
Libraries for the Blind as Accessible Content Publishers: Copyright and Related Issues

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ABSTRACT

Libraries for the blind developed as charities, circulating and producing, for the most part, Braille. Their seeking of copyright licenses to permit them to produce such books did not pose any particular threat to copyright holders and publishers. But as they started taking their places as libraries that rendered library services, and as technological developments enabled them to make and circulate accessible books in various forms to readers with different print disabilities, it became difficult for them to have to seek and obtain such licenses for a variety of reasons. Many governments therefore enacted statutory exceptions to their copyright laws to assist them. Some of those exceptions are considered here, with reference to their efficacy. Particular attention is paid to difficulties arising out of those exceptions as they impact interlending services. It is argued that those laws alone do not appear to be at the heart of the problems libraries for the blind experience with regard to interlending. Rather, the delivery of digital materials via the Internet, being entirely different from the delivery of books through interlending arrangements, is creating obstacles that require agreements with publishers, if they are to be addressed.

INTRODUCTION

In a letter published in the *Times* of London on December 2, 2005, Professor J. A. L. Sterling, of the University of London's Queen Mary Intellectual Property Research Institute, very aptly observed that "In the digital era, international copyright becomes an Augean stable requiring a jurisprudential Hercules to bring order out of chaos" (p. 24). In Greek

mythology cleaning the stable of King Augeas was the fifth task set by Eurystheus for Hercules. This was not just an insurmountable task for a super stable hand: the Augean stable was the largest and filthiest in the then known world. The many goats and oxen that belonged to Augeas had lived there, in the biggest stable ever, without it ever having been cleaned. "The result was a mountain of filth and litter, which not even Hercules could clear away in a lifetime—not, of course, from want of strength, but from want of time" (Francillon, 1896). Professor Sterling was discussing problems arising out of Google Book Search. But he might as well have been responding to a catalog of problems, and the chaos they cause, that plague libraries for the blind with regard to copyright issues.

This article focuses on those problems and how they have come about. It also deals with steps that are being taken, both by libraries for the blind and by the international blindness movement, to resolve them. An appreciation of the nature of work typically undertaken by libraries for the blind, the social environment they operate in, and of how technological change has affected them is however necessary in order to place these issues in their proper perspective.

WHAT ARE LIBRARIES FOR THE BLIND?

General

"Libraries for the blind" has become something of an imprecise term, though it will be used throughout this article. It is a term that is nowadays used in respect to different types of institutions responding to ever-increasing and changing types of reading needs.

In an age of political correctness, the reference to "the blind" engenders a measure of discomfort even with those who habitually employ it. But it is a well-entrenched one. "Blind" has—probably without sound justification—become useful shorthand with which to denote varying degrees of lacking visual acuity.

Many such libraries use the term "blind" as part of their name. The South African Library for the Blind, the National Library for the Blind in the United Kingdom (NLB), the Danish Library for the Blind (DBB), and the Dutch Federation of Libraries for the Blind (FNB) are notable examples. Other such libraries are owned by institutions for and of the blind, for example, the libraries of the Canadian Institute for the Blind (CNIB), the Royal New Zealand Foundation of the Blind (RNZFB) and the Royal National Institute of the Blind (RNIB).

The "of" in Royal National Institute *of* the Blind and Royal New Zealand Foundation *of* the Blind is a reflection of changing perceptions and circumstances. It represents the notion that blind people have taken ownership of an institute that, in the past, had existed as a charity to serve and identify needs that they themselves are now both determining and serving.

Some institutions—whether by luck or good management is not important for present purposes—have what one might call more modern names, like the Korea Braille Library, the Library of Talking Books and Braille in Sweden (TPB), and Vision Australia Information and Library Service, to mention three examples.

Bookshare.org is a virtual library. It distributes electronic books only, which blind and other readers with print disabilities read with the assistance of computers. It has no premises that house shelves. Even its name suggests that all notions of format are irrelevant, though of course what is decidedly relevant is that there is no room for hardcopy books at Bookshare.org. It is not the contention here that Bookshare.org is a library—neither that it is not. Bookshare.org is an important phenomenon though. It is the logical consequence of doors that have been opened by the digital revolution to people who cannot read print.

Typically, libraries for the blind contend that their current members are not “the blind” per se but all readers with print disabilities (Kavanagh & Christensen Sköld, 2005). In some instances the addition of more than blind beneficiaries of the services of those special libraries are reflected in names like the National Library Service for the Blind and Physically Handicapped of the United States Library of Congress (NLS) and, also in the United States, Recordings for the Blind and Dyslexic (RFB&D), formerly just RFB.

Braille and the Development of Libraries for the Blind

The adoption of Braille as a reading and writing medium of blind people has been the catalyst for the proliferation and development of libraries for the blind all over the world.

There were a few libraries and institutions that had made available to blind readers embossed books of various descriptions even prior to the adoption of Braille, for example, the Pennsylvania Home Teaching and Free Circulating Library for the Blind, established by Dr. William Moon and John P. Rhodes in Philadelphia in the 1880s, which contained materials written in Moon type, probably the most durable alternative to Braille (Mellor, 1998). In the late nineteenth century a few libraries for the blind had been established in the United States, but in that country no fewer than five tactile reading systems were in use then, which obviously served collection development poorly. In a letter to the *New York Herald* published on May 31, 1905, Walter G. Holmes wrote in part:

The raised type has given [blind people] a great power to entertain themselves and brighten their hours, but these books are so expensive that only a few of the blind can afford them. For instance *Ben Hur* in type for the blind costs \$10.50. A few cities have libraries for the blind, but very few of the 100,000 blind in the United States have access to them. We are able to buy these books for my [blind] brother, and know-

ing the great pleasure they give him, my heart sighs for the many who do not have these books. (as cited in Mellor, 1998)

Helen Keller remarked in 1952, in a public speech at Louis Braille's reburial in the Pantheon in Paris together with other French national heroes that blind people owe Braille (1809–1852) what the world owes Gutenberg (Kimbrough, 2005).

Few people realize today that Braille had emerged only in the latter half of the nineteenth century only as the accepted alphabet used by blind people from among more than one contending medium. It was adopted in France in 1854, two years after the death of Louis Braille, soon after that in Switzerland, in the United Kingdom after 1870 only (Kimbrough, 2005)—in a process that culminated in 1905 (Mellor, 1998)—in Missouri (United States) in 1860, and in Boston in the 1870s. It took a long time, however, before Braille became the standard in the whole of the United States. Braille took root there over time. Only in 1932 was a more or less uniform system for English Braille adopted on both sides of the Atlantic (Mellor, 1998). To be sure, there had been tactile books and professional notation long before the invention of Braille, but they had been produced on a very limited basis for educational purposes and for individual professional needs only, like those of the blind concert pianist Maria Theresia von Paradis (1733–1808), for whom Mozart had written a piano concerto, and the blind Lucasian professor of mathematics at Cambridge, Nicholas Saunderson (1682–1739) (Kimbrough, 2005). Embossed books were used more widely for educational purposes; for example, in about 1784 Valentin Haüy, the father of the education of the blind, founded L'Institution Nationale des Jeunes Aveugles (The Institution for Young Blind People) in Paris as the first school for the education of the blind (Kimbrough, 2005). But the later advent of Braille and the devices with which to write it seem to have contributed to the development of book production and libraries for the blind into phenomena that could take their place alongside their more traditional peers because Braille was not, in the words of the blind French philosopher Pierre Villey, a system that “fell into the logical error of ‘talking to the fingers in the language of the eye’” (as cited in Mellor, 1998).

Libraries for the Blind as Charities

Early libraries for the blind were charities (Kavanagh & Christensen Sköld, 2005). In 1932 Lord Blanesburg, chairman of the Ministry of Health Advisory Committee on the Welfare of the Blind in the UK, wrote about charitable work for the benefit of blind persons in these terms:

The affliction of blindness makes an irresistible appeal. The blind can count all men amongst their friends. Their claim upon everything that is chivalrous and selfless in human nature can never be denied.

The record of agencies established, of benefactions made (for the

relief of blindness, for the training of the blind in every variety of useful work, for placing at their service the treasures of literature, and enabling them to exercise their musical, literary, and artistic gifts, for their medical and other care) is a long one, and is confined to no period of history, to no country or continent. The list of those choice spirits who have devoted their lives to the care and education of the blind is as long, and it, too, is limited by no distinctions of race or of creed. In the result, the blind to an astonishing degree have been, and are being, helped to help themselves to be self-reliant and independent, foremost in some walks of life, prominent in many others, efficient in all. The resources now at their service, helped by that strange inward light which seems to cheer and inspire their physically darkened lives, have made of our blind friends to-day the good citizens that they are. (Wagg, 1932, foreword)

Tactile media did not for long remain the only means by which blind people could read. The advent of sound recording technology enabled agencies that, in the words of Lord Blanesburg, placed the treasures of literature at the service of blind people in the form of so-called talking books—that is books that were read by humans and recorded for later use in electromagnetic form.

