

Braille Awareness Day

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For many blind persons all over the world, Braille is the equivalent of the Guttenberg press.

For some time, educators, parents and other allies have also developed a strong appreciation for the benefits the braille system of reading and writing brings to the blind and society more broadly.

We have Louis Braille to thank for this gift, the gift of literacy. When I think of the literacy of the blind, I always remember the story shared by a blind man. The man was attempting to immigrate to Canada from an English-speaking country. He already had a university degree. Because, however, being totally blind, he could not read printed letters, the immigration official who interviewed him told him he had to be classified as illiterate. This is not a joke, though it did happen a few decades ago.

Louis Braille

On January 4th, we celebrated Louis Braille's birthday. He was born in a small village outside Paris and lost his sight after fooling around with an awl in his father's workshop. His parents worked as harness makers. Although young Louis accidentally injured only one of his eyes with the sharp needle, both eyes became infected resulting in complete blindness by the age of 5.

Wishing to give Louis the opportunity for education, initially his parents enrolled him at the local school. Reportedly, Louis was a determined student employing his listening. Later, he attended the National Institute for Blind Youth in Paris. While there, along with other students, he became acquainted with a tactile reading and writing system developed by a French army officer.

The French Army Officer was Charles Barbier. Officer Barbier introduced the students to a 12-dot cryptography system he had created for soldiers to use for night-time battlefield communication. His system consisted of different combinations of 12 raised dots to represent different symbols. Louis thought the tactile coding system was a great idea and could be the basis for a form of reading and writing that might be useful for the blind.

From age 12 to 15, Louis carefully studied Officer Barbier's system and, through adaptation, developed a simpler system so the blind could use a single index finger to feel and read. Louis' system only had six dots (two sets of three dots lined up vertically next to each other) and he assigned different combinations of dots to different letters and punctuation marks. Louis kept poking holes in sheets of paper as he refined his system, ironically with an awl like the one that had accidentally blinded him. By working

on and adapting Officer Barbier's idea, Louis elaborated the braille system, a tactile reading and writing method of raised symbols.

The braille system was presented to Louis' peers for the first time in 1824. Louis and his classmates would no longer have to learn through the slow process of tracing huge raised print letters and numbers. Braille was supported by the Institute's director, until a new one arrived and banned it in 1840. The new director was afraid there would be no need for sighted teachers if everyone who was blind could read as a result of using braille.

The War of the Dots

It is not possible to trace the history of the struggle to establish braille as a system of reading and writing in the remaining few minutes.

For our purposes today, it suffices to say that gradually and through a great deal of effort, blind persons prevailed in finally having braille adopted as a system of reading and writing. It is, undoubtedly, today preferred by a significant number of blind persons.

It is important to emphasize that braille is a tactile system of reading and writing. It is not, as sometimes people mistakenly believe, a new language.

The essence of braille is that a person can read it through touch. The combination of the dots produces letters, punctuation marks and other symbols.

Historically, the alternatives to braille were various formats of raised print letters. Usually, these were formats conceived and promoted by well-meaning sighted professionals.

The fundamental difference between braille and raised print letters is that whereas raised dots are usable by touch, raised print letters, though tactile, are designed to be perceived through sight.

The insistence of primarily sighted professionals that raised print letters should be the basis of literacy for the blind represents an early form of what today is called "ableism".

Throughout the 19th and early 20th centuries, both in Europe and in North America, various formats and variations of raised print letters were developed. In general, blind persons preferred braille. Ultimately, educators for the blind were convinced and supported the adoption of braille as the prevalent system of reading and writing.

Even S. Gridley Howe, an undisputed leader in the education of the blind, is an example of a sighted teacher initially favouring raised print letters. Howe is well-known for being the inaugural director of the first school for the blind in North America, which was established in Boston in 1829. One of Howe's major contributions was his belief in the education of deaf-blind persons. Helen Keller was a well-known beneficiary.

Howe also developed the Boston system of raised print letters known as the Boston line letter. He tried to convince his blind students to accept it. It is interesting that, following field experience, he came around and became a strong proponent of braille.

Some Further Observations

While I am looking forward to learning from the contributions and personal experience of my fellow presenters, I would like to share with you some further observations regarding braille. Let me start with a personal experience.

Privacy

As indicated above, a system of reading based on raised representations of print symbols would be easily understood by a sighted reader. Braille, on the other hand, requires learning how to interpret the various combinations of dots. In this sense, especially early on, in addition to being a means of literacy and independence, braille provided a method of communication privacy. A personal story serves to illustrate this point.

I experienced braille-enabled privacy when I was a teenager, though I did not think about it then in those terms. I understood it later, in the early 1990's, while participating in an effort to revive braille in Canada.

