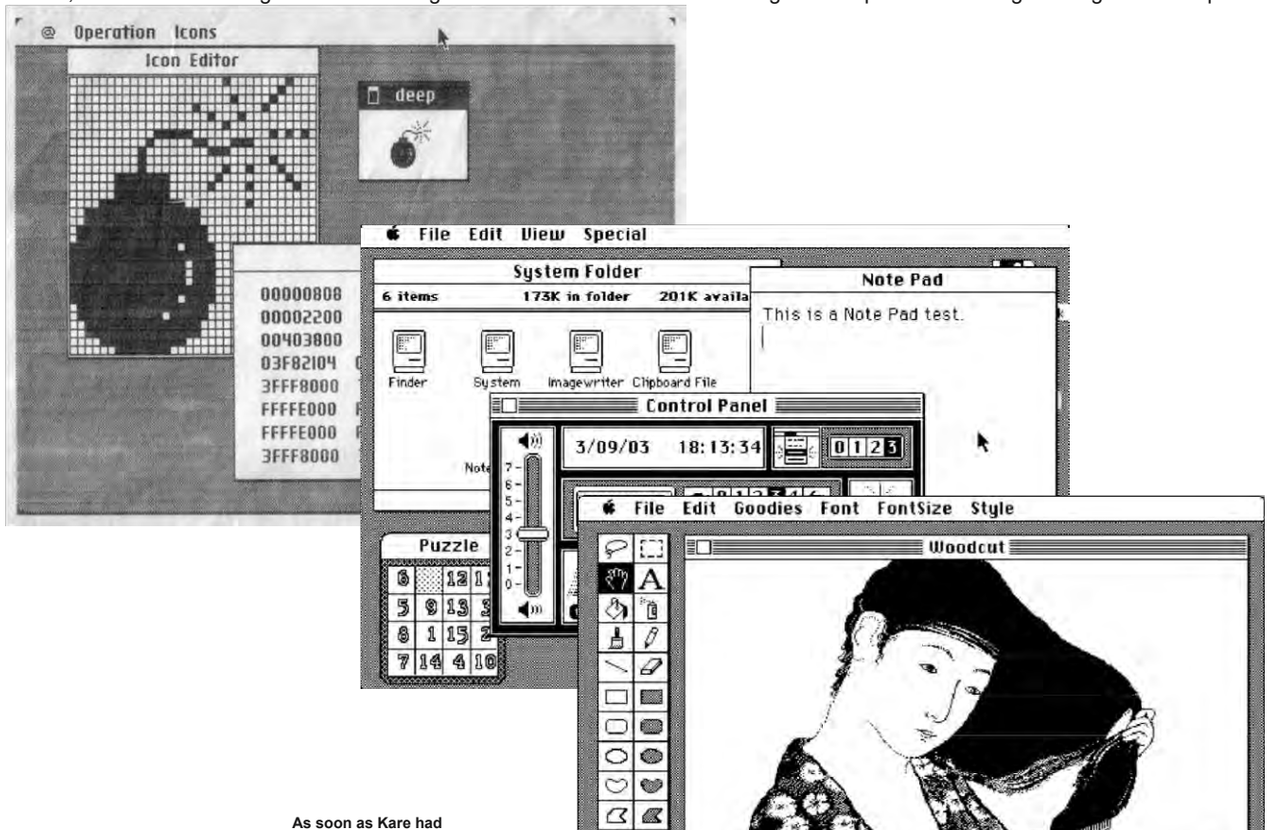
The Macinto nterface. Therefore, the challenge of designing



such a personal computer benefited from input from the creative types, like Kare, who might someday be convinced to buy a Mac. Kare agrees that she was a typical customer that they were trying to attract, someone for whom the graphical side of it would have been attractive. Kare tweaked and streamlined certain icons that already existed, like the arrow cursor, the trash can, MacPaint's "lasso" selection tool, and the "document" icon with the page corner turned up. She also created dozens of icons from scratch following requests from Andy Hertzfeld and Bill Atkinson in the software group. She remembers that she took a very common sense approach. People would ask for something, and she would do what she thought would work. She does remember always trying- and she still does to this day-to provide a rich selection of choices, and see what works. She also engaged in informal user testing, showing her multiple

Emerging designs to a lot of people and just asking them what they thought. Eventually, the group would reach consensus, with Steve Jobs having the final word.