PRODUCING BOOKS UNDER LICENSE

The charitable institutions that were to supply blind people with books obviously had to produce those books themselves. Even now, at the beginning of the twenty-first century, both book circulation and book production are considered core activities of libraries for the blind (IFLA Libraries for the Blind Section, 2006). Libraries for the blind are the re-publishers of content in respect of which others—whether authors or publishers or both—hold the copyright. Books for the blind are made accessible to them. In one sense they are copies of the originals, but they are copies to entirely different forms; thus, in another sense they are republications or new editions of those works.

In its most basic sense, copyright embodies the entitlement of the holder thereof to control the circumstances under which the content to which it pertains may be copied, in whole or in significant part. In order to make an accessible copy of a work, a library for the blind or any other producer of that accessible copy must, therefore, obtain a license from the copyright holder that permits it to do so. Otherwise, however laudable the purpose of making an accessible copy, the accessible copy is an infringing copy, that is to say a copy that infringes on the copyright of the right holder. It stands to reason, then, that since the time of their inception, libraries for the blind would, in the main, have done the honorable thing and requested the copyright holder's permission or license to produce—with or without the payment of royalty—an accessible copy or edition of a work for use by blind people. By and large, licenses were granted.

No doubt the charitable nature of the enterprises requesting such licenses served as an incentive to rights holders to agree to such licenses. But the fact that books for the blind were typically produced in specialized formats played no small part in reaching those decisions. Braille is not a medium that can be put to commercial use. A Braille book, produced for circulation purposes by a library, is unlikely to be sold to the prejudice of its original publisher. It cannot be read by those members of the public who typically buy books. And, most significantly, it cannot be copied by way of a photocopying process. Publishers therefore took no significant risks when granting licenses to libraries for the blind to have Braille books produced for use by blind people. They were being produced in an obscure code, to be enjoyed by people who were perceived as basically needy.

The development of audio recording techniques, which enabled the production of talking books, gave rise, for the first time, to the prospect of the commercial use of books especially produced for reading by the blind. A recording of an audio or talking book could, in theory, be accessed by any member of the public. It could be enjoyed like any other dramatic production that is meant to be listened to only. Like blind people, sighted people also routinely listened to and greatly enjoyed productions, whether of music, poetry, or anything else of mass interest. All that was required was access to the necessary playback equipment. Technology started to emphasize the commonalities between blind people and their sighted counterparts. In a sense, all tools or technologies are invented to overcome barriers or disabilities, whether environmental or physical, so it is not so strange that this development, as others would do later, brought the possibility of solving the problems of blind people within the purview of mainstream technology. But in the context of talking books it was in the interests of publishers especially, but possibly also of the charitable institutions who depended on the alien qualities associated with blind people to raise their funds, that the reading needs of blind people should not be mainstreamed. Doing so would have opened up potential areas of risk to the publishing industry. It raised the spectre of unauthorized use of materials created for the blind by sighted people who possessed the requisite technology.

It is small wonder, then, that producers of literature for the blind took to using specialized recording means. Books recorded on vinyl records were typically recorded at a number of revolutions per minute not commonly used by the producers of commercial records. In later years, audio cassettes were often recorded at half the speed at which commercial tape recordings usually played, and the channels used for stereo recordings were used for the recording of altogether separate sound tracks. In some instances specialized audio cassettes were developed by some libraries for the blind.

Those specially produced sound recordings had one common fea-

ture: they could not be enjoyed without the use of specially developed equipment, which was not commercially available. Reading those books was akin to reading Braille in the sense that what was required to do so might not have been a unique skill, possessed almost exclusively by blind people, but a unique, usually expensive, tool possessed almost exclusively by blind people was required. And so the stage was set for the production of alternative format books for blind people by way of expensive specialized equipment. Cheaper technologies were not widely embraced. The nowadays almost universally known but nevertheless impenetrable code of Louis Braille became paralleled by idiosyncratic formats and recording techniques in which the commercial world was even less interested than it was in Braille itself. Everybody involved in the publishing industry remained more or less happy to grant licenses for the production of those alternative format books, since doing so remained a benevolent gesture toward a charitable activity, which, although it was publishing properly so-called, remained cloaked in relative technical obscurity. As long as money could be found to manufacture, acquire, and distribute commercially insignificant technology among blind people, nobody—not the producers of alternative formats, nor the publishing industry—had anything to lose.

Yet the people who were the intended beneficiaries of these traditional arrangements—blind people themselves—were also prejudiced by them. Reference has already been made to the expensive technologies necessitated by the measures that were taken to secure the goodwill of the publishing industry. Money that could have been used to produce alternative format books had to be spent on the technology with which to read them. Often blind people could not afford to purchase the equipment they needed. Libraries for the blind therefore had to provide, in addition to the books themselves, expensive machines without which the books could not be read. As time wore on, the route taken with the development of specialized talking books proved costly to libraries for the blind. But there were other disadvantages associated with having to request copyright licenses.

DISADVANTAGES ASSOCIATED WITH REQUESTING COPYRIGHT LICENSES

Burdensome Terms

A license embodies the terms upon which the copyright holder agrees to the reproduction of the protected materials in an alternative format. Libraries for the blind, as charities, have no bargaining power when they request licenses. A copyright holder is therefore free to dictate those terms almost unilaterally. So, for example, the library might be required to renew the license request from time to time. This is a strange require-

ment because one would have expected that once the alternative format publication has seen the light of day, the copyright holder, having granted the license under which it has been produced, is not free to decree its destruction if the license request is not renewed.

Copyright holders have also been known to grant a license for the production of a book in Braille but to refuse a license for its production as a talking book. One suspects that this usually happens out of a misplaced hope that if it is not available as a library book to the blind, they will go out and purchase the commercial audio book. A further type of constraint that is imposed from time to time relates to the number of copies that a library for the blind is entitled to produce. Copyright holders appear to forget that librarians for the blind—and not they themselves—are the best judges as to how many copies of a particular work a given library requires. They appear to forget, also, that the likelihood of prejudice to them has little, if anything, to do with the number of copies the library in question produces.

One final example of constraints imposed by copyright holders relates to the geographic area in which the reproduction of the protected work may be circulated. From time to time, it is required of a library that a particular book may be circulated only within the boundaries of the country in which it has been produced. That particular book is therefore out of bounds as available stock when an interlibrary loan request in respect of it is received. The copyright holder prefers that the cost of the books' production in an alternative format be duplicated in the country from which the interlending request emanated, or that the requester should go without, notwithstanding the otherwise ready availability of an alternative format copy.

High Cost

It stands to reason, then, that the cost of copyright administration for libraries for the blind is very high. Copyright administration cannot be managed by clerical staff alone. Permissions requests must be filed properly, renewal requests must be diarized, permissions must be consulted in cases of interlending requests, and if copyright holders do not respond to license requests, further follow-up action is required.

Reference has already been made to various types of recordings that have been used for the production of audio books. Typically, as audio technologies develop and old technologies become obsolete, talking books must be migrated from one medium to another. In each case that necessitates a wholesale migration of a talking book collection, permissions must be consulted on an individual basis in order to ensure that the terms of each given license may be interpreted to sanction the migration of that particular item from one talking book format to another. If not, a new license must be requested. The administrative burden this entails

requires a high level of skill and a considerable amount of hard work in cases of large collections.

Delays

The conversion of a book into an alternative format is a lengthy process. It takes time to narrate a talking book. Narrators are in many instances volunteers who cannot devote themselves full-time to reading books for use by blind people. The process involves both the reading of the text and the editing of mistakes. In some cases, where the materials are complex, some preparation time is required. Once the text has been read, a measure of post-production work is in addition required, after which copies must be made, packaged, and labelled.