During a summer school break in my village near the historic Sparta, in Greece, my father came home one evening and handed me an envelope. I opened it and realized it was a love letter in braille from a girl who had started flirting with me in the school for the blind.

I can only imagine what would have happened if my would-be girlfriend had somehow managed to get one of her sighted friends to write a few words to keep our teenage flame alight. The village postman would have handed the letter to my father who would have read it. Attempting to maintain his standard of paternal rectitude, he would have admonished me severely. A terrible quarrel would have ensued with unpredictable ramifications. As it happened, thanks to braille, my austere father had no clue about what those dots conveyed. My would-be girlfriend and I were able to maintain the privacy of our communication, while keeping my dear old Spartan father in ignorant bliss!

Active Reading

Blind persons, experienced with both reading in braille and listening to material, report that reading in braille is more effective for comprehension, for grasping information and for absorbing spelling and syntaxes.

Recently, I observed that I had to work to maintain my alertness and comprehension while reading a very interesting book by listening to it through a screen reader producing synthetic speech. It was late in the evening and I was somewhat tired.

As it was important to finish the book, I decided to switch to reading in braille. My comprehension improved. I did not have to work as hard to maintain my alertness. I concluded that the process of moving the refreshable braille display and my fingers across the display itself contributed to my improved reading experience.

Many braille users notice the same phenomenon.

This, of course, does not mean that blind people who, for whatever reason, have not learned or do not use braille, do not have rewarding and productive reading experience through listening.

Refreshable Braille Technology: Unlimited Possibilities

Today, technological progress makes access to braille better than ever before in history. Using my refreshable braille display connected either to my computer or iPhone, I can easily and quickly read a huge variety of documents in any of the three languages I use.

A very revolutionary technological development promises to make access to graphical representations available too in the very near future.

In fact, at this point, I want to acknowledge and thank my director, Margaret Hill, for her support in obtaining my braille display, Mantis, which I am using to make this presentation today.

I will let my knowledgeable and expert co-panelists speak about refreshable braille and other technology-enabled developments.

Tactile Money

Some of you may have noticed the braille cells on Canadian paper currency.

The application of braille, in which I participated more than 20 years ago, arguably renders Canadian paper money the most accessible in the world. It enables totally blind persons to easily and independently identify the denomination of paper money in their hands.

Steady Recognition and Progress

Braille users now enjoy the benefits of braille. Braille also receives a great deal of support in practice and in principle, if not always the required resources.

Emblematic of the above statement is the inclusion of braille in the Convention on the Rights of Persons with Disabilities.

The Convention was the first United Nations Human Rights Instrument of the twenty-first century. It refers to braille several times. In article 2, it is mentioned as a form of communication. In article 9, it is set out as an accessibility means. In article 21, States Parties undertake to use braille as a means of official communication.

The inclusion of braille in a hard international law instrument, as opposed to a soft instrument, constitutes an important policy achievement. Canada, and the provinces and territories, are bound by this commitment. After all, Canada was an active participant in the elaboration of the Convention. We have signed it and ratified it.

The Convention is cited in the *Accessible Canada Act* as one of the key preambular elements. It is also noteworthy that the accessibility strategy for the federal public service developed in response to the legislation adopts the principle of “nothing without us” – and is actually formally called *Nothing Without Us*.

All the above references substantiate without any doubt the decisive role of persons with disabilities in all matters, especially matters that affect them.

The history of braille and its final acceptance and adoption constitute a specific example of what now is enshrined in legislation and policy.

The key is that blind persons, often supported by allies, had to fight for this acceptance.

Nothing Without Us

The above very short narrative draws the link between the now-accepted principle of “nothing without us” and the effort by blind persons to use the system of reading and writing they prefer.

There is a more general point I’d like to make: we need to identify accessibility barriers and solutions in close collaboration with those directly affected.

ESDC’s Accessibility Roadmap constitutes a recent example of that in action. The Roadmap, the Department’s plan to identify, remove and prevent barriers to accessibility which was approved by ESDC senior management last September, has explicitly adopted “Nothing without us” as one of its six guiding principles:

In practice, this means people with disabilities must be continuously heard in the development and implementation of Roadmap activities. The lived experiences of employees and clients with disabilities, and user testing by people with different types of disabilities, are key for many things: for ensuring the Roadmap is based on sound evidence; for achieving the related guiding principles of collaboration, co-development and responsiveness; and, ultimately, making ESDC barrier-free.

Let me close by saying that, in view of the above, Louis Braille fully deserves his recognition as a benefactor of the blind all over the world, and as a national hero of France befitting his resting place in the Pantheon.