The reading experience of print-handicapped people: from Braille to new technologies

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Abstract:

How can print-handicapped people overcome their handicap and integrate in society in the 21st century? What are the main questions raised by this problem statement? Several elements of answers come from the first results of an academic research on the impact of new technologies on the reading of visually impaired people. Libraries have a determining role to play in ensuring that everyone will be able to benefit from the new technologies.

In libraries, when you ask professionals of information how they think they could serve print-handicapped people, the first answer is Braille. Indeed, with the invention of Braille, in the 19th century, Frenchman Louis Braille allowed blind people to have equal access to education, culture and more generally to printed documents. With Braille, blind people were able to share all the ideas developed in books and to structure their own thoughts, participating in the democratic debate and expressing themselves freely. That was an historic and fundamental step.

Nowadays, at the beginning of the 21st century, society has evolved and the needs have increased. To simply illustrate this topic: the problem of “print-handicapped people” concerns a many-sided reality, from the blind and visually impaired people to dyslexic and illiterate people. So, we can make a parallel between the diversification of the solutions to access to the printed documents and the diversification of the needs of our users. In this short presentation,
I will concentrate my remarks on the needs of visually impaired people, focusing on the main characteristics. However, you should keep in mind that many of these remarks are valuable for serving print- handicapped people in general, whatever is the origin of the handicap (social, cultural, intellectual or sensory). On the other side, this diversification of needs illustrates how essential it is to identify correctly the population we want to serve, before thinking of an adapted service. Even if the solutions elected can successfully be used by other customers, it is fundamental to keep in mind the first aim. Studies show, for example, that enlarged print books are borrowed more by seniors or “classic” users who are looking for comfort reading, than by visually impaired people. So, depending on to the purpose and to the people to reach, it is necessary to adapt the product offered.

Considering that the best way to identify the needs of print-handicapped people was to observe objectively the practice of these users, I decided to study the impact of new technologies on the way visually impaired people read. So, the following remarks I will share with you, result from the first observations of an academic research, in Information and Communication Sciences. I work with a selected representative population of visually impaired people (from 12 to 75 years), linked with specialised institutions in France and Québec, proposing to these people all the alternatives existing to access to printed documents, and analysing their remarks and the evolution of their practise during several months.

The analysis is based on the study of the way print handicapped people can best appropriate literature and leisure books, because the psycho-cognitive process of appropriation, reading a story and following a text on several pages, is different from the process implemented when looking for information. The notion of pleasure, reading, is in the centre : when do the constraints of the technology or the difficulty to catch parts of printed words erase the pleasure?

What do users expect about an adapted service in a library? I think that is the main question, if we want to be able to offer services linked with the reality, the practise. The best technical solution is not valuable if its use is not based on an observed practise. We have first look at the needs of the user and than at the human, editorial or technical solutions that we have in order to overcome the situations of the handicap. To outline the problem: we can distinguish three main levels of access to printed documents : the scholar needs, the citizen needs to access to information, actuality and the leisure, literature needs. To answer these three kind of needs, the practice and the way of appropriation of texts will be rather different. However, the perspectives have completely changed with the apparition of digitalized texts, with the possibilities offered by numeric versions of printed documents. The Braille paper document stopped to be the only solution with its difficulties of conservation, navigation and space required. Braille with the changes introduced with new technologies, takes again a central and strategic position, as a textual way of appropriation and not only as a format of transcription of a document.

In our 21st century society, everything goes quickly. We are in a society of information and audiovisual technologies. So, print handicapped people don’t accept anymore to bear the difficulties that new technologies abolish. With digitalized text and with audio and numeric formats you can navigate in a text, find references quickly, take notes on the text etc. You can access all the editorial that is offered by digitalizing it, which wasn’t the case with the adapted edition. However, thinking that Braille must remain the exclusive solution as well as thinking that new technologies answer all users needs would be wrong. Observing the different ways of appropriation of a text (audio, textual, digitalized…), it appears clearly, for me, that the answer is in a mixture of the possibilities, according to the use. Moreover, as we have
different readers in our libraries, isn’t the diversity the richness? Reading in Braille or in enlarged characters is the best way to have the best concentration, however it’s marvellous to have the possibility to use it with new technologies. Nowadays, we have many solutions to answer to the needs: Braille format, audio format, enlarged print format, digitalized format and the new audio-numeric format (like Daisy) which is a mixture between digitalized text accessible on a computer with enlarged characters or Braille and the human voice.

New technologies, without denying the importance of Braille, build a bridge between visually impaired people and other citizens. It’s a factor of integration in the society, sharing the same references, the same texts, and enlarging the possibilities of exchanges. We observe a diversity of situations in the world (above all with regard to authors rights and the possibility to distribute texts), but a universality of needs. It is essential in this context, to be aware that the equality of access to the society of information and to the new technologies is a democratic stake, above all for print-handicapped people. We must be aware not to see only the important but visible gap between northern and southern countries. Libraries have a determining role to play. In our developed societies, we will live longer and longer, better and better with more and more activities. And we won’t accept to lose the pleasure to read, with more and more frequent visual problems to solve. Adapted solutions exist, between Braille and new technologies.