

Bitmap

Bitmap fonts, made out of black on white pixels set in a grid, are designed to render appropriately at specific sizes on screen. Originally, these were developed to meet the coarse resolutions rendered by early operating systems (OS) and printers in the 1980s, and as technology allowed for type to render more smoothly—at least at sizes bigger than 9 points—their use was slowly discontinued in the mid 1990s. But later that decade, bitmap fonts experienced a resurgence through their use in web design, as they appeared sharp and clear no matter which monitor or OS the end-user had. In less than ten years, designers and type dabblers have generated a large sum of bitmap fonts, as they are comparatively easy to develop and distribute. And despite the intended use of some bitmap fonts at 5 points, 7 points, or 9 points on screen, designers have felt compelled to use them in print applications at vertiginous three-figure sizes.

QUICK FOX,
LAZY DOG:
JUMPED.

SILKSCREEN / JASON KOTTKE, 1999 / *Designed on a 5 × 5 pixel grid*

Quick Fox,
Lazy Dog:
Jumped.

UNI BODY / UNDERWARE, 2002 / *Designed on a 10 × 10 pixel grid*

QUICK FOX,
LAZY DOG:
JUMPED.

SUPERMAGNET / SVEN STÜBER, 2001 / *Designed on a 5 × 5 pixel grid*

QUICK FOX,
LAZY DOG:
JUMPED.

FIXED V2 / ORGDOT, 2001 / *Designed on a 12 × 12 pixel grid*

The Fuzzy World of Anti-Aliasing

Type on screen looks smooth and curvaceous, following the carefully crafted twists and turns of each character that typeface designers agonize over. But don't trust your eyes—all you are seeing are square pixels rendered at grayscale values that simulate those curves. Aliasing is the natural bitmap state in which graphics are rendered on screen; it yields a jagged collection of black pixels incapable of rendering smooth curves, so anti-aliasing is the feature that corrects this on screen. Bitmap typefaces are meant to be used aliased so the pixels render sharp, while regular typefaces must use anti-aliasing to display as intended.



Monospace

Monospace typefaces take their cue from typewriters, where all letters conform to a specific physical width, resulting in letterforms that must expand or condense to make the best use of the allotted space—hence the wide *is* and tight *ms*. They are also referred to as *nonproportional*, in contrast to typical *proportional* typefaces, where each character is a different width. Another feature of monospace typefaces—which can be seen as a pro or a con—is that they are spaced perfectly evenly, creating nicely aligned columns of text. This is helpful for creating the financial tables of an annual report, and has proven to be the best practice among programmers for writing code. The odd spacing, unusual letterforms, and a propensity for futuristic and typewriter designs limit the applications of monospace fonts.

Quick Fox,
Lazy Dog:
Jumped.

COURIER / HOWARD “BUD” KETTLER, 1955

QUICK FOX,
LAZY DOG:
JUMPED.

ORATOR / JOHN SCHLEPPER, 1962

Quick Fox,
Lazy Dog:
Jumped.

OCR A / AMERICAN TYPE FOUNDERS, 1968

Quick Fox,
Lazy Dog:
Jumped.

OCR B / ADRIAN FRUTIGER, 1966

Spacing
non-proportional

Spacing
proportional