For many years, Braille books had to be transcribed manually onto Braille paper or onto plates that were used in the embossing process. Those transcriptions then had to be proofread and mistakes had to be corrected. The work can with justification be described as a labor of monks. The process has to some extent been made easier by digitization. Digital text can nowadays be converted to digital Braille by means of software (Kerscher, 1999). But the digital text nevertheless must be captured, either by way of copy typing or scanning and optical character recognition. Braille is a complex script. Each language has its own code of contractions of frequently used words and letter groups in that particular language. Braille translation software makes mistakes because of the ambiguities inherent in the use of contractions. The word "mother" can, for example, be contracted in the word "smother," but it would be nonsensical to contract it in the word "chemotherapy" (De Klerk, 2005). To ensure that the final product does not contain mistakes that render the Braille difficult to read, proofreading is therefore still necessary, as it is during the text-capturing process.

All of those steps require time. The conversion process cannot be embarked upon until and unless a license to do so has been obtained. As with any application process, the time delays occasioned by it may vary greatly from case to case, but it can nevertheless be accepted that in the best cases, it adds considerably to an already lengthy conversion process. This means that blind people must wait far longer than their sighted counterparts before they can gain access to particular books they require.¹

Student Literature

Naturally, the problem is a particularly pressing one in the case of student literature. A blind student simply cannot identify prescribed texts on the first day of term and hope to have access to them at the same time as his or her sighted peers. In point of fact, it is impossible to provide students with effective access to required texts if copyright licenses must be applied for in the ordinary course. That part of the production process alone is so lengthy that it disables libraries for the blind as effective sources of assistance to students at any educational level whatsoever. In jurisdictions

where blind students are required to obtain contractual copyright licenses if their study materials are to be converted to alternative formats, those students tend to study by means that are, by and large, illegal.²

Students typically do not require the use of textbooks in their entirety. Any license to produce a textbook in part only is of necessity a more difficult one for which to apply, as it entails having to make a license request that is not a standard one. It cannot be generated from a precedent by someone without experience in such matters. It has to be formulated with reference to the needs determined for the particular course for which the textbook is required.

Mergers, Take-Overs, and Liquidations of Copyright Holders

As a general rule, copyright vests in the author of a published work, but publishers enter into agreements with the authors whose work they publish that provide, among others, for the transfer of copyright in the published works to the publishers on certain terms. To the extent that those terms require a license to be granted both by the author and the publisher, the publisher can and mostly does act as an intermediary between the library for the blind and the author.

The application process can become very complex in cases where the original publisher transfers those rights pursuant to a merger or take-over or if, in the case of smaller commercial concerns, they are wound up and the rights are not disposed of in a manner that makes it possible to trace the current holder. This is not an infrequent occurrence in developing countries. During the year 2005, for example, the South African Library for the Blind identified more than thirty books written in indigenous South African languages in respect to which neither the copyright holder nor the author could be traced. The consequences are tragic for blind people who belong to cultural traditions that still have what one might call, to quote Lord Blanesburg yet again, few treasures of literature.

Newspapers and Magazines

In cases where contractual licenses are required to do so, the production of magazines for the use of blind people is impossible where, as is often the case, those magazines carry syndicated materials over which the magazine publisher may not have further rights of disposition. The publisher could agree to the republication of content produced by the magazine or newspaper itself but not to the republication of syndicated materials. Where the need to procure licenses prevails, libraries for the blind cannot provide their readers with content that is nationally available. Those readers must, more often than not, look to foreign periodicals for their reading requirements. All of these difficulties experienced by libraries for the blind came to be seen by people working in the field and by blind readers alike as barriers to access to information.

HUMAN RIGHTS–BASED PERSPECTIVES

After the adoption by the United Nations of the Declaration on Human Rights, the second half of the twentieth century saw many traditionally held views reconsidered, many articles of faith either rejected or reformulated, and many social attitudes either reshaped or tempered. Social and scientific communities began reappraising and in some cases reinventing themselves. The world political order underwent radical changes that sent ripples around a world, which became increasingly smaller as the result of technological innovation, and the postcolonial community of nations increased in size and levels of diversity and social mobility. Diversity is currently regarded as requiring accommodation, either because it is a social or political threat or because it is socially desirable to do so. The international consensus is that economic and social development, whether of individuals, communities, nations, or regions, is necessary because economic and social divisions that are too large are bound to lead to unacceptable levels of instability of the prevailing world order. In short, stability is no longer assumed, and change is regarded as the norm, which requires careful management. Little is taken for granted, either in our social or our physical environments. Responses to these societal changes have varied, but constructive ones focus on the evolution of values and philosophies that are appropriate to new conditions. In some cases those values are adopted as constitutional laws. Sometimes they are adopted multilaterally by nations as treaty obligations. Even in countries where they are not codified, such values become commonplace in the press, the speeches of politicians, the writings of public intellectuals, and so on. Even where they are not necessarily actively implemented or enforced, they have become common rhetorical devices of individuals and groups to assert freedoms and entitlements, or perceived entitlements, rather than needs only.

Values that have emerged and are relevant to the present discussion are, for example, entitlements to equality, to human dignity, to access to information—whether for purposes of personal development or to enable people to assert other freedoms or entitlements—the right to self-determination, and access to basic education. Responding to these developments, the international library sector sees itself also as needing to focus on priorities that reflect their impact. The promotion of literacy, reading, and lifelong learning; providing unrestricted access to information; balancing the intellectual property rights of authors with the needs of users; and promoting resource sharing are some of the priorities identified by the International Federation of Library Associations and Institutions (IFLA, 2001) at present.³

People with disabilities have, likewise, developed theoretical perspectives on their own circumstances that are in keeping with these human rights–oriented perspectives. Community-based representative self-help organizations for and of people with disabilities pursue agendas that are

nowadays commonly informed by the philosophy that, rather than focus on the needs of their members and constituencies only, the attitudes of society that contribute to the disabling effects of people's physical, sensory, and intellectual circumstances also require attention. This is sometimes expressed as something of an exaggeration, by saying that the disability movement insists on a move away from the so-called medical model of disability and toward a social model. The objectives of progressive organizations that make disability their core business invariably are all aimed at the ultimate goal of full social inclusion and self-determination of people with disabilities.

LIBRARIES FOR THE BLIND AND HUMAN RIGHTS

Libraries for the blind are, first and foremost, libraries. Institutions that were founded with very few Braille books and very limited means to buy or produce more of their own now have considerable stock of books in different formats. They are therefore—in many cases—fully fledged members of their local and national library communities, some even of the international library and information services community. Their members require their services not for recreational purposes only but also for professional and research purposes. As societies develop, more and more of their blind members attend institutions of higher learning and pursue professional careers. Even their value to society as providers of recreational reading is on the increase, as, in the developed world, communities begin to age with adverse consequences to the eyesight of many otherwise still healthy individuals who would like to carry on reading.

The governing bodies of many libraries for the blind now have blind people serving in them. In some instances community-based organizations for or of the blind own relatively large libraries for the blind themselves. It is fair to say that blind people have become influential in the running of their own affairs generally and in the management of their libraries as well. It is, therefore, not surprising that libraries for the blind have had to downplay their status as charities somewhat so as not to offend their members.

Libraries for the blind also—in keeping with the value of inclusivity and to broaden their constituencies—seek to develop their readership beyond the category of blind people. People with dyslexia, for example, can potentially benefit greatly from talking books that are routinely made available to the blind, as well as from new technologies that are being taken up by libraries for the blind. Thus, those libraries strive to serve not blind people only but all people with print disabilities.

In many instances governments—for good reason—take an interest in these former charities. In some cases they have become integrated as part of public library services; in some cases they are subsidized; in some cases they are assisted by other means.

LIBRARIES FOR THE BLIND AND THE DIGITAL REVOLUTION

Besides political, philosophical, and attendant cultural developments that characterized the latter half of the twentieth century, the digital revolution also had a profound impact on society, especially during the last two decades. It presented libraries for the blind with immensely interesting opportunities to improve their Braille book production outputs. It also gave rise to fascinating techniques for making talking books more accessible. Blind readers gained almost full access to computers, which changed radically not only the manner in which they do their work but especially the manner in which they read.

Reference has already been made to the fact that, for many years, Braille books were transcribed manually and that nowadays the process has become computerized. While scanning and optically recognizing the scanned images of printed materials for conversion to digital text files is a much faster means of capturing materials that are to be converted to Braille, the production process may be enhanced even further if Braille producers are able to access publishers' production files rather than to have to capture the data themselves. The input process can thereby be eliminated in its entirety, which would cut down not only on the time previously taken to do so but would eliminate the need to proofread the materials for mistakes other than Braille translation mistakes. Besides saving money, this would, most significantly, save production time (Owen, 2004).

