

Braille preservation: recognising and respecting archival materials produced by and for the blind

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Archivist **Lisa Sisco** has worked in a variety of non-profit settings in the United States since graduating from the University of Pittsburgh with a MLIS and specialization in Archives, Preservation, and Records Management. Since graduation she served as an archival consultant for PEN American Center in New York City, which is known as the oldest literary and human rights organization in the world. In her most recent appointment Ms Sisco worked as the sole archivist at a notable natural history museum where she preserved and provided responsible access to digital and physical scientific records of all formats. Currently, Ms Sisco is consulting for the Farming Rust Foundation (FRF) and will work with her husband, the founder, to conduct oral histories with coffee farmers who are experiencing the devastating effects of coffee leaf rust around the globe. Lastly, as the daughter of a talented man who is permanently blind, she is greatly interested in the preservation of records produced by and for the visually impaired - specifically braille collections. She looks forward to continued collaboration with other archivists, librarians, and preservation professionals to ensure long-term access of these archival materials.

There is a noticeable gap in the archival literature concerning the preservation of braille and other tactile print formats that, since the eighteenth century, have been produced by and for blind and visually impaired persons. Based on the insights gained from interviews with information professionals and additional research conducted by the author into the historical usage and production of braille, this paper aims to highlight factors that may affect the preservation and accessibility of braille in archives. While this article will not generate specific preservation guidelines, policies and procedures for braille – measures to be created in a future study – the purpose of this article is to draw an initial awareness to the issues that influence the preservation of and access to these archival records.

Keywords: accessibility; braille preservation; braille transcription; digitisation; unique context

Introduction

The preservation of braille and tactile print systems¹ produced by and for the blind is, at present, a little-examined area in the archival profession. This is likely due to the physical nature of braille as well as other factors that transcend the complexity of the format. After researching the existence of best practices for handling, storing and stabilising degrading braille records, the author conducted informal interviews with archivists, librarians and conservation professionals. Soon after the initial stages of the inquiry, it became apparent that there was limited codified information about braille preservation and that, more broadly, there are additional factors that could be affecting its preservation. The purpose of this paper is to highlight how various external elements may affect the preservation and accessibility of braille and tactile print materials produced by and for the blind.

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There are influences that presumably have an effect on archivists' understanding of braille, its accessibility and preservation. One possibility that this paper will explore is that braille records are thought to be duplications of text from the sighted world. Additionally, some outlets have posed that assistive technologies, such as text-to-speech software, remove the need for traditional literacy. These notions have an effect on our collective archival opinions about the usage and existence of the format itself. The historical roots of tactile print systems for the blind, opinions identified by advocates of the format, barriers in deciphering various levels of the braille code, personally produced records, and efforts to stabilise and digitally reformat braille are topics that will be touched on in this article.

History of the format

Beginning in eighteenth-century France and then spreading worldwide, tactile print systems have played and continue to play important roles in the education and expression of the blind. Histories of braille typically begin with a statement similar to the one put forth by Frances Mary D'Andrea, the Chair of the Braille Authority of North America. She states: 'In the late 1700s, Valentin Haüy invented an embossed print reading system and a press for creating tactile books. This method turned out to be slow and cumbersome both for reading and embossing.'² Haüy's print did not endure as a prevailing standard but this Frenchman was the first to provide a means of written communication for the blind and he paved the way for others to empower the blind through literacy. Following Haüy's invention, at least seven forms of embossed print systems developed during the nineteenth through the early twentieth centuries and they were used by visually impaired persons.³ D'Andrea asserts: 'This plethora of codes meant, of course, that many tactile readers learned at least two systems – three, if they wished to have access to Braille books from overseas ... [Children] learned additional codes to have access to additional tactile books.'⁴ However, in the twentieth century braille became the dominant successor of all other writing tactile systems.⁵ Owing to its long history, archivists are in need of preservation guidelines that detail the continuing care of braille and other tactile print materials that document how the visually impaired and blind have learned and communicated for the last two centuries.⁶

Opinions about braille

Although the professional literature on braille is not extensive, there are vanguards that offer insight into the preservation of the format.⁷ In an interview with Judith Dixon, the acting Braille Development Officer of the National Library Service within the Library of Congress in Washington, DC, she stated:

