

BRAILLE—WHAT IS IT?

WHAT DOES IT MEAN TO THE BLIND?

Braille is a system of reading and writing by touch used by the blind. It consists of arrangements of dots which make up letters of the alphabet, numbers, and punctuation marks. The basic Braille symbol, called the Braille cell, consists of six dots arranged in the formation of a rectangle, three dots high and two across. Other symbols consist of only some of these six dots. The six dots are commonly referred to by number according to their position in the cell:

There are no different symbols for capital letters in Braille. Capitalization is accomplished by placing a dot 6 in the cell just before the letter that is capitalized.

The first ten letters of the alphabet are used to make numbers. These are preceded by a number sign which is dots 3-4-5-6 There are no different symbols for capital letters in Braille. Capitalization is accomplished by placing a dot 6 in the cell just before the letter that is capitalized. The first ten letters of the alphabet are used to make numbers. These are preceded by a number sign which is dots 3-4-5-6 Some abbreviations are used in standard American Braille in order to reduce its bulk. These must be memorized, but most Braille readers and writers find them convenient, rather than a problem. Braille is written on heavy paper, and the raised dots prevent the pages from lying smoothly together as they would in a print book. Therefore, Braille books are quite bulky.

Today there are three methods of writing Braille, just as there are two methods of writing print. A Braille writing machine (comparable to a typewriter) has a keyboard of only six keys and a space bar, instead of one key for each letter of the alphabet. These keys can be pushed separately or altogether. If they are all pushed at the same time, they will cause six dots to be raised on the paper in the formation of a Braille cell. Pushing various combinations of the keys on the Braille writer produces different letters of the alphabet and other Braille symbols.

Writing Braille with a slate and stylus compares to writing print with a pen or pencil. The stylus is used to push dots down through the paper, while the slate serves as a guide. The Braille slate can be made of metal or plastic and is hinged so that there is a guide under the paper as well as on top of it. A person writing Braille with the slate and stylus begins at the right side of the paper and ends the line on the left, since the dots are being produced on the underside of the paper. Of course, the Braille reader reads from left to right, for the dots are then on the top side of the paper. Although this may seem a bit confusing, it need not be at all troublesome, since both reading and writing progress through words and sentences from beginning to end in the same manner. The speed of writing Braille with the slate and stylus is about the same as the speed of writing print with pen or pencil.

Just as the personal computer has revolutionized writing in print today, it is also possible to produce Braille more easily and quickly than ever before. Assuming that the proper equipment

is available, a computer user can now send a document to a standard printer to produce a paper copy in print or to a Braille embosser to produce the document in Braille. And one need not even know Braille to create this miracle.

Braille was first developed in the late 1820's by a young Frenchman named Louis Braille. He created Braille by modifying a system of night writing which was intended for military use. He did this work as a very young man and had it complete by the time he was about eighteen. He and his friends at the school for the blind found that reading and writing dots was much faster than reading raised print letters, which could not be written by hand at all. The development of this system by young Louis Braille is now recognized as the most important single development in making it possible for the blind to get a good education.

It took more than a century, however, before people would accept Braille as an excellent way for the blind to read and write. Even today many people underestimate the effectiveness of Braille. While tapes and records are enjoyable, Braille is essential for note-taking and helpful for studying such things as math, spelling, and foreign languages. It is a matter of great concern to members of the National Federation of the Blind that fewer blind people now have the opportunity to become good Braille users than did twenty-five years ago.

Why is this? Many professionals in work with the blind stress recorded media with blind children. Many people who become blind do so in old age and are not encouraged to spend the time and make the effort needed to develop the new reading and writing skills that depend on feeling rather than seeing. There are even Braille teachers who do not expect speed and accuracy of their blind students. As a result, the students learn Braille as a chore and drudgery.

Experienced Braille readers, however, read Braille at speeds comparable to print readers--200 to 400 words a minute. Such Braille readers say that the only limitation of Braille is that there isn't enough material available. They want more books produced by Braille presses, more books produced by volunteer Braillists in their homes, and wider availability of computerized Braille production.

One of the goals of the National Federation of the Blind is to help people appreciate Braille for the efficient system it is. The main difference between print and Braille is simply that print is meant to be read with the eyes, while Braille is meant to be read with the fingertips. Fingers feel dots quickly and accurately; eyes see loops and lines of ink. In both cases it is the brain that processes and reacts to the raw data sent to it by the fingers or the eyes.

This article was first written in Braille and transcribed into print to answer the questions of sighted people who cannot read Braille.

If you have further questions about Braille or blindness, write to the National Federation for the Blind, 1800 Johnson Street, Baltimore, Maryland 21230.