Besides the fact that Braille can be produced much faster if a producer has access to a publisher's digital text, blind people can, themselves, read digital text straight off a computer. They can do this either by making use of synthetic voice output—in which case the text on the screen is spoken to the reader synthetically—or by making use of display devices that provide them with access to their computer screens by displaying the text in refreshable Braille, that is to say as Braille dots that are continually re-configured as the display focuses on a different area of the screen. (Both synthetic voice and Braille output devices are driven by specialized software).

The quality of some synthetic voices is extremely high. It is therefore also possible to generate a talking version of digital text as a talking book, that is to say a sound recording of a synthetically read document or series of documents. Talking books that are generated in this way can be produced in a fraction of the time that it previously took to produce the same quantity of material, either as Braille or as a talking book read by a human voice.

There are libraries for the blind who, by arrangement with publishers, can produce overnight, through almost fully automated production processes, either sound recordings of television program listings for multiple channels for an entire month, distributed through the mail on compact

disk, or digital versions of entire newspapers, duly marked up to make them fully accessible to blind readers, who can download them via the Internet and access them with synthetic speech or Braille displays soon after their delivery to the library concerned.

The fact that blind readers have direct access to digital text via computers loaded with the requisite software has interesting implications for libraries for the blind. Braille and talking books are no longer the only media by means of which blind people can read. They can buy print books or borrow them from their public libraries, scan them, and have them converted to digital text, after which they can be read. In addition to Braille and talking books, libraries for the blind can make digital text available to their readers. They can still add value to those files by marking them up to enable readers to access them as sighted readers would navigate books, that is to say to be able to go directly to predefined reference points, like chapters, desired pages, and so on.

In theory, blind readers can acquire books in electronic formats directly from publishers, and depending on the actual formats used, they can access them directly. It bears emphasis that this is a theoretical possibility only at this stage, in part due to file formats used by publishers and, more significantly, because publishers do not routinely distribute books directly to the public (Beckman Hirschfeldt, 2005).⁴ Publishers are also notoriously cautious about making any of their products available in digital form. The concern is that digital documents, like sound recordings, can be copied without any loss of quality. The copy is a direct replica of its original. If they do make a publication available in digital form, it is usually protected against unauthorized copying by copy protection measures, which affect the accessibility of the files by blind readers who might need to switch formats for better interaction with their screen-reading software.

But the possibility of direct dealings between blind readers and publishers is important. Libraries for the blind are now more integrally involved in publishing. In a sense they are now bureaucracies that function as intermediaries between blind readers and publishers. To be sure, blind readers cannot read optimally without them: they add value to existing digital text; they convert print to Braille; they convert print to talking books. They provide library and information services to the blind like public libraries do to sighted readers. But they are also duty bound to do the best they can to extract from the world of publishing the maximum possible benefit for their readers and to make it easier for them to acquire access to the books they need and want to acquire, simply because the digital age makes this possible like never before.

The publishing industry, interestingly enough, has also discovered the value of talking books to the general public. There are, therefore, areas of mutual interest between publishers and libraries for the blind like never

before (Ghylling, 2003). No doubt those will increase as an aging public with failing eyesight who are nevertheless still able to read larger typefaces demand from either the libraries for the blind or their publishers books they can still read.

COPYRIGHT REFORM FOR THE BENEFIT OF BLIND READERS

In many countries where blind people and their libraries have been able to lobby their governments, copyright laws have been amended to confront the problems experienced with the obtaining of licenses from publishers to reproduce materials in alternative formats, so as to make them accessible to blind readers. Statutory exceptions to copyright protection have been enacted, which provide, under certain circumstances, for statutory licenses to certain individuals and organizations to produce alternative format materials for readers in need thereof (Lung, 2004).⁵

These measures are extraordinary in their effect. They constitute radical departures from the accepted norms of copyright protection. They permit the production of accessible materials without recourse to copyright holders. In a sense, therefore, they prevent copyright holders from asserting their otherwise usual entitlements to prohibit the reproduction of the objects of their copyright into alternative formats. A radical analysis would suggest that such measures are akin to expropriations without compensation, albeit expropriations in the public interest, under circumstances where copyright holders would not ordinarily be able to show they would suffer likely financial losses in the result. It is beyond the scope of this article to examine whether, and to what extent, the expropriation analogy is accurate. Such an analysis would, in any event, be futile. Expropriations are regulated very differently in different jurisdictions. If, therefore, the analogy holds, then the question would still arise whether, in a given jurisdiction, the expropriation is nevertheless permissible under the laws governing those matters in that particular jurisdiction.⁶ It is worth noting, though, that in the United States the constitutional protection of property is extremely strong, so that nobody may be deprived of property without due process of law.⁷

The expropriation analogy is interesting because in countries where copyright holders are dissatisfied with the statutory exceptions to their copyright protection and where alternative format producers fear that they may be benefiting from measures with doubtful constitutional validity, it stands to reason that they would be likely to interpret their entitlements under those exceptions conservatively. It is clear, though, that countries that do enact such statutory exceptions do not violate their obligations under international law. The Berne Convention for the Protection of Literary and Artistic Works (Berne Convention, 1886) vests the exclusive right to authorize the reproduction of such works in their authors. Authors may and invariably do transfer most of those rights to their publishers. But the

Berne Convention permits states to enact statutory exceptions of this nature. It provides as follows: "It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author" (Berne Convention, 1886, Article 9). It seems clear that the benefit of blind readers—indeed of all persons whose ability to enjoy protected works is hindered because of copyright protection—is a so-called special case, precisely because the work, as published, is inaccessible to them. Making a previously inaccessible work accessible seems, moreover, to be perfectly consistent with the normal exploitation of that work. As long as statutory exceptions ensure that such reproductions do not prejudice the interests of copyright holders unreasonably, they will be permissible under the Berne Convention.

In all countries where statutory exceptions have been enacted, cognizance has been taken of the requirement that permissible reproductions ought not to prejudice the interests of copyright holders. Legislation tends to be very specific about the institutions authorized to undertake permitted reproductions. Care is taken to permit such activities by bodies conducted on a not-for-profit basis, or designated government agencies, or specially registered agencies with a licensing authority (Roos, 2005). The principle is that although publishers are not able to make money out of selling their work to blind readers, nobody else can either. But publishers are not precluded by these measures from marketing their wares to blind people. An analysis of a representative sample of such statutory exceptions has been published elsewhere (Roos, 2005). It reveals that, although the problems associated with the procurement of statutory licenses to produce books for blind people have by and large been addressed by them, they have given rise to a variety of other issues that require scrutiny.

Accessibility and Special Formats

In 2002 the Copyright, Designs and Patents Act of the United Kingdom (1988) was amended by the Copyright (Visually Impaired Persons) Act of 2002. According to its long title, the purpose of the amendment was "to permit, without infringement of copyright, the transfer of copyright works to formats accessible to visually impaired persons." Significantly, this law is based on the assumption that determining what "formats [are] accessible to visually impaired persons" is not a matter of law, but one of fact. The UK Parliament did not lay down what those formats ought to be. In the Copyright, Designs and Patents Act it is permitted, under the circumstances laid down therein, to make accessible copies for multiple people or an accessible copy for an individual (1988, Section 31A(1)). "Accessibility" is the key concept of the amending legislation. This provision should be contrasted with the position in the United States, where reproductions are

permissible only if they are made in “specialized formats exclusively for use by blind or other persons with disabilities” (United States Copyright Act, 1996, Section 121). The specialized formats referred to in the United States legislation are “Braille, audio or digital text which is exclusively for use by blind or other persons with disabilities” (Section 121).

Many libraries for the blind are at present converting their talking book heritage from analogue to digital formats according to the DAISY standard, which is the subject of another article in this issue. Proponents of the DAISY standard like to point out that DAISY is not a format but a standard that incorporates different commercial or proprietary formats. They also claim that DAISY is not only a better way to read but also a better way to publish. DAISY publications can include both audio recordings and digital text that is readable by sighted readers. Although developed primarily with the reading needs of the blind in mind, DAISY strives to be a standard or format that is not for the exclusive use of blind people but for use by all people with print disabilities and, indeed, for all who adopt electronic books as an acceptable reading medium.

The very exciting prospects that the DAISY standard holds for a more inclusive manner of publishing and reading nevertheless raise the potential problem that, in the United States, the production of at least some types of digital talking books may not *be* covered by the statutory exception that is operative there. Is it the intention with which the books are produced that determines whether or not the exclusive use requirement has been met, or must there be some or other factual link between the medium used and the fact that the readers have print disabilities? The closer libraries for the blind move to mainstream technology, the more problematic it becomes to specify in copyright law that a given exception may apply to specialized formats only.

