

Johannes Gutenberg

Gutenberg's knowledge of metallurgy enabled him to produce durable alloy letter punches using moulds. These could be replicated over and over giving the printer a usable number of letters to form his text and that then could be reused in infinite combinations unlike the fixed plates, used previously, which could only be used once.

Following his invention of moveable type, in 1455 it was used to produce his 42-line Bible, thought to be the first printed in using this method.

Gutenberg had made printing a lot more accessible and a lot cheaper to the public than the hand-scribed documents that had preceded them. Before print, the ability to read was useful mainly to the elite and the trained scribes who handled their affairs. Affordable books made literacy a crucial skill and an unprecedented means of social advancement to those who acquired it.

Gutenberg's Bible is printed using a font called Textura. It is a Blackletter font with heavy upright letters with emphasised verticals and angled junctions and contains over 300 glyphs in order to replicate the handwritten documents it was trying to emulate. Although it is pretty illegible by today's typographical standards, it remains a work of art comparable to the manuscripts it imitated.

Johannes Gutenberg has been voted one of the top 100 most influential people of the millennium for his contribution to printing and giving ordinary people the opportunity to read and reflect on their own terms.

William Caxton

William Caxton introduced the art of printing to England. He was a businessman who could foresee and understand the value of printing, publishing and selling books. He had seen this new technology while working in Germany. Caxton and his team of craftsmen set up shop in London in 1476 where they began producing books for the educated readership of the city. Caxton commissioned a typeface called Bastarda which was based on the gothic handwriting used in universities and was a direct evolution from Gutenberg's Textura. It had ornate forms, angular in style with lopping ascenders and numerous ligatures. It is said to have been cut for him by a renowned Flemish man named Johan Veldener. Although Caxton didn't directly cut the type he is accredited with its creation.

Caxton published over 100 editions in his lifetime, most of them in English. Most books of the time were written in Latin, but Caxton's publications were aimed at the new literate classes and the businessman knew his market. As well as publishing well known works, Caxton also published his own works and translated others due to his knowledge of English, Latin, French, German and Dutch.

Caxton also introduced a number of changes to the production of his books over the course of his career. He used a variety of different type fonts and he was the first English printer to commission woodcuts to illustrate his books. They appear for the first time in his edition of *Mirror of the World* (1481) and thereafter in a number of other books, most famously in his second edition of Chaucer's *The Canterbury Tales*, with its portraits of the pilgrims.

Claude Garamond

Garamond started his career as a type founder in 1538 and went on to produce 34 different types of which 17 were romans and 7 were italics. The most famous of these is Garamond Roman which is a light serif typeface with the top serifs having a downward slope. Garamond has been one of the most popular typefaces in history and has been imitated and redrawn countless times. Nearly every type foundry in the world has produced a typeface with Garamond's name.

Garamond's significant skill as a punch cutter enabled him to produce refined type that would be used as a standard for French printing for centuries.

In 1989 Adobe commissioned Robert Slimbach to produce a typeface for its emerging software programs. Slimbach used a specimen of Garamond's original typeface from 1592 from the Plantin–Moretus Museum in Antwerp to create a version for the computer age.

Garamond's work has inspired many typefaces, including several contemporary ones including Garamond, Granjon, and Sabon, and still used in publishing for books today such as the Harry Potter books.

John Baskerville

Baskerville wanted to improve on the previously published typeface Caslon by William Caslon in 1725. Unlike previous type designers who had based their designs on what had come before, Baskerville wanted to design as it was written with a pen held at right-angle to the baseline. This created sharp contrast between the thick vertical and thin horizontal strokes. He widened the characters to make them stand out and gave some letters curved swashes.

Upon publishing his first book in 1757 with widely spaced headings and very open leading he was mocked by his competitors accusing him of “blinding all the readers in the nation; for the strokes of your letters, being too thin and narrow, hurt the eye”.

Baskerville's designs have gone on to inform all typefaces that followed it.

Firmin Didot

Firmin Didot came from a long line of printers, type founders and papermakers who's clients included the French Royal family. Working alongside his brother Pierre they set out to improve upon the earlier work of John Baskerville. As processes and papers improved, Didot found he was able to produce more refined typefaces which enabled him to give more contrast to the letters' stroke width.

Didot's first published type was in 1784 and is considered to be the first 'modern' typeface. Didot is a serif typeface with the stress on the vertical strokes with high contrast with the horizontals. It has sharp, unbracketed serifs and most of the capitals are the same width.

