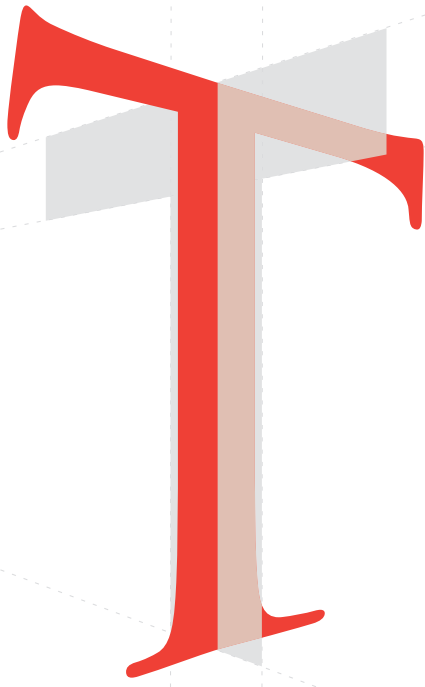




# Typography, Placemaking and Signs

A Four-Part SFI White Paper Series  
By Craig Berger



## Part I

# The History of Typography and Place



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## Other Resources:

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The history of typography is as long as the 5,000-year history of written languages and alphabets that combined letter forms into words. Most of that history, however, was dedicated to the refinement of written language on paper, which could be read by only a small minority of the most highly educated. Typography in the environment began at the dawn of the first century A.D., bringing along with it the promotion of large-scale literacy and technological advancement in mobility and communication. In fact, there is a strong case to be made that environmental typography is a natural outgrowth of the desire for people to explore and comprehend the outside world.

## Trajan and the First Environmental Typeface

The Roman Empire had been in existence for more than 500 years before the first experiments in environmental typography began. The complexity of managing a far-flung empire had grown easier with the use of one language, a common currency and written laws; but low literacy in the population made communication difficult on a mass scale.

The Romans resolved this with two inventions that pushed type from parchment into the urban environment. Metal stamps allowed for the development of watermarks and coin currency with numerical values that could be easily learned. In addition, stencils allowed for the consistent creation of type on posters, signs and carved landmarks. This first Latin alphabet type style was termed Trajan, after the emperor in power when it first appeared

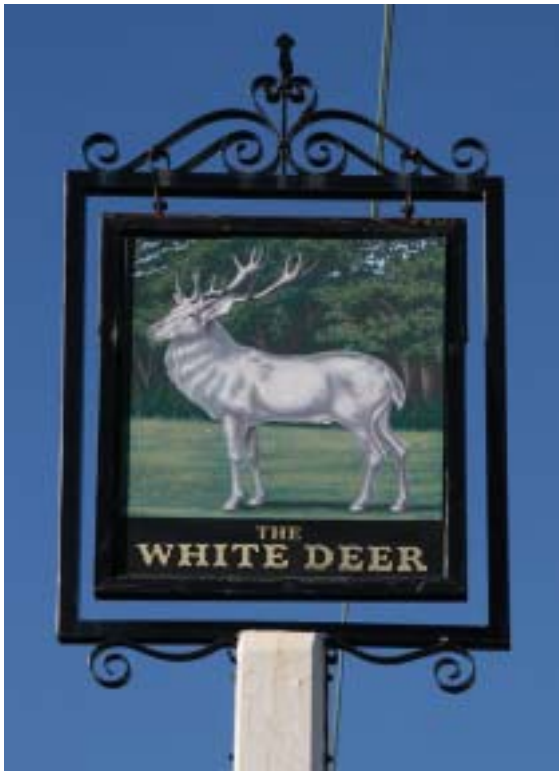
on monuments, though it had evolved over the previous hundred years. The type style used simple serifs and all capital letters, but it created a communication revolution in the Roman Empire. Lettering was used to mark political and historical events such as major victories and landmarks. More important, it communicated the location of stores, marked roads and street numbers. This began to rationalize Roman cities and promote simple language skills.

## The Printing Press and the Development of Legible Type

The flowering of typography during the Romans was short lived. The collapse of the empire reverted typography back to its key use in religious documents. Calligraphy became a core academic skill, but produced documents that were all but unintelligible. It was not until the 15th century, with the development of the printing press and moveable type, that typographical innovation resumed. Looking back to the clarity of the original typeface from the Romans, Nicholas Jenson developed one of the first fonts designed for the printing press. The advent of a designed legible font soon became an industry with printers developing their own typefaces, many of which are still used today. Unfortunately, literacy in this era was very low and cities and towns were still too small to need the rationalization of letters and numbers. Advances in metalworking and woodcarving did see the rise of commercial signage utilizing a mix of pictograms and simple messages.



← *Trajan's Column in Rome is a good example of the many columns, arches and other monuments erected to tell the story of the emperor's military victories in Dacia. Even though most of the storytelling is done through illustrative carvings, the dedication information is in a newly developed Roman typeface that would later become known as Trajan.*



← *This recreated pub sign shows that, with limited literacy, signs before the Industrial Revolution had to combine iconography and typography to get the message across.*

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## The Industrial Revolution

Fonts were continually refined for the next 300 years, paralleling a continuous rise in new technologies for printing and a need for printed media in the environment. The trend started in 1757 with the development of the Baskerville font by John Baskerville. This typeface of varying thick and thin elements, high contrast and variable spacing allowed type to be seen from greater distances, increasing its utility for environmental communications.