The Australian statutory exception makes provision for sound recordings, Braille versions, large print versions, and photographic and electronic versions (Copyright Act, 1968). The list is longer than the United States list. The reference in the Australian legislation to large print alerts one to the needs of partially sighted readers. Publishers can provide for those needs themselves, and it is no doubt a potential subject for a fascinating article in its own right.

Electronic or digital text is important, not only because blind people can in principle access digital text via their own computers with screen-reading software but because university students, in particular, actually appear to favor it (Kilmurray & Faba, 2005). Electronic text also provides a solution to the problems of partially sighted readers.

Statutory exceptions that focus on exclusively used formats do not take proper cognizance of the potential for technologies to determine what is and what is not accessible to blind readers at any given time. They also drive up the cost of supplying blind people with reading matter, inasmuch

as they create a need for specialized technology that is expensive because it is not mainstream. They exclude blind people from making proper use of mainstream technologies. Those provisions ought therefore to be discouraged, especially in the developing world where maximal use of commercially available technology is generally encouraged and specialized technology tends to be unaffordable to many.

Retroactivity

As a general rule legislation never applies retrospectively, unless the intention that it should do so is expressed clearly by the legislature. This is fundamental to the rule of law. The reason is that to hold otherwise would be to undermine the legal certainty that people require when organizing their affairs on the basis of their existing entitlements and obligations. The position is not different in the cases of statutory exceptions to copyright protection.

Many libraries for the blind that may now avail themselves of statutory exceptions hold masses of stock that were produced under copyright licenses. The terms of those licenses are not invalidated by the coming into force of statutory exceptions. They can therefore not necessarily be ignored with immediate effect.

The UK statutory exception contains particular provisions that apply to licensing schemes. The general principle is that a licensing contract can override the statutory exception if a library for the blind or other producer of alternative format materials enters into a licensing scheme with a copyright holder, but the licensing scheme may not purport to restrict the terms of the statutory license or have the effect of restricting the statutory license (Copyright, Designs and Patents Act, 1988). These provisions, likewise, do not appear to have retrospective effect. It is therefore possible that licensing schemes in operation prior to the coming into effect of a statutory exception may restrict the operation of such an exception.

Commercial Availability

In the United Kingdom the statutory exception does not permit the making of an accessible copy if there are copies of the work commercially available that are accessible to the same or substantially the same degree (Copyright, Designs and Patents Act, 1988). The Canadian and Australian statutory exceptions contain differently worded provisions aimed at achieving much the same result.⁸ (United States law does not contain a similar provision because it requires accessible books to be produced in specialized formats in any case). The idea behind these provisions is that copyright holders should not be prejudiced if they provide commercial products that are accessible to blind readers. The commercial audio book market has grown substantially in recent years. The thinking is that if blind readers can use those books, they should be bought either by them or by their libraries in much the same manner as public libraries buy print or

audio books. On the face of it, the "commercial availability" requirement does not appear unreasonable. Why should a publisher not benefit from the fact that a library requires a number of copies of its commercially available audio product for use by blind readers?

But there is at present no universal standard for commercially produced audio books. They are available on audio cassette and in competing digital formats. Blind readers who need to avail themselves of the full range of audio books would have to make sure that they have a range of playback tools at their disposal. And besides, none of the commercially available audio books are quite as navigable as a properly marked-up DAISY talking book.

Commercial accessibility is not quite the same thing as navigability. If legislatures mean by accessibility that the book can in principle be read in a linear fashion from beginning to end like an audio tape, then it needs to be stressed here that in the digital age accessibility refers both to having access to content and to having random access thereto. Libraries who have adopted the DAISY standard ought therefore to be able to contend that their talking books are maximally accessible because they enable access to all relevant text elements, like chapters, subheadings, pages, footnotes, sidebars, etc.

But libraries who still distribute materials on commercial audio cassettes recorded in the standard commercial manner would be well-advised to procure copyright licenses as before. The smaller institutions, like the Torch Trust in the United Kingdom, are, therefore, prejudiced in the sense that the larger institutions are benefited by the above-mentioned 2002 amendments while they are not.

The commercial availability requirement makes good sense for publishers. If its implementation causes problems, libraries for the blind would be well-advised to seek ways in which to ameliorate those problems by looking to reformulate or reinterpret relevant provisions. The fact is that libraries for the blind are interested in integrating both their readers with print disabilities and their own services into public library services the world over. This has already been achieved with considerable success in Scandinavian countries and particularly as regards the provision of talking books. Now if a public library supplies talking books that both its blind and its sighted readers can access, why ought some of those talking books to be for use by blind readers only? Should all talking books not in principle be available to all readers of a public library, blind and sighted alike? Whether or not the integration ideal is worth pursuing is not a subject on which a view is taken here. It is suggested, however, that it is patently illogical to argue for inclusion and integration but to trash the commercial availability requirement at the same time. Once a position against integrated public library services is taken, though, on the grounds, say, that blind readers will be the losers due to inconsistent service provision

and because libraries for the blind can advocate better for their reading needs, then the commercial availability requirement can more justifiably be questioned as affording undue protection to publishers and imposing a disproportionately large burden on libraries for the blind, who should be free to spend their scarce resources as they think best.

Beneficiaries

In the United States, the above-mentioned statutory exception favors the blind and people with print disabilities, though it would appear that the formulation excludes people with partial sight, who also require the adaptation of reading materials to suit their circumstances. As has been pointed out, large print is specifically included in the Australian legislation, while in the United Kingdom, the emphasis is, quite rightly, on accessibility. Canadian law, interestingly, is formulated to include all people with—as it is put—perceptual disabilities (Owen, 2004).⁹ Individuals who pride themselves on being perceptive might have a problem with the term “perceptual disability” and might favor “print and sensory disability.” In Australia print and intellectual disabilities are expressly identified by the prevailing exception.¹⁰ Be that as it may, the Canadian legislation’s merit is that it includes the needs of the deaf community. The Canadian exception is broad enough to cover the translation of a play or television broadcast by an interpreter for persons who are deaf (Copyright Act, 1985, Section 32). Although the United Kingdom legislation focuses on accessibility, the accessibility with which that focus is concerned, is, in so many words, accessibility to blind people only. It is beyond comprehension why such an otherwise progressive approach should have been restricted so as to exclude the needs of others. The European Union Directive on which the legislation was based mandates (but does not compel) the adoption of statutory exceptions “for the benefit of people with a disability, which are directly related to the disability and of a non-commercial nature, to the extent required by the specific disability” (European Parliament, 2001, Article 5(3)(b)).¹¹ It does not appear to rule out a more inclusive approach.

Exclusions

As has already been pointed out, large print is excluded from the United States and Canadian exceptions. So, too, is sheet music and published dramatic works. In the United Kingdom databases and extracts from databases are excluded if the reproductions would constitute infringements of copyright in the database concerned.¹²

Intermediate Copies

Since the production of books for people with print disabilities is nowadays digitized, it stands to reason that libraries for the blind hold files that enable the production of distribution copies. Those digital files are essential to the proper maintenance of hardcopy materials. Talking books

on damaged media can be recopied; Braille books with torn pages can be repaired by reprinting those pages; additional copies may be produced on demand if they are urgently needed for, say, educational purposes. Only the United Kingdom legislation makes proper provision for the holding of such “intermediate” copies, as they are termed in the legislation.¹³

Altering Typographic Arrangements and Adding Captions

Braille is a script, but it is not a tactile version of print.¹⁴ It is therefore an approximation only of the typographic arrangement of a print book. Graphical material is often omitted from Braille, which, incidentally, makes children’s books, especially modern ones, an interesting challenge to libraries for the blind. Descriptive captions are sometimes substituted for drawings or photographs. Tables are—due to space considerations—represented differently from the printed originals. Similar considerations, peculiar to the medium, necessitate deviations from or interpretations of the layout of print materials when talking books are made.

Only the UK exception expressly takes account of the fact that, to make a book accessible, the typographic arrangement may be interfered with, and it provides that doing so would not constitute an infringement of the copyright in the work.¹⁵ In other jurisdictions libraries would have to rely on interpretations of terms like “specialized formats” and on the spirit of their exceptions.

Making Accessible Extracts

Like all students, students with print disabilities more often than not require extracts of books only. Yet if an extract, rather than an entire work, is reproduced, this would in itself constitute an infringement of copyright in the work, unless it is sanctioned by fair dealing or fair use principles.