This typeface predated his rival Giambattista Bodoni's type, but who had the original design remains a mystery. But it's clear to see that the Italian Bodoni and the French Didots influenced each other.

The Didots designed type like never before, incorporating mathematical and classical design principles. This had never been done and it changed the way that type was designed and conceived right up to the present day.

Giambattista Bodoni

Bodoni was another European designer who appreciated and was influenced by the work of John Baskerville. After using imported French type for many years Bodoni took it upon himself to design his own. Basing his designs on the work of Baskerville, Bodoni created type with high contrast of stroke width. Like his French contemporary, his type had unbracketed serifs and uniform-width capital letters. Bodoni based his designs on four principles of typography: regularity, clarity, good taste and charm.

In 1813, Bodoni's widow published one of her late husband's textbooks called 'Il Manuale tipografico' (The Manual of Typography). The book featured 373 characters which include 48 Oriental or exotic ones and 34 Greek.

Robert Besley

Besley, along with his punch cutter Benjamin Fox, developed the Clarendon typeface in 1845 at the Farm Street Foundry in London. This was the first typeface to be registered under the new English Ornamental Design Act of 1842. Clarendon is a bold serif typeface with bracketed slab serifs. It had huge success in England's new printing and advertising industries where it was used to emphasise type instead of using italics. It was used widely in the American South West on classic western signage and posters. In the 1920's the Clarendon typeface experienced a resurgence when during the American industrial revolution where it began to be used in the newspaper industry as a popular typeface for publication.

Besley went on to become Sheriff of the City of London in 1863 and the Lord Mayor of London in 1869.

Hermann Berthold

Born in 1831, Hermann Berthold was the son of a calico-printer. On completion of his apprenticeship as a precision-instrument maker and after practical experience gained abroad in galvanography, Hermann Berthold founded his "Institute for Galvano Technology" in Berlin in 1858. Very quickly he discovered a method of producing circular lines from brass and not, as

customary at that time, from lead or zinc. The soldering normally necessary could also be dispensed with. The lines were elastic and therefore highly durable. They produced outstandingly fine results. Most of German's letterpress printers and many printers abroad placed their orders with Berthold. His products became so popular that the print trade popularized the saying "As precise as Berthold brass".

In 1878 Hermann Berthold was commissioned to put an end to the confusion of typographic systems of measurement. With the aid of Professor Foerster he succeeded in devising a basic unit of measurement (1m = 2,660 typographic points). This was the birth of the first generally binding system of typographic measurement. It is still used in the trade. Hermann Berthold served as the head of the Berthold type foundry until 1888.

Akzidenz Grotesk is a sans serif typeface produced by the Berthold Type Foundry in 1898. It was the first widely popular sans serif typeface and was the progenitor of many of today's grotesque typefaces including Helvetica.

Morris Fuller-Benton

Morris Fuller-Benton worked for American Type Founders in the early 1900s and had a major influence on American graphic design with the typefaces he designed. These included Globe Gothic, Lightline Gothic, Alternate Gothic and News Gothic. However, his most famous creation was Franklin Gothic in 1904.

'Gothic' is a term commonly given to sans serif typefaces originating in America, where the European equivalent would be 'grotesque'. This is thought to be a nod to the original blackletter forms of medieval texts. Franklin Gothic was designed for use for advertising purposes. Its bold, double-storied forms were heavily influenced by the European grotesques such as Akzidenz Grotesk.

Paul Renner

Paul Renner's Futura was the typeface used to engrave the plaque left on the moon.

A strong supporter of the Bauhaus movement of the 20s which influenced the geometric forms of his most famous creation. Renner's work on Futura endured through the years and is still widely used by graphic designers today and has recently been given new life as Futura Now by Monotype Studio.

During the Nazi rule of Germany, Paul Renner was labelled as an intellectual subversive and Cultural Bolshevik and spent a period of time in exile after his arrest.

Renner's books include *Die Kunst der Typographie* (The Art of Typography) and *Typografie als Kunst* (Typography as Art). In these works he set the guideline for sophisticated book designs and typographic design.