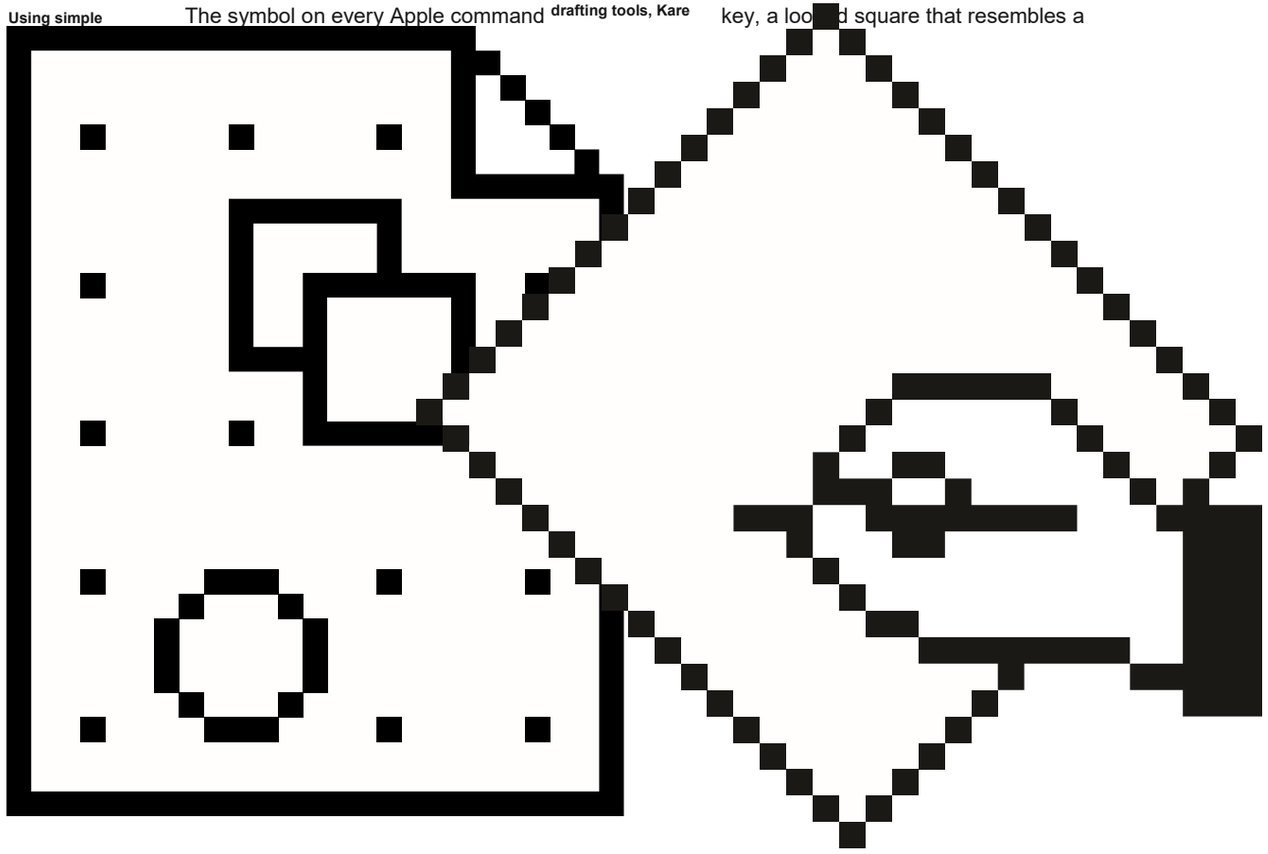
Designing new icons was a challenge because, as Kare discovered, “user interface design isn’t about design in the traditional sense. It’s solving the little puzzle of making an image fit a metaphor.”



