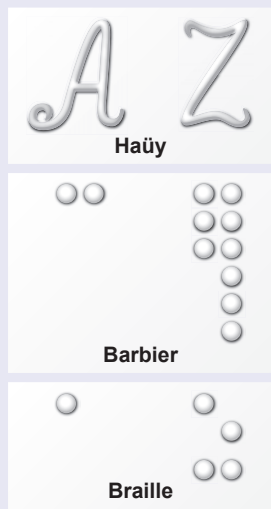


Louis Braille



In the early 1800's, Charles Barbier developed a special type of writing for soldiers to use in the dark. It was called night writing. It consisted of 36 different sets of 12 **embossed** dots and dashes placed into two columns that represented different sounds of the French language. He designed it so that soldiers wouldn't need to use lights at night in order to read **communications**. This system failed and wasn't really accepted by the army because it was too difficult to learn. Another key reason why it wasn't used was that it required the reader to shift their finger over each individual symbol in order to interpret what the symbol was, this made it very hard to read and often people forgot the first part of the symbol before they felt the second half. Even though it never took off, his idea wasn't a bad one and he never gave up on it. While he was visiting the French Institute for the Blind, he met a fifteen year old blind boy who took his idea, developed it further and gave people with poor eyesight the ability to read and communicate with the written word.



The three types of writings developed for the blind, showing A and Z.

That boy was Louis Braille. At the age of three he suffered an accident in his father's workshop where an **awl** (sharp pointed metal tool for forming holes in materials like leather) he was playing with, slipped and caused severe damage to one of his eyes. Over the following weeks an infection set in and this led to both his eyes being affected. By the age of five he had gone completely blind in both eyes. He was a bright boy and through his determination and **perseverance**, gained a spot in the first school for the blind in France. Here they had special books that had been designed by the school's founder Valentin Haüy. These books had raised letters of the alphabet that spelt out words and then sentences. The reader ran their fingers over each letter to spell out each word which was a very slow process. It would be like having one letter on each page of a book and having to spell the words as you turned the pages. Not only were they slow to use but they were also large and heavy due to the large amount of space that each symbol took up, so there would be very few words on a single page. Each letter was bent from wire then pressed under wet paper in the correct order, so that it dried in a raised **fashion**. Because the books were all hand-made they were very expensive and even the school where the designer worked only owned a few. Braille became determined to develop a system which was much simpler and accessible to all vision-impaired people. Eventually he learnt of Barbier's system and spent much time thinking about how it could be improved. The two previous systems (Barbier's and Haüy's) had been designed by people who could see and Braille felt that this was why their success was so limited.

Braille, who had now started working at the school for the blind as a teacher's aide, started simplifying the night writing system and reduced it to a series of 6 dots in two equal columns. The smaller size meant that each letter could be read with one touch of a single finger, making reading much faster. Because each symbol was much smaller, it allowed for greater volumes to be written and many more symbols could fit per page. He released his first edition of braille at just fifteen but this included dots and dashes which he found to be too difficult to interpret. By 1837 he had published his second edition of the system (without dashes) and it was starting to become more common but still not widely used. In fact, the school where he worked refused to use his system until well after he died. Braille also developed a way of writing in braille by pressing the paper with a blunted awl. This meant that poor-sighted people could now also write as well as read.

In 1932, long after he had died, Braille was finally **universally** accepted and an English code was developed. Today, developments in technology have made braille even easier to use and have kept it alive with the dramatic changes in human life such as the creation and acceptance of computers. There are printers that print braille, braille terminals and even an application called RoboBraille. Braille terminals are computers without screens (a person with a vision impairment can't read from a screen). They have a flat surface, similar to a keyboard, that has pins that **protrude** forming the braille symbols. This allows the user to read the information by running their fingers along the board. The symbols change as the information changes, which allows people to access the internet easily. RoboBraille is an email application that **converts** the text of an email into braille. Despite the development of other technologies such as talking computers, the use of braille as a **tactile** language has continued to be widely used. Louis Braille opened the world of the written word to thousands of people who would have otherwise been in the dark.