Eric Gill

Eric Gill was a British artist, sculptor and type designer who was associated with the Arts and Crafts movement. He is most famous for designing the typeface Gill Sans, nicknamed the 'Helvetica of England', which was based on some lettering he had painted for a bookstore in Bristol in 1926. He was asked to design a typeface to rival the German sans serifs and based on the modernist forms of Futura, Elbar and Kabel which had been hugely successful right across Europe in the 20s. Gill Sans has been used all around the world and is said to have an unassuming, clear and uniquely English tone of voice. It was followed by a variety of typefaces, including Perpetua Greek, Solus, Aries, Bunyan and Joanna. Gill's legacy will probably be his typeface being used on the cover of Penguin Books in 1935 by Edward Young and standardised by Jan Tschichold when he was employed as head of type in 1940.

Stanley Morrison

In 1931 the Times newspaper commissioned the British Monotype Corporation to develop a new typeface following an article written by Stanley Morison. He had complained that the paper's print was of "poor quality and the defective modern typeface that had survived in its pages for many years".

Under Morison's supervision, two typefaces were designed: a version of Gill Sans and a version of Plantin. The newspaper's board picked the latter and Times New Roman appeared on its pages in 1932.

Because it was used in a daily newspaper, the new font quickly became popular among printers of the day. In the decades since, typesetting devices have evolved, but Times New Roman has always been one of the first fonts available for each new device (including digital platforms). This, in turn, has only increased its reach.

Times New Roman was used for 40 years, but new production techniques and the format change from broadsheet to tabloid in 2004 have caused it to switch typeface five times from 1972 to 2007: Times Europa; Times Roman; Times Millennium; Times Classic and Times Modern.

Howard Kettler

Howard 'Bud' Kettler worked for IBM and was tasked with designing the typefaces for its manual typewriters. He was responsible for designing Prestige Elite, Letter Gothic and, most famously, Courier.

Courier is a mono-spaced, slab-serif typeface which was created to fit on the strikers of typewriters. It was a '10-pitch' typeface, meaning that 10 original size letters would fit side-by-side in one inch.

Kettler, while at IBM, helped to design a typewriter with a 36-inch carriage which typed letters 1 inch high. This typewriter was used to make "prompt cards" for President Eisenhower.

Max Miedinger

Max Miedinger was trained as a typesetter and typographer in Zurich before going to work at the Haas'sche Schriftgießerei (Haas Typefoundry) in Münchenstein near Basel as a type salesman and customer rep. His body of work as a type designer is small but extremely significant. He is best known for Neue Haas Grotesk, later renamed to Helvetica, which he designed between 1956–1959 under the art direction of Eduard Hoffmann.

When Stempel, the parent company of Haas, changed the name of the face to Helvetica and decided to market it to businesses in Germany. Miedinger and Hoffmann were troubled by the name's similarity to the Latin word for Switzerland, Helvetia. But, the name had more universal appeal and the world fell in love with the infamous typeface.

Helvetica is designed for utility. It is stripped of all remarkable features. It is the epitome of Swissness. Helvetica is a household name, you don't have to be a type designer to recognise it. It is probably the most used typeface of all time which has led to it being regarded as 'boring'.

Jan Tschichold

was a prominent German type designer and book designer who escaped to Switzerland when the Nazis came to power in his home country. Before fleeing Tschichold penned 2 books, *Die neue Typographie* and *Typographische Gestaltung*, which were required reading for designers and typographers. He spent the rest of his life in Switzerland except for a 3 year spell in London when he famously redesigned the Penguin paperback range, giving it the familiar style we know today. In 1960 Tschichold was employed by a group of German print companies to create a typeface based on Claude Garamond's work. It had to have the ability to work when set using different printing methods to keep up with the ever-changing technology.

The result was Sabon. The typeface wasn't just a direct copy of earlier works, but it was a highly crafted and detailed to account for the new printing techniques and modern papers that were used.

Carol Twombly

Carol Twombly, along with her colleague Robert Slimbach, were charged by Adobe in the early 90s to create a sans-serif typeface for its Adobe Originals series. Myriad was shaped for the digital age and was free of any flourishes an individual designer may have added. Myriad has been compared to Frutiger designed 16 years earlier and has been a staple on digital platforms since its creation. It is also used widely in branding due to its clear readability, most notably for Apple.

During her eleven+ years with Adobe, Carol has designed a number of very popular text and display typefaces. Designs like Trajan, Charlemagne, Lithos, and Adobe Caslon are inspired by classic letterforms of the past - from early Greek inscriptions, to William Caslon's typefaces of the 1700s. Designs like Viva and Nueva explore new territory while maintaining traditional roots. In 1994, she received the Charles Peignot award from the Association Typographique Internationale for outstanding contributions to type design. She was the first woman and only the second American to receive this prestigious honor.