At the same time the Industrial Revolution created many new tools that expanded printing, while making it more flexible. The tracing pantograph and router made the creation of new and different fonts much easier, while expanding the ability to create unique signs. Color lithographic printing brought color to mass production printing by the mid-19th century, providing all the tools needed to create large-scale printed billboards and signs.

These technologies came at a perfect time when mass production brought about the need for product advertising and promotion. Cities began to fill up with posters, handbills, banners and print billboards, all featuring multiple fonts and styles. At the same time, cities exploded in size, with the addition of new building types. Office buildings, train stations and municipal buildings now required signs for identity and wayfinding. Typography was further simplified to meet these new sign types, though typography was still following customized versions of classical fonts until the 20th century.

## Bauhaus and the Modern Architectural Era

The messiness and clutter of the commercial city was disturbing to many designers and intellectuals in Europe. Design movements developed to integrate design disciplines to better reflect the greater mechanization of society. This culminated in the Bauhaus movement of the 1920s, where designers like Walter Gropius, Mies Van Der Rohe and Josef Albers influenced architecture and design for the next 40 years. In 1927, Paul Renner developed Futura, a font stripped of all classical adornment that could seamlessly integrate with the modular and simple modern buildings being proposed by the Bauhaus.

In the United States, the Art Deco movement established sleek and streamlined typography to fit with designs of airplanes, trains and cars. Thin Art Deco typography fit perfectly with the advances in metal routing and cutting and the commercialization of neon lighting for signs. Commercial signage for stores and restaurants soon followed the sleek lines of skyscrapers and government buildings. By the 1950s, the sleekness of the Modern Movement met Art Deco to produce Moderne, a sign and building typography that still adorns hotels in Miami Beach.

## Highway and Roadway Environments

The introduction of the automobile into everyday American life also influenced



*Billboard Clutter circa. 1890*



*The Bauhaus worked closely to integrate  
typography and architecture*



*Miami Beach Art Deco*



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the push for more legible environmental typography. In the 1920s the Manual and Specifications for the Manufacture, Display, and Erection of U. S. Standard Road Markers and Signs—a precursor to today's Manual on Uniform Traffic Control Devices—mandated specific typefaces for road signs. This type was usually modern San Serif characters that could be easily painted on signs and easily read at high speeds. After World War II the introduction of an interstate highway standard promoted Highway Gothic which was also adopted by a number of other countries with only minor changes. California developed a bolder version to utilize reflective buttons.

The British went about things a little differently by employing a research study on type legibility. The result was the development of British Transport by Jock Kinneir, which had more rounded letters and was in upper and lower case, both attributes that tested well at high speeds. With the use of reflective vinyl, American highway signs needed a new typeface that could minimize the blurring and hazing that came along with reflectivity. The development of Clearview by Donald Meeker advanced many of the concepts found in Kinneir's British Transport and after years of testing and advocacy, received approval from the Federal Highway Administration (FHWA) in 2004. The typeface is also used in a number of wayfinding programs in airports and train stations where legibility is important. Today legibility testing is an integral part of typography design. New fonts like Wayfinding Sans Pro have been developed directly from legibility testing of comparable font types.

## Helvetica and the Typography of Brands

Modern typographical development went hand-in-hand with the modern design trends of the first half of the 20th century in art, architecture and publishing, but had yet to penetrate products and services. These categories still focused heavily on print advertising and packaging to convey brand identity. The post-war years saw the development of completely new classes of buildings to support rapidly growing multi-national companies. These companies needed type and identity approaches that could communicate to a wide variety of cultures as well as different print and environmental conditions. Corporate iconography and typography both became mediums to convey messaging.

In the 1950s, type foundries in Europe worked to develop fonts that could be applied to the varied needs of advertising and branding. Drawing inspiration from Akidenz-Grotesque, an early modern typeface developed in 1898, Adrian Frutiger designed Univers, which used numerical designations to identify different line weights, faces and position combinations. Helvetica, developed by Max Miedinger with Eduard Hoffmann was a font developed to be truly neutral and focused on legibility. Corporations such as American Airlines<sup>®</sup>, GM<sup>®</sup> and 3M<sup>®</sup> incorporated the Helvetica font family into their branding in the 1960s, followed soon after by retailers like Target<sup>®</sup>.





*British Transport uses both upper and lower case type as well as more rounded letterforms, which made it both highly legible and more easily able to squeeze onto typically dense English signs.*



*Clearview was developed for high-speed and spacious American highways. With a taller “x” height, lower case letters are easier to read, but take up more space than the denser British Transport.*



*Alvin Lustig’s work at the Northland Mall near Detroit pioneered the use of type to establish a branded place.*



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In the early 1960s, these new typefaces were released to the design community through the Linotype corporation with cast metal type and transfer stencils like Letraset. In signage, advances in vinyl, neon and fluorescent lighting led to a major move to both internally illuminated and cut vinyl signs. These signs were most effective with simple typography and high-color contrast. These advances promoted the beginning of a new type of designer—the environmental graphic designer—who works closely with architects to integrate modern brand tools into buildings. This development started in the 1950s with the work of Alvin Lustig and his wife Elaine Lustig Cohen on projects like the Northland Mall, the first enclosed mall in the country, and the Seagram Building, one of the first modern office towers.