Under the laws of the United Kingdom and of Australia express provision is made for the making of accessible extracts from published materials. The device used in the United Kingdom was to provide that an accessible copy may also be made from part of a copy.¹⁶ The United Kingdom provisions do not permit an entire book to be made accessible in part only, so one is probably left with having first to make a partial master copy from the whole book. Making an accessible copy of part of a work (for a person with a print disability or intellectual disability) is expressly permitted in Australia.¹⁷

The problem in this context is that it is inconceivable that, for fair dealing or fair use purposes, an accessible extract cannot be made by a person with a reading disability. The situation becomes more complex, though, if it is borne in mind that here an alternative format producer may be required since the reader him or herself may lack the means to make the extract accessible. So the problem cannot be regulated by fair dealing or fair use simplifiers. It is therefore necessary that an exception should clarify the legal position. Where it does not do so, libraries for the

blind still have difficulties rendering services to students and members of the public wishing to do research.

INTERNATIONAL INTERLENDING ARRANGEMENTS AND STATUTORY EXCEPTIONS

The National Library Service for the Blind and Physically Handicapped of the United States Library of Congress, in a fact sheet dealing with the United States exception to national copyright protection for the benefit of such readers (Library of Congress, 1996), addresses the question of the effect of the statutory exception on interlibrary loan arrangements in the following terms:

NLS currently lends books through interlibrary loan (ILL) to foreign agencies serving blind and physically handicapped individuals. Will this practice continue, or will ILL be limited to books for which NLS has received copyright permission?

NLS will continue to lend to eligible foreign agencies through interlibrary loan. Such distribution is permissible under U.S. law and is unlikely to infringe the laws of other countries. However, foreign agencies must look to the law of the country where the use takes place to determine whether they might be liable for acts of unauthorized importation or distribution of *lawfully* made copies without permission of the copyright owner.

Yet in April 2004 the General Assembly of the International Council on English Braille (ICEB), meeting in Toronto, adopted the following resolution:

This General Assembly affirms the principle of unrestricted international interlending of reading materials in alternative formats among recognized blindness agencies. Therefore the Executive Committee of ICEB should work through the Braille Authority of North America and with other relevant non-governmental organizations and governmental agencies to give non-citizens of the United States access to Braille and other accessible format materials produced in the United States through the development of appropriate international protocols and legislative change if necessary. (ICEB, 2004, Section 13.0)

But an analysis of the interlibrary loan records of the South African Library for the Blind shows that more books—both in Braille and on audio cassette—are borrowed from the NLS in the United States than from any other library for the blind. What accounts for the perception of the delegates to the 2004 General Assembly of the International Council on English Braille?

The answer probably relates to Bookshare.org,¹⁸ more particularly to its membership eligibility requirements. It will be remembered that Bookshare.org is a virtual library. Members download electronic books from Bookshare.org, which they read by way of computers. Books are contributed by the members (and volunteers) who scan books for their own use.

They upload the digital content to Bookshare.org, who then makes those books available to all of the members. Bookshare.org therefore acts as a central repository for books scanned by the blind community of members, on the understanding that it is time-consuming to scan a book and that once it has been scanned it makes good social sense if many people can benefit from the effort of one.

Of course, Bookshare.org is a publisher's nightmare. Computer technology turns a single print book into a digital copy, which is made available to multiple recipients. Yet in the United States, where Bookshare.org is based, copyright law permits this. Since the coming into operation in 1996 of the already mentioned United States copyright exception, a legislative amendment known as the Chafee Amendment, it is not an infringement of copyright if certain entities either reproduce or distribute copies or phonorecords of previously published nondramatic literary works, provided that those activities comply with certain requirements. Nonprofit organizations that have, as their primary missions, the provision of specialized services relating to, among others, adaptive reading or information access needs of blind persons or other persons with disabilities, are such authorized agencies (United States Copyright Act, 1996, Section 121(a)). Bookshare.org is a nonprofit agency with precisely this mission. It distributes books uploaded by its members. Those agencies must reproduce and/or distribute books in, among others, "digital text which is exclusively for use by blind or other persons with disabilities" (United States Copyright Act, 1996, Section 121(a)). The digital text that is being produced is marked-up by Bookshare.org in accordance with specifications published by the DAISY Consortium, and it is being read with a text reader that has been developed to read text that has been marked-up in that manner.

Not every blind person may become a member of Bookshare.org. Initially membership was limited to residents of the United States only. (Canadian residents have now been included by special arrangement, but that is not relevant for present purposes). The United States law that permits Bookshare.org to distribute digital books to people with print disabilities has no extra-territorial effect. It applies in the United States only. If Bookshare.org were to distribute books to people beyond the reach of the United States copyright exception, such distribution may therefore be illegal.

As was noted earlier, the Berne Convention sanctions the introduction of copyright exceptions like the Chafee amendment. But the parties to the Berne Convention are states. Individuals do not derive rights from international treaties. The Berne Convention, together with the World Intellectual Property Organisation Copyright Treaty, lays down a standard for copyright protection internationally. In effect it provides that a state should not treat authors from other countries worse than it treats its own authors. In the context of copyright exceptions, it provides that it is acceptable—but certainly not compulsory—to enact such exceptions and

thereby in effect to expropriate copyright in special cases, as long as the normal exploitation of their work remains the same and their interests are not prejudiced. So while a state like the United States is free to enact a copyright exception like the Chafee Amendment without conducting itself unlawfully—that is to say without laying itself open to the accusation that it is subjecting authors to measures that are unacceptable to the international community—a library for the blind outside the United States or a blind reader outside the United States cannot, under the Berne Convention, lay claim to the benefits derived by United States residents under the Chafee amendment.

How does it happen, then, that the NLS, a United States government agency, can lend books, produced and distributed in terms of the Chafee amendment, to libraries for the blind in other countries, while Bookshare.org cannot admit as members, residents of those same countries? Is the NLS acting in breach of the Chafee amendment, or does Bookshare.org misunderstand the implications of its provisions?

There is a fundamental difference between what the NLS does and the way it operates and the way in which Bookshare.org does its business. It is based on the fact that the NLS is for all practical purposes a traditional library, with accessible books on its shelves, that operates like a traditional library, both in terms of what it circulates and in terms of standard operating procedures. Bookshare.org is a virtual library. It does not circulate books in the traditional sense. Its operating procedures are therefore completely different. The books that the NLS circulates are of course not printed books, but they are physical objects. They are either Braille books or audio cassettes containing sound recordings of talking books. The NLS also makes available electronic books that have been encoded for printing Braille, which its members can either print themselves or read on Braille display devices, but those files are not circulated in accordance with standard circulation procedures. They are not sent out or physically handed to library members; they are not physically received back at the NLS' circulation desk and checked in and returned to shelves. They are therefore not made available by way of interlibrary loan.¹⁹ Similarly, Bookshare.org does not circulate books. It makes available books that are downloaded, used, and never returned, checked in, and shelved.

The NLS lends books abroad to eligible U.S. citizens and to other libraries, but not to any individuals other than U.S. citizens (Library of Congress, 1990). It lends books to institutions only. In other words, if the NLS lends books abroad that are to be read by blind individuals who are not United States citizens, those books are lent to libraries for the blind only. Those libraries implement their own internal standard operating procedures to ensure that the books in question are lent to their members. They lend them, receive them on their being returned, take steps to recover them if they are not returned, take responsibility for returning

them to the NLS in the United States, and are responsible for all matters incidental to or arising out of the lending transaction and that pertain to the books entering and leaving the country in which they operate. The borrowing library—not the borrowing individual—is the only party with which the NLS deals and who is answerable to the NLS. The NLS does not routinely circulate books in foreign countries. If the borrowing library encounters problems in its own country relating to copyright, more particularly to the possible infringement of copyright, it must solve those problems. The NLS—as a library properly so called—assumes, and is entitled to assume, that the borrowing library takes responsibility for copyright-related issues and, for that matter, for issues relating to controls and financial levies associated in a given country with the entry and exit of goods.

An online repository of digital data like Bookshare.org does not lend physical objects containing data to its users. It makes available, by way of downloads, such data to them. They do not lend it; they acquire it for their own use for an indefinite period, that is to say until such data becomes inaccessible to them due to technological developments that render the data no longer accessible. They may, in terms of their use agreements with the online data repository, agree not to share such data with others, and the repository may employ watermarking or encryption techniques that makes such unlawful sharing either difficult or impossible, but those measures do not detract from the fundamental fact that the data in question is given to and acquired by the user, not lent and borrowed. A copy of it resides on a storage medium in the user's possession and under his or her control. It becomes either the property of the user or the property of the person who owns the storage device.