Erik Spiekermann

Erik Spiekermann is one of the most famous contemporary German graphic designers of the modern era. Some of his seminal works such as commercial typefaces and corporate design programmes include Berliner Grotesk, ITC Officina Sans, Nokia Sans and FF Meta Serif. He designed Fira Sans for Firefox OS 2013 version in collaboration with Carois Type Design. He is responsible for corporate design programs for Audi, Skoda, Volkswagen, Lexus, Heidelberg Printing, Bosch, Nokia and way-finding projects like Berlin Transit and Düsseldorf Airport. Erik Spiekermann is responsible for writing one of the world's best-selling books on designing with type -- including editions in Korean, German, Russian, Portuguese, and Polish -- *Stop Stealing Sheep & find out how type works* continues to educate, entertain, and enlighten design students and type lovers around the globe.

Tobias Frere-Jones

Responsible for some of our most recognised typefaces, Tobias Frere-Jones has literally made his mark on the world through the design of hundreds of fonts for retail publications and private clients. He has created some of the most widely used typefaces of recent years, including Interstate, Poynter Oldstyle, Whitney, Gotham, Surveyor, Tungsten and Retina. While collaborating with Jonathan Hoefler, the two collaborated on projects for The Wall Street Journal, Martha Stewart Living, Nike, Pentagram, GQ, Esquire magazine and The New York Times Magazine. In 2014 German type designer Erik Spiekermann, who published Frere-Jones' first typeface, described him as "one of the two or three best type designers in the world". Type has evolved at its fastest rate in the last 20 years with more of the world having access to the digital world, and on the evolution of type, Frere-Jones said "We try to keep ourselves flexible enough to take the lessons of a 16th-century punchcutter and apply them to what will happen on Internet Explorer running on Windows 8,"

Typography is basically the way that type is arranged on the layout. It has huge influence over the impact of the message it is trying to convey, setting the tone and mood for anyone who reads it. Type design has a rich and varied history ranging from serifs carved on Roman columns, to the revolution that the printing press brought to the Middle Ages, and how Modernism went on to influence type design to the present day.

For designers, typography is more than just how the type is arranged on the page, it is the format, size and its relationship with the other content. It is the nuances, details and ligatures that gives different typefaces their character and appeal.

Typography as we know it today has its origins with the invention of the printing press, however it has been around since the 2nd century where punches and dies were produced to stamp letterforms and glyphs on to seals in what was Mesopotamia. Many serif fonts can trace their roots back to Ancient Roman capital letters. The likes of Trajan and Times Roman are direct descendants of these Roman forms.

In 12th century Europe, books and manuscripts were hand-lettered by scribes and monks. These were ornate works of art and it was a highly skilled profession. This form of lettering was known as blackletter, a gothic calligraphic script. The downside of this hand-lettering technique was that it was very time-consuming and costly, so it was only available to the well-to-do in society.

It was the German blacksmith Johannes Gutenberg who made it accessible to more people with the invention of a machine that could use 'moveable type'. This allowed for the mass-production of printed sheets using ink and dies making it affordable for more and starting a literary revolution. This was initially done using the first ever typeface: Blackletter.

Blackletter type was not the easiest to read, so when the Roman typefaces of the 15th and 16th centuries appeared legibility was vastly improved, and the addition of italics, made it easier to fit more type into publications and thus making them even more affordable.

The 18th century saw the introduction of the humanist typefaces such as Caslon and Baskerville which were elegant, romantic and more refined. The typographic evolution continued with the French Didots and Italian Bodoni creating what are known as the first Modern Serifs which are still used today to give a sense of refinement and luxury.

The 20th century saw the Modernists controversially remove serifs and strip back what had come before. The likes of the classic sans serif typefaces such as Futura and Gill Sans soon gave way to next step in type design with the introduction of the Swiss Style and the dominance of the ultra-legible Helvetica.

With the invention of computers, typefaces and fonts became commoditised. Initially, the technology was limited to the screen resolution of the time and early digital typefaces were pixel-based. As digital technology evolved, so did the number of fonts and typefaces. This new era opened up the possibilities for type design, both good and bad. The upside is that this was probably the biggest development in typography since Gutenberg's revolutionary work over 500 years earlier.

Type design is no longer the work of a specialist few, but instead anyone with access to vector design software has the potential to design type in the comfort of their own home.

As a species, we have endeavoured to improve the way we communicate information to one another since we first walked the Earth. Type will not stop evolving, but in what direction? We'll have to wait and see...