Designers including Paul Rand, Chermayeff & Geismar and Unimark International continued to evolve typography from guidelines developed for advertising into fully developed programs for everything from business cards to buildings. This approach was also applied to the overall environment, including transit systems and government buildings.

## Apple, CAD, ADA and the Type Accessible to the Masses

In a century of design advances, the

development of a number of interlocking software innovations in the 1970s and 1980s created the biggest leap yet in the development of environmental typography. A range of desktop publishing software solutions began with the development of the Apple Macintosh and complementary software for the manipulation of pictures, type and graphics. The rapid evolution of this software led to the creation of True Type Fonts in 1991, which could be scaled to multiple sizes without a loss of clarity. Combined with early drawings programs like Corel Draw and Freehand, even the smallest design firms could have access to tools for incorporating type into their work.

Along with tools for the designer, the introduction of commercially available Computer Aided Design (CAD) and manufacturing software brought specialized routing and cutting to thousands of small fabrication firms. When combined, Computer Aided Design and manufacturing improvements increased design flexibility so significantly that it is difficult to comprehend. Routed raised letters and Braille made accessible signage possible and created an entirely new industry and set of government codes. Computer controlled industrial tools brought high-powered methods to even the smallest sign shops, expanding custom and stylized typography to small communities around the globe. Finally advances in fabrication and lighting combined with a greater ability of designers to visualize the end product added immeasurable visual effects to signs.



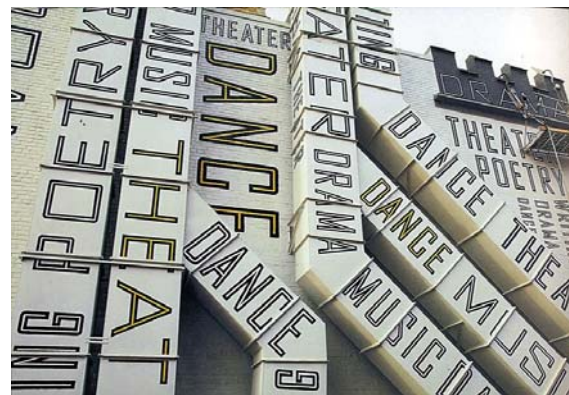
*The work of Chermayeff & Geismar and Michael Manwaring. **Typography as Architecture.***



*Helvetica was not the first typeface used for the New York Subway but it was the one that succeeded in tying the system together.*



*The work of Paula Scher of Pentagram.  
(Shake Shack and the New Jersey Performing Arts Center.)*



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## The Future

With the ability to create, adapt and apply type in a variety of ways, the future of type in the environment can move in any number of directions. But this may not yield greater design freedom. Increases in legibility research have created more effective typefaces but have also led to more restrictive design codes. Digital sign technology has dynamic type, yet in many transportation systems this has resulted in even greater efforts at standardization. The creation and use of type is the combination of technological innovation with systemic rationalization and that balance will always exist even in a future of limitless possibilities.

Learn more about the practices and research that define the way we use type in the environment in Part 2 of *Typography, Placemaking and Signs: Dimensional Typography Best Practices*. [↴](#)

## Great Books on Typography and Signage

### *Architectural Signing and Graphics*, John Follis

John Follis started one of the first dedicated environmental graphic design firms and his book on the subject, released in 1978, established nearly all the early best practices for the development of wayfinding and identity programs. A hard book to find, but well worth it.

### *Graphic Design and Architecture: A 20th Century History*, Richard Poulin

This book released in 2012 by perhaps the foremost combination of Environmental Graphic Designer and intellectual today, and covers many of the design themes discussed in a graphic, yet in-depth format.

### *Learning from Las Vegas*, Robert Venturi

Yes the book is old. Yes it is hard to read. But very few books have had a greater influence in analyzing the role of symbol, type, identity and brand in the environment.

### *Signage and Wayfinding Design*, Chris Calori, and *Signage Systems and Information Graphics*, Andreas Uebele

The 21st Century version of signs and architecture, these books serve as a great basic text for the new generation of sign designers.

### *Wayshowing*, Per Mollerup

If you like design commentary this book provides wonderful riffs on design and wayfinding in the environment in all its forms.

### *Helvetica and the New York City Subway System*, Paul Shaw

A great story of how a single typeface can permeate our everyday life.

### *The Development of the Wayfinding Typeface Wayfinding Sans Pro*, Ralf Hermann

This article shows the development of a modern typeface used in signage and is a good guide to the varied legibility issues found in vehicular sign systems.

### *Thinking with Type*, Ellen Lupton

One of the greatest design thinkers of the last twenty years brings an understanding of type to the masses with this book.