As soon as Kare had

Because she was designing icons for someone like herself, Kare was motivated by respect for, and empathy with, users of software. Her task was to transform small grids of black and white pixels into a family of symbols that would assist people in operating the computer. The design process involved the search for the strongest metaphors, and the craft of depicting them. Beyond the icons, Kare helped refine other aspects of the Mac's look and feel. For example, she added pinstripes to the title bars of windows and grey tints to their scroll bars to help offset the interface from the data. With Hertzfeld, she also designed the 15 number puzzle and Notepad in the Mac's desk accessories, as well as various elements of the Mac control panel, like the nifty tortoise and rabbit that represented the range of user settings for the mouse's click-rate. Kare also created a family of new proportional fonts for the Macintosh. At the time, most digital typefaces were monospaced like a typewriter'smeaning that narrow and broad characters alike used the same amount of on-screen space. Jobs had studied calligraphy at Reed College with the Trappist monk Robert Palladino and was determined to offer something more sophisticated and that looked better in print, especially since the Mac was to be sold with the Apple Imagewriter printer.

Using simple drafting tools, Kare



The symbol on every Apple command key, a loo d square that resembles a

Bursting with inspiration

Kare's iconography was inspired by art history and a variety of international cultures. She is a big believer that there is a rich history of symbols from which one can draw even for concepts and icons, whether from fine art or folk art, or advertising or bottle caps. So she had her shelf of books from college, and some that she picked up that were kind of random.

For example, when Kare first moved west after graduate school, she lived near the Buddhist Temple of San Francisco and studied at its Japanese school. When stuck on a particular design, she would often consult a book entitled Kanji Pictograms. She espe - cially loved its list of the glyphs that Depression-era hobos would chalk on walls and fences to signal a sympathet- ic household.

began to master a peculiar sort of mini-turned tiny dots on and off. castle seen from above, came about mal pointillism as she when Steve Jobs worried that the Mac's designers were overusing the Apple symbol. Her friend Hertzfeld and the Mac design team felt it was important for the user to be able to invoke every menu command directly from the keyboard. So they added a special Apple key; when pressed in combination with another key, it selected the corresponding menu command. Therefore every menu item displayed a little Apple logo and key combination, but Jobs believed there were too many Apples on the screen. She was asked to design an alternative. After pouring through books of symbols, she settled on the familiar looped square, which since the 1950s had been used on Scandinavian roadside markers to indicate interesting sightseeing destinations. Kare's designs were intuitive and easily understandable, but they also had a playful, whimsical quality; think of the smiling "Happy Mac" that greeted users at startup or the ticking bomb that represented a system error. Utilizing an eclectic pool of sources ranging from

irate lore to ancient hieroglyphics,

Kare then conceptualized the jargon into a digestible visual metaphor. The command symbol, for instance, was conceived when Kare pored through old symbology books for hours and saw the Saint Hannes cross, an ancient symbol also used by Scandinavians in the 1960s to mark locations of cultural interest.

Through all of her challenges, Kare always operated with a whimsical charm and an independent streak. She once festooned Apple's office with a pirate flag, complete with a signature rainbow-colored eye patch, an ode to the team's infamous motivational quote:"It's better to be a pirate than join the navy."

And no colleague—not even Steve Jobs himself—was safe from being rendered in pixel art form by Kare. Throughout the years, Kare has strictly adhered to a design philosophy that rests on the tenets of simplicity, clarity, and beauty. And though she's upgraded her tools from graph paper to design software, Kare continues to place a premium on context and metaphor. On the streets of San Francisco, she intrepidly hunts for catchy symbols and shapes. Once inspiration strikes, she works within a grid-like template in Adobe Illustrator.

A tool to help her visualize the constraints of the device on which her user will view her icons and each icon, she contends, must not only be easy to understand, but easy to remember. In the digital era, where visual pollution clogs the Web, her simplicity-driven philosophy enjoys a heightened relevance. Now an icon in her own right, Kare does too.


STAATLICHES BAUHAUS-WEIMAR

Impressum

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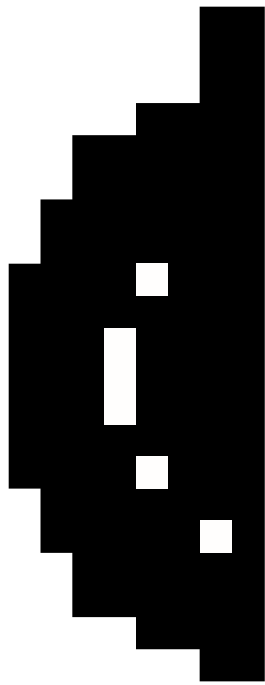


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