Braille is always thought of as a by-product of something else. People think the real thing is print and that braille is just a transcription. So many of these things are not thought of as the actual documents.⁸

The above sentiment was echoed in another interview conducted with the Research Librarian at the Perkins School for the Blind in Watertown, Massachusetts. Perkins School was founded in 1832 as the first school for the visually impaired in the United States. Among its alumni and educators are the remarkable Helen Keller and Samuel Howe Gridley, who developed Boston Line Type – a Romanised embossed print system for the blind (see Figure 1).⁹

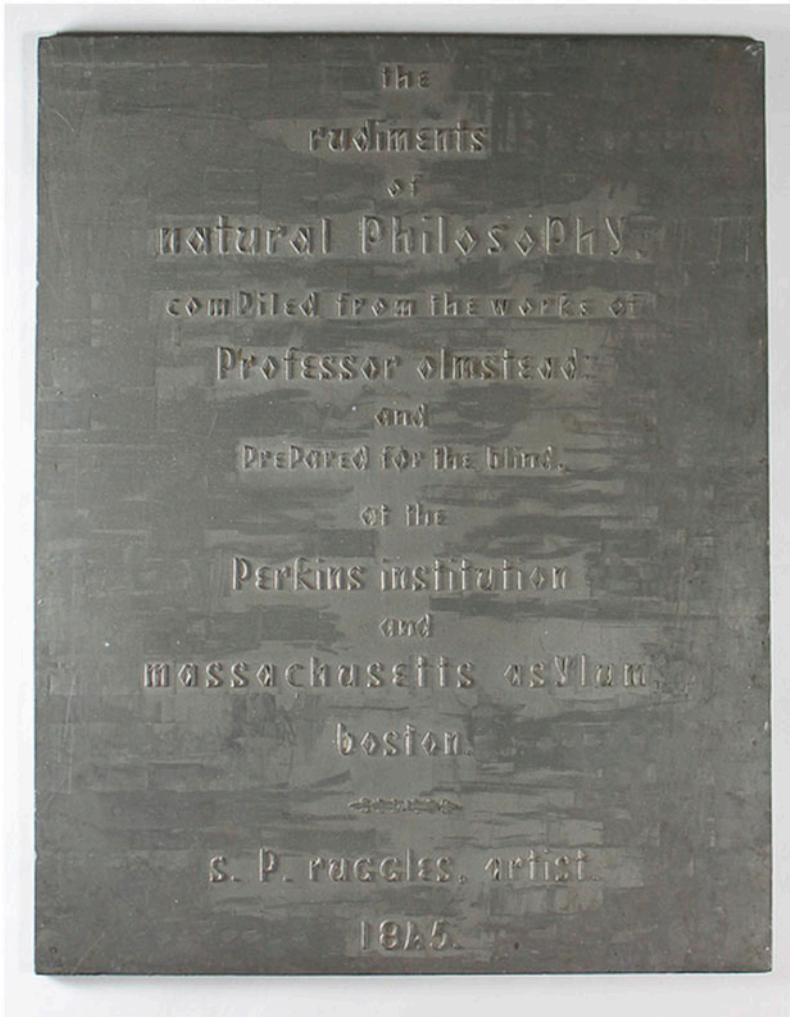


Figure 1. Example of Boston Line Type. Courtesy of Perkins School for the Blind.

Jan Seymour-Ford, one of the many advocates for the Perkins School's archival braille materials, detected that:

Braille is unfortunately not considered archival. It is seen as something to be read and as a transcription of the original. And so, it is not considered valuable as an artefact in itself, the way like a first printing of a book from 1860 is...¹⁰

The Perkins Archives possess an array of artefacts produced by and for the blind, which include archival collections donated by Helen Keller and other persons that attended or instructed at the institution.¹¹ These records are important owing to their ability to document the education of the blind. They also provide a window into the unique contexts of creation and use by their adopters. Braille texts were used and/or composed by Helen Keller throughout her autonomous scholarship and provide deep insight into the daily life of this notable deafblind person (see Figure 2).

