

## FLUID TYPOGRAPHY

“Fluid Mechanics: Typographic Design Now,” essay by Ellen Lupton, published in Donald Albrecht, Steven Holt, and Ellen Lupton, *Design Culture Now: National Design Triennial*. New York: Princeton Architectural Press and Cooper-Hewitt, National Design Museum, 2000.

Liquidity, saturation, and overflow are words that describe the information surplus that besets us at the start of the twenty-first century. Images proliferate in this media-rich environment, and so too does the written word. Far from diminishing in influence, text has continued to expand its power and pervasiveness. The visual expression of language has grown increasingly diverse, as new fonts and formats evolve to accommodate the relentless display of the word.

Typography is the art of designing letterforms and arranging them in space and time. Since its invention during the Renaissance, typography has been animated by the conflict between fixed architectural elements—such as the page and its margins—and the fluid substance of written words. Evolutions in the life of the letter arise from dialogs between wet and dry, soft and hard, slack and taut, amorphous and geometric, ragged and flush, planned and unpredicted. With unprecedented force, these conflicts are driving typographic innovation today. Typography is going under water as designers submerge themselves in the textures and transitions that bond letter, word, and surface. As rigid formats become open and pliant, the architectural hardware of typographic systems is melting down.

The flush, full page of the classical book is dominated by a single block of justified text, its characters mechanically spaced to completely occupy the designated volume. The page is like a glass into which text is poured, spilling over from one leaf to the next. By the early twentieth century, the classical page had given way to the multicolumned, mixed-media structures of the modern newspaper, magazine, and illustrated book.

Today, the simultaneity of diverse content streams is a given. Alongside the archetype of the printed page, the new digital archetype of the window has taken hold. The window is a scrolling surface of unlimited length, whose width adjusts at the will of reader or writer. In both print and digital media, graphic designers devise ways to navigate bodies of information by exploring the structural possibilities of pages and windows, boxes and frames, edges and margins.

In 1978, Nicholas Negroponte and Muriel Cooper, working at MIT's Media Lab, published a seminal essay on the notion of “soft copy,” the linguistic raw material of the digital age. The bastard offspring of hard copy, soft text lacks a fixed typographic identity. Owing allegiance to no font or format, it is willingly pasted, pirated, output, or repurposed in countless contexts. It is the ubiquitous medium of word-processing, desk-top publishing, e-mail, and the Internet. The burgeoning of soft copy had an enormous impact on graphic design in the 1980s and 1990s. In design for print, soft copy largely eliminated the mediation

of the typesetter, the technician previously charged with converting the manuscript—which had been painstakingly marked up by hand with instructions from the designer—into galleys, or formal pages of type. Soft copy flows directly to designers in digital form from authors and editors. The designer is free to directly manipulate the text—without relying on the typesetter—and to adjust typographic details up to the final moments of production. The soft copy revolution led designers to plunge from an objective aerial view into the moving waters of text, where they shape it from within.

Digital media enable both users and producers, readers and writers, to regulate the flow of language. As with design for print, the goal of interactive typography is to create “architectural” structures that accommodate the organic stream of text. But in the digital realm, these structures—and the content they support—have the possibility of continuous transformation. In their essay about soft copy, Negroponte and Cooper predicted the evolution of digital interfaces that would allow typography to transform its size, shape, and color. Muriel Cooper (1925–1994) went on to develop the idea of the three-dimensional “information landscape,” a model that breaks through the window frames that dominate electronic interfaces.

Viewed from a distance, a field of text is a block of gray. But when one comes in close to read, the individual characters predominate over the field. Text is a body of separate objects that move together as a mass, like cars in a flow of traffic or individuals in a crowd. Text is a fluid made from the hard, dry crystals of the alphabet.

Typeface designs in the Renaissance reflected the curving lines of handwriting, formed by ink flowing from the rigid nib of a pen. The cast metal types used for printing converted these organic sources into fixed, reproducible artifacts. As the printed book became the world's dominant information medium, the design of typefaces grew ever more abstract and formalized, distanced from the liquid hand. Today, designers look back at the systematic, abstracting tendencies of modern letter design and both celebrate and challenge that rationalizing impulse. They have exchanged the anthracite deposits of the classical letter for lines of text that quiver and bleed like living things.

The distinctive use of type, which can endow a long or complex document with a sense of unified personality or behavior, also builds the identity of brands and institutions. Bruce Mau has described identity design as a “life problem,” arguing that the visual expression of a company or product should appear like a frame taken from a system in motion.

The flat opacity of the printed page has been challenged by graphic designers who use image manipulation software to embed the word within the surface of the photographic image. A pioneer of such effects in the digital realm was P. Scott Makela (1960-1999). In the early 1990s, he began using PhotoShop, a software tool that had just been introduced, as a creative medium. In his designs for print and multimedia, type and image merge in dizzying swells and eddies as letters bulge, buckle, and morph. The techniques he helped forge have become part of the fundamental language of graphic design. The linear forms of typography have become planar surfaces, skimming across and below the pixelated skin of the image.

The alphabet is an ancient form that is deeply embedded in the mental hardware of readers. Graphic designers always ground their work, to some degree, in historic precedent, tapping the familiarity of existing symbols and styles even as they invent new idioms. While some designers pay their toll to history with reluctance, others dive eagerly into the reservoirs of pop culture. Tibor Kalman (1949-1999) led the graphic design world's reclamation of visual detritus, borrowing from the commonplace vernacular of mail-order stationery and do-it-yourself signage. Designers now frankly embrace the humor and directness of everyday artifacts. In the aesthetic realm as in the economic one, pollution is a natural resource-one that is expanding rather than shrinking away.

Thirty years ago, progressive designers often described their mission as "problem-solving." They aimed to identify the functional requirements of a project and then discover the appropriate means to satisfy the brief. Today, it is more illuminating to speak of solvents than solutions. Design is often an attack on structure, or an attempt to create edifices that can withstand and engage the corrosive assault of content.

The clean, smooth surfaces of modernism proved an unsound fortress against popular culture, which is now invited inside to fuel the creation of new work. Image and text eat away at the vessels that would seal them shut. Forms that are hard and sharp now appear only temporarily so, ready to melt, like ice, in response to small environmental changes. All systems leak, and all waters are contaminated, not only with foreign matter but with bits of structure itself. A fluid, by definition, is a substance that conforms to the outline of its container. Today, containers reconfigure in response to the matter they hold.