The Chafee amendment does not prohibit the distribution of this data to readers with print disabilities, but it cannot permit such distribution to such individuals abroad. The question that logically arises is whether distribution abroad can ever be permissible under the same law just because the data is distributed by way of a physical object to an institution that undertakes to return it.

The differences between the distribution of data and the circulation of objects containing data that are returned are, it is submitted, of considerable importance. First, there is arguably a difference between the distribution and the circulation of data, in the sense that "circulation" is an accepted term used for one of the principal activities that lending libraries undertake. But, of course, it may equally forcefully be argued that "circulation" is a form of "distribution." Secondly, however, even if the Chafee amendment does not sanction the distribution, it does not prohibit it either. The legal consequence of such a distribution is that the data thus distributed might be an infringing copy according to the law of the country in which it is found.

There is, in practical terms, a world of difference between the NLS providing a library for the blind abroad with a single infringing copy of a particular book and Bookshare.org providing countless individuals in a variety of countries with multiple infringing copies of many different books. The library for the blind in question poses no appreciable threat to the copyright holder in question. It could resolve the matter by way of negotiation; it could clear the circulation with the right holder in advance; it could recall the book and satisfy the demand of the right holder; the right holder might decide not to pursue the matter once the facts are known; and, probably most importantly, the interests of the right holder are not prejudiced because they would not have been prejudiced had the transaction been conducted by a lending library in respect of a printed book.

It is true that publishers have in the past received bad press, but it is fanciful to assume that they have an interest—indeed that they perceive themselves as having an interest—in thwarting interlending transactions concerning alternative format materials. It is different in the case of materials that are made available via the Internet by libraries if they believe that by doing so they are engaging in lending transactions. It is equally fanciful to assume that librarians are incapable of understanding the differences between lending physical objects and making available for indefinite use digital materials for storage by the receivers of such materials.

These practical considerations between what it involves to distribute digital materials via the Internet and to circulate physical objects containing data in either Braille, analogue, or digital formats are of critical importance to the interlibrary loan enterprises of the community of libraries for the blind. In the English-speaking world a considerable amount of resources are of necessity wasted when best-sellers and books considered to be of near-universal value are produced in alternative formats in one country after another. Because of the cost, time, and effort involved in the production process, moreover, blind and otherwise print disabled readers have access to far fewer books than their sighted counterparts. If libraries for the blind were to curtail their interlending activities on the basis of mistaken assumptions as to what they may and may not do with digital materials, the progressive laws that have been enacted for the benefit of blind people and people with print disabilities will turn out to have benefited the production facilities of libraries for the blind more than library members themselves. Libraries for the blind are increasingly converting their talking books to digital talking books that comply with the DAISY standard. Regrettably, there are now libraries for the blind who appear to take the view that because their audio stock is held in digital format only they are no longer permitted to lend those books to similar institutions in other countries.

Apart from the adverse consequences that these attitudes or beliefs have for readers, they are, interestingly enough, also bad for the libraries

for the blind sector. If libraries for the blind are in the future to serve their own local communities only, the case weakens for their continued international cooperation and, by extension, for their status as members of an international community of institutions that contributes to the full social inclusion of readers with print disabilities into the societies in which they live. They would, in the long run, end up yet again as institutions serving quite separate special needs, and those quite separate special needs will be provided for in a quite rudimentary fashion only.

Some Legal Considerations

The emphasis on practical considerations so far is not to be taken to mean that legally speaking, interlending of materials produced under a statutory copyright exception is illegal but that the illegality would likely not be visited upon such actions. But the practicalities are the best guide, to lawyers and librarians alike.

The applicable legal principles are complex, and there may be minor variations from country to country. The point, though, is that even at the level of practicalities alone, it seems that libraries for the blind are applying unrealistic restrictions to themselves and to others with reference to digital materials.

Any book that is produced—or reproduced if you like—under a statutory copyright exception should, by any legal standard, become the property of the producer or the entity that commissioned its production. In most cases, therefore, a library for the blind would become the owner of such a book. Most legal systems acknowledge that the owner of property is entitled to sell such property to whomsoever the owner pleases. It is no different in the case where the property is a medium such as a book, the contents of which is subject to copyright protection. In the United States, this principle is expressed by way of what is known as the “first sale doctrine” (United States Copyright Act, 1996, Section 109); in continental legal systems it is known by the label of “exhaustion” (of rights).

Of course, most statutory exceptions expressly rule out sales for profit, but that is as far as they go. They say nothing about an entitlement to lend those materials. It therefore follows that a lending right survives intact. But having established that the lending right is not affected by a statutory exception, one should nevertheless bear in mind that most legal systems are sensitive to the fact that their copyright regimes may differ from the ones that apply elsewhere. And so they typically contain provisions intended to take care of the possible adverse consequences of those differences for copyright holders who reside beyond their jurisdictions.

In South Africa, for example, an infringing copy, that is to say a copy that infringes the rights of the copyright holder, is, among others, an imported article, the making of which “would have constituted an infringement of . . . copyright if the article had been made in the Republic.” (Copyright Act, 1978, Section 1).

United States law, similarly, bars the importation of copies or phonorecords that may have been made legally in their country of origin but that would have been made illegally had United States law been applicable (United States Copyright Act, 1996, Section 602(b)). Interestingly, libraries and related institutions are partially exempt from this provision.²⁰

In South Africa importation of an article protected by copyright is not an infringement of such copyright if the article in question is imported for private and domestic use, even if to the knowledge of the person who imports it "the making of that article . . . would have constituted . . . an infringement [of copyright] if the article had been made in the Republic" (Copyright Act, 1978, Section 23). No special provision is made for libraries in this context. So in South Africa, two apparently contradictory principles apply. It is, on the one hand, an infringement of copyright if a particular book is imported if it originated under circumstances that would have infringed copyright if South African law had been applicable, but on the other hand, if it is protected by copyright in its country of origin, importing it for personal use—that is to say use that is noncommercial and does not prejudice the copyright holder—it is lawful to do so without a copyright license. Which one is the overriding principle? Is it always unlawful to import—even for temporary and noncommercial purposes—a copy that otherwise qualifies as an infringing copy, or does the noncommercial character of the transaction play a part in the weighing up process?

From a pro-copyright perspective the question whether or not it qualifies as an infringing copy will no doubt guide the interpretation, while from a human rights-based constitutional perspective a variety of other considerations may likewise be invoked to argue for the proposition that a library for the blind does not break the law if it engages in interlending transactions concerning books produced under statutory copyright exceptions. It is conceivable that in a given country no copyright protection measures may exist, and that would complicate the equation somewhat. But the likelihood of such a country having a library for the blind or like institution that produces books others might want to borrow, indeed the likelihood of likely borrowers becoming aware of the existence of such books, is negligible.

Ordinarily, libraries cannot afford litigation, and they tend to avoid it if they are in doubt as to the legality of one or other of their practices and are requested by a rights holder to desist. But these are not ordinary matters. They affect access to information issues concerning marginal communities who strive for full inclusion, which do not pose substantial threats to copyright holders or the principles underlying copyright protection more generally. All that one needs as a library in a case like this is an arguable, potentially tenable point of view with realistic prospects of success and—

most significantly—a community that will expect of it to advance that case and, if necessary, will pledge financial support for its doing so.

Interlending and WIPO

The libraries for the blind community are not oblivious to the problems brought about by either the digital revolution or statutory exceptions, depending on one's point of view. Neither is the DAISY Consortium. Nor is the international blind community, as represented by the World Blind Union (WBU). But there is a limited understanding of either how these problems came about or of how best to address them.

Working through the World Intellectual Property Organisation (WIPO), the WBU, the DAISY Consortium, and the Libraries for the Blind Section of the International Federation of Library Associations and Institutions (IFLA) appear to have achieved an understanding that what is required is a large-scale revision of national statutory copyright exceptions to make provision, additionally, for importation entitlements (King & Mann, 2004). WIPO itself has contributed to this consensus by suggesting what one might term a model provision to this effect. It is important to emphasize that WIPO can at best advise members of the international community. As regards copyright matters, such advice is apparently provided to especially the developing world by making available a draft copyright law to serve as a precedent for those countries that are of a mind to enact all or some of its provisions. It therefore serves little purpose to analyze the draft law here because the answer to any weakness that one might be able to identify is bound to be that countries do not have to enact the problematic provision as it stands. It should also be noted, in passing, that much as an importation rights clause is suggested by WIPO as a solution to the problem, WIPO has, for some time, not seen fit to publish such a provision on its Web site, though very particular draft wording has been touted in that regard. This means that in reality, there is nothing of substance to analyze. A few observations of a general nature are nevertheless worth making in this context.