Personally produced braille

Several archives, like the Helen Keller Archives in New York City and The Perkins School for the Blind Archives, possess only a few collections containing braille specimens that were personally embossed by their creators.¹² ‘Handwritten’ braille documents that are generated by the usage of a stylus and slate or with a Braille (that is, a braille typewriter) are seemingly rare in archival collections. However, the National Federation of the Blind Archives in Baltimore, Maryland preserves and provides access to sizable holdings of personal manuscripts.¹³ Furthermore, an estimated figure of braille and embossed print documents found in archives nationally or worldwide has yet to be investigated, but the unknown total of the formats may affect professional views. In two separate interviews with the author, information professionals Micheal Hudson, the Director of the Museum of the American Printing House for the Blind, and Charlotte Cushman, Archival Consultant at Perkins School for the Blind, corroborated the above sentiment. When asked their opinions about the absence of literature or active discussion on the preservation of braille, both Cushman and Hudson confirmed that braille is not something that every archives or library specifically maintains.¹⁴ Cushman expressed that: ‘The numbers are small, which contribute to a lack of awareness.’¹⁵

Archival appraisal decisions also influence the acquisition, aggregation and preservation of documents composed in tactile systems created by and for the blind. Archivists should cultivate blind donors who write with these systems so that future generations will recognise this work. Canadian archivist Rodney GS Carter writes:

If no traces are left, if we do not even remember that the group has been forgotten and silenced, if the group has been obliterated from archival and societal memory (the latter being dependent on the former over time), where is this recognition of silence going to come from?¹⁶

There are other factors that can explain the limited presence and representation of personally produced braille records in archives. Historically, blindness has been described as a ‘high impact, low incidence’ disability in Australia and America. Meaning, blindness affected smaller numbers of persons but these few were greatly affected. This



Figure 2. ‘Helen Keller reading Braille’. Courtesy of Perkins School for the Blind Archives.

statement will likely change owing to the fact that there is a documented growth in conditions that cause loss of sight worldwide.¹⁷ It is true, nonetheless, that not all blind people use braille. So, compounded with low incidence, an estimated aggregate of the format is conceivably small. Furthermore, it is important to note that there are many braille conventions utilised by persons who are proficient in the code.

The braille music code, the Nemeth Code for mathematics and scientific notation, and various First Nation braille scripts continue to be adopted around the globe. In light of these conventions, it is reasonable to conclude that original works are created by using these codes.¹⁸ The Library of Congress, the National Federation of the Blind and the Australian Eastern States Aboriginal Language Group recently released articles and/or pamphlets that detail the personal accounts and innovations of braille users in the areas of music, mathematics and First Nation education.¹⁹ For example, in a response to the Australian Parliament's House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs in August 2011, the Eastern States Aboriginal Languages Group noted that a 'woman named Marjorie Petrick 'is pioneering the use of braille to read and write the Arrernte language, supported by the Centre for Australian Languages and Linguistics unit at Batchelor Institute'.²⁰ It is crucial that archivists engage in outreach with braille users such as Ms Petrick in order to convey the importance of preserving their legacies for future generations.

Braille transcriptions

Transcription programs in Australia and America continue to fulfill the needs of the visually impaired.²¹ As Dr Gillian Gale stated in a 2001 release by the International Council for Education of People with Visual Impairment:

An excellent Australian national catalogue of braille texts exists. However, there have been reports of difficulties in accessing it and consequently this, in addition to the ever increasing demand for braille, has meant that some production agencies are unable to keep up with demand and students do not always receive their texts on time or may have to be content with audio substitutes. Australians do not have the luxury of receiving mandated support through national or state level braille legislation as do students in some American states.²²

For over 20 years, trained braillists in Australia satisfied individual requests from blind patrons. Like the Australian Braille Authority, the Library of Congress instituted a certification program for braille transcribers and proof-readers. A small yet notable transcription program also thrived in 1944 through the latter half of the twentieth century at a remarkable synagogue in Pittsburgh, Pennsylvania.