The importation rights idea presupposes a substantial measure of similarity between statutory exceptions. It is based on the assumption that if a statutory copyright exception in one country has permitted the production of a book in an alternative format, it would also be permissible in another country that applies a statutory copyright exception. In the United States, as has been noted, sheet music and published dramatic works are excluded from the local statutory copyright exception; in the United Kingdom databases are expressly excluded; in Canada the production of large print books is impermissible under the copyright exception that applies there.

The wording that is being suggested in WIPO circles reads:

... it shall be permitted without the authorization of the author or other owner of copyright to reproduce a published work for visually impaired persons in an alternative manner or form which enables their perception of the work, and to distribute the copies exclusively to those persons, provided that the work is not reasonably available in an identical or largely equivalent form enabling its perception by the visually impaired; and the reproduction and distribution are made on a non-profit basis.

The distribution is also permitted in case the copies have been made abroad and the conditions mentioned above have been fulfilled. (as cited in Garnett, 2006, p. 97)

In neither the United States, nor the United Kingdom, nor Canada would one be able to enact that particular wording wholesale. This does not mean that the idea that underlies the draft wording cannot be enacted in a manner suitable to the legislative drafting conventions that apply to the copyright laws in a given jurisdiction. But what is the good of suitable wording? What is the United States legislature to do? Ought it to permit only the importation of works that would have been lawfully produced had the United States law applied, or ought it to set another measurable standard by enacting a principle rather than express provisions dealing with particularly identified cases? Is a play that has been made accessible in the United Kingdom to be excluded? Is the Canadian legislature supposed to show more understanding for the needs of partially sighted Canadian readers to borrow large print books from abroad than to have them produced locally? Or was the local provision in Canada the result of publisher submissions that would not apply to large print books held by other libraries for the blind already?

Finally, the reference to importation, without more, seems to beg for clarification. Clearly there are, as the above analysis suggests, appreciable differences between the purposes for which goods, even books, are imported; and clearly they matter because some purposes would prejudice or potentially prejudice the interests of copyright holders while others would not. And, if a degree of similarity between country A and country B's exceptions is required, who will be the judges? Whose task will it be to decide whether the provisions of one country's exception are to be squared with those in the importing country? Do interlibrary loan librarians have to become experts at legal interpretation?

Legislative drafting hardly ever gives expression to ideals, unless ideals are expressly being enacted, and then those provisions look nothing like the ones suggested by WIPO at present. What is required is not legislation aimed at painstaking comparisons between the statutory copyright exceptions that apply in various countries. All that might be required, in some countries at any rate, is some clarification that libraries are protected if they import books that have been lawfully produced under the copyright

laws of their countries of origin, provided that the country of origin is a member of the Berne Convention. This qualification would at least ensure that in the country of origin acceptable standards of copyright protection are adhered to.

DOCUMENT DELIVERY VIA THE INTERNET

Electronic delivery of documents is important, both because it affects future service delivery models and because digital text is particularly significant to blind and other readers with print disabilities. As we have seen, the problems associated with document delivery via the Internet are complex. Bookshare.org deserves credit for not only realizing that there are additional challenges involved in delivering digital books to readers with print disabilities all over the world but also for having set about dealing with those challenges. Speaking at the Second World Summit on the Information Society in Tunis, its founder and president, Jim Fruchterman (2006), set out his approach succinctly, as follows:

The second approach [apart from copyright reform] is getting permissions from authors and publishers, but with a much broader approach to permissions than today's. The typical approach to permissions—the approach we used until last year—is to get the narrowest possible permission: limited to our organization, our clients, and our country. But, if we agree about the vision of building a global library that makes access for the disabled as easy, cheap, and fast as that for the nondisabled, we must take a broader view.

Our new permissions form asks publishers and authors to give us permission to provide access to people with disabilities around the world and to work through other nonprofit or government agencies similar to our nonprofit organization. It also asks them to grant permission for us to work directly with third parties such as Amazon and Google who are scanning their books. It does not limit our work just to the visually impaired but to all people with disabilities that significantly impair their ability to access print. And it asks that these permissions be granted royalty-free. Publishers and authors are generally willing to grant such permissions. They want to hear a few things from us:

- That we will limit access to people with bona fide disabilities
- That we will work hard to ensure that the books do not leak out into the mass market
- That we will support them in prosecuting people who violate copyright law by distributing such books illegally

Authors and publishers want to do the right thing but want to be reassured that their commercial interests will not suffer. That's the essence of the social bargain in copyright law, and if we honor it in the permissions realm, we can achieve much more. The moment I receive a global permission from an author or publisher, I can distribute that book to any person with a print disability in any country in the world. In practice

we need to work with our counterpart agency in that country to ensure that the social restrictions are complied with and that we are serving people with bona fide disabilities.

Already we have received such permissions for more than one thousand books that are currently on Bookshare.org, as well as for another two thousand books that will be added to our collection over the next six months. Of these books two thirds will be in English and one third in Spanish. We are getting ready to serve the world.

But our efforts are not enough. The global library is not an American library. It is not an English- or Spanish-language library. We need our peers in countries all over the world to secure as many similar permissions as possible and pass as many of those copyright law exemptions as they can. By working together and by sharing, we can build the global library. Together we can assure that people with print disabilities in the next decade will have access that is as easy, cheap, and fast as for everybody else on the planet.

The fact that libraries for the blind and otherwise print disabled people can put digital materials to good and almost immediate use is highly significant. As has already been indicated, access to digital materials can radically reduce production time and effort. It brings mainstream publishing and accessible publishing closer together (Kerscher & Fruchterman, n.d.). Digital publishing is also a better way to read for people with print disabilities. Bookshare.org's focus on licensing arrangements in respect to digital materials that are to be delivered via the Internet is clearly a step in the right direction. Access to digital materials is greatly facilitated by having those materials available online; similarly, the electronic delivery of digital materials are a much cheaper and speedier delivery method for libraries for the blind in the digital era.

As has been pointed out, research suggests that particularly blind students with access to computers prefer digital text to any other reading medium for people with print disabilities.²¹ The popularity of digital text with that generation indicates that it will, in the future, become even more important for libraries for the blind to be able to make materials available as digital text.

The significance of access to digital text for educational purposes has also been acknowledged by the United States Congress. The Individuals with Disabilities Education Improvement Act of 2004 makes provision for a national instructional materials accessibility center, whose task it is, among others, to establish a national instructional materials accessibility standard. Publishers of educational content will be compelled to make their materials available in a digital form that complies with this standard.²²

Likewise, the directive of the European Union referred to above provides that if member states provide in their copyright legislation for statutory exceptions,

Member states shall take appropriate measures to ensure that right-holders make available to the beneficiary of an exception or limitation provided for in national law . . . the means of benefiting from that exception or limitation, to the extent necessary to benefit from that exception or limitation and where that beneficiary has legal access to the protected work or subject-matter concerned. (European Parliament and Council, 2001, Article 6(4))

In Europe, as in the United States, publishers are beginning to understand the needs of readers with print disabilities to be granted direct access, or access via their libraries' intervention, to digital materials. This much is evidenced by the establishment of the European Accessible Information Network,²³ a collaborative venture between leading libraries for the blind and prominent publishers, with the view to exploring accessible publishing and the standards to which such publishing should conform.

Although it has become commonplace to adopt the position that, with regard to copyright in the digital age, "digital is not different," this maxim tends to obfuscate the very real problems associated with the electronic delivery of digital assets. Also, the problems experienced by the entertainment industry in this regard are not the same as those of libraries for the blind. In the prior case, the threat of perfect copy quality suggests a cautionary approach. In the latter case, the lending and returning paradigm associated with libraries is no longer valid unless more technology is brought to bear and the fictions of lending and borrowing are employed.

Are licensing arrangements like the ones proposed by Bookshare.org a retrogressive step? Are we reverting to the stage when charities sought licenses as favors or against the payment of royalty from publishers? Libraries for the blind are nowadays professional institutions that use highly sophisticated mainstream techniques, rather than Braille only, to secure access to information for communities with very diverse needs who demand to be included where practicable. The degree of sophistication and the range of reader demand is demonstrated by the fact that nowadays the search is one for a solution to an international problem rather than to national problems only. It is quite logical that best practice in this area would begin to develop out of bilateral and multilateral contractual licensing arrangements. A no "importation rights" clause in a local law will definitively solve the problems associated with electronic delivery of digital books across international boundaries without publisher collaboration.

COPYRIGHT PROTECTION TECHNOLOGY

Publishers that make