A group of women called the Sisterhood Braille Committee at the Rodef Shalom Congregation began a transcription program in the early 1940s. They aided thousands of blind researchers and fulfilled countless requests.²³ Although there were braille transcriptions made in numerous languages, one of the most fascinating requests was fulfilled by Sisterhood certified braillist Mrs Freda Brauman for a blind graduate student. The graduate student, Winfred J Smith, was determined to study the Nigerian language Hausa in anticipation of a trip to Africa where he would teach blind children to read in their first language.²⁴ Mrs Brauman had to quickly learn the language along with Mr Smith in order to transcribe his print version into Hausa Braille.²⁵ As a rule, transcription programs do not require the return of braille texts. Transcriptions made for patrons generally remain with the person that initiated the request. Nonetheless, examples of braille

transcriptions with unique contexts of creation, assembly and usage can be found in repositories. For example, Harvard University's Law Library holds law examinations that were created for blind law students from 1950 through 1985.²⁶ These records are distinctive because they were produced from a primary function within the university and incorporate the educational experience of blind and visually impaired students.

Issues of access juxtapose preservation

There are additional factors that likely influence the preservation of braille and tactile print archival records. The majority of archivists cannot read braille or other forms of tactile print in order to catalogue, provide access to and ultimately preserve these materials. Braille records such as the Hausa transcription mentioned in the previous section pose substantial challenges to readability for non-users. Still, there are solutions to jumpstart this process. In an interview with Anna Kresmer, the archivist for the National Federation of the Blind (NFB), she drew attention to the staff that her institution employs. Kresmer stated that braille readers, meaning blind or sighted people who are proficient in braille, help her decipher thousands of manuscripts and other braille texts that are housed in the archives.²⁷ She also stated that the NFB contracted outside scholars in the past to help decipher and catalogue her braille holdings. Ms Kresmer established the following:

Most of our braille material did not have any sort of print labels on it. It is just pages and pages and pages of braille documents. You don't know when one document ends and the other one begins. When it is large amounts full of braille, we have mainly isolated it in Hollinger boxes that can encompass it. What have started dealing with what they are, where they end, and where they begin, and what their content is. We had for a while a braille reading linguistics professor ... She wanted to study the use of Grade 3 and Dr Jacobus tenBroek had another shorthand or another version of Grade 3. He sort of had his own abbreviation. So, some of his stuff is cryptic.²⁸

In English Braille there are various levels of encoding, which, as Kresmer touched upon, are tailored to braille users' needs: Grade 1 braille is an uncontracted form that is taught to beginners; Grade 2 is a contracted form used for reading with greater rapidity; and Grade 3 braille is an advanced type of shorthand. All of the levels present a daunting task for an archivist if s/he has little knowledge of tactile print systems for the blind.²⁹

Information professional Barbara M Jones perfectly encapsulates the detriments incurred by an institution and the public if collections go unprocessed, in her article 'Hidden Collections, Scholarly Barriers: Creating Access to Unprocessed Special Collections Materials in America's Research Libraries'. Two of the points Jones makes in her article directly apply to unprocessed braille items or collections:

- They are inaccessible to the scholarly community and thus hinder research and research results...
- Unprocessed collections often are lost and forgotten in storage areas and sustain physical damage from unstable temperature and humidity, or become worn from too much handling due to lack of finding aids.³⁰

If braille texts go unprocessed and consequently remain inaccessible, researchers and the lay public will not be exposed to the significance of these materials. Moreover, the

second statement by Jones carries substantial weight regarding braille. Humidity poses a serious threat to the format because it can alter the raised cells on the document and render it indecipherable.

Digitisation

Currently, circulating braille library resources are being scanned from their physical manifestations into digital file formats. The National Library Service's (NLS) surrogacy program is reducing damage to braille musical scores within their holdings caused by active use.³¹ The NLS website reads:

The scanner also helps with preserving the collection. Of the more than 20,000 braille music scores NLS has acquired throughout the years, many have been in circulation since the 1920s. Years of storage and multiple readings have damaged some of the cells. The new scanner highlights those defective cells on the screen so that a staff member can correct the errors and preserve the score. Once the scores are scanned, the staff member saves them as ASCII files in a folder. At the end of each month these ASCII files are posted to the NLS Web-Braille site and then linked to the catalog records.³²

Considering that this program is digitising musical scores with ostensible preservation issues, how will the resulting digital surrogates be preserved in the long term? This is an important question that braille surrogacy programs must consider as they strive to preserve and provide greater access to braille documents.

There are also new and untapped digital solutions that may broaden access to these archival materials. In May 2012, the author contacted a non-profit company based in San Francisco, California that uses a technology called Reflectance Transformation Imaging.³³ This technique allows its users to digitally capture, enhance and preserve the surface of three-dimensional artefacts.³⁴ Moreover, Cultural Heritage Imaging utilises open source standards to facilitate easier migration in the future. The company has put thought into the preservation of its digital captures and thus could provide a viable way to digitally preserve braille as an artefact. Although this technology would not initially benefit the visually impaired and blind community, it would likely result in awareness among sighted and non-specialised archivists about the importance of braille preservation.

Braille literacy

Braille literacy is fought for in many countries around the world. In America and Australia, literacy is extolled for its ability to allow the blind to autonomously read and write without being reliant upon audio texts.³⁵ Therefore, the struggle for braille preservation relates to a larger literacy debate.

The National Federation of the Blind is ardently working to increase literacy rates in America. By 2015 this non-profit organisation hopes to double braille literacy rates by outreach and education.³⁶ Thanks to technological advances and changes in course curriculum, literacy rates have decreased in recent years. A report published by NFB testifies:

It is often said that technology obviates the need for braille. The availability of text-to-speech technology and audio texts, for example, is advanced as an argument against the use of braille. But literacy is the ability to read and write. While using speech output and recorded books is a way for students to gain information, it does not teach them reading

and writing skills ... No one would seriously suggest that alternate sources of information, like television and radio, replace the need for a sighted child to learn to read; the same should be true for braille.³⁷

In light of these debates, archivists should strive to preserve tactile print systems such as braille with the aim of representing a multiplicity of perspectives. The profession should be aware of external factors that influence literacy and the ongoing maintenance of braille – especially if this medium is removed from curricula.³⁸

Hope for the future: collaborating with conservators

Conservation intervention provides a sense of optimism for the future of braille preservation. In an interview with the author, conservator Samantha Sheesley stated that she was not discouraged to take on projects such as degrading braille. Ms Sheesley has solved similar preservation issues with non-braille media.³⁹ She confirmed that she works with unusual pieces on a regular basis, such as a project preserving double-sided embossed wallpaper.⁴⁰ It is hopeful that as more archivists contract conservators to stabilise degrading archival braille materials, the professions will come together to generate discussion on this topic.

Archivist Helen Selsdon of the Helen Keller Archives and Micheal Hudson, Director of the Museum of the American Printing House for the Blind, shared news that they contracted conservators or local conservation centres, such as the Conservation Centre for Art and Historic Artefacts (CCAHA) in Philadelphia, Pennsylvania. Ms Selsdon in particular lauded the efforts of the CCAHA and has received successful results in the stabilisation of a unique braille document that dates back to the first mechanical printing of the format in the late 1830s.⁴¹

Conclusion

While data on personally produced and transcribed braille materials found in archives is unknown at the present time, archivists should be aware of the important task ahead to preserve this code and erstwhile tactile print systems that were used by the blind from the eighteenth century. Since this inquiry began in late 2011, several university archives have blogged about their encounters with braille and tactile print systems when processing backlogs, which is a great way to engender awareness for these records.⁴² Archivists should continue to broadcast their holdings and reach out to organisations such as the National Federation of the Blind chapters, Vision Australia⁴³ and conservation centres in order to collaborate on the preservation and accessibility of their braille holdings. In closing, Marc Maurer, a lawyer and the former long-time president of the NFB, wrote:

I have read braille to myself for study and pleasure, I have read braille to my children, I have read braille to judges in courts of appeals, and I have read braille to tens of thousands of blind people. My mother taught me to read it, and I have taught braille to others. It is the medium for my learning, my work, and a very significant piece of my life. I have enough braille in my possession to give me the opportunity to read for the rest of my life even if all of the electricity disappears. I cannot imagine a life without a braille volume to stimulate, entertain, and inform.⁴⁴

In order to preserve and provide access to the corpus of material that creators like Dr Maurer generate during their lifetimes, information professionals must be cognisant

of how the blind and visually impaired express themselves so that repositories will protect and maintain these records both nationally and around the world.

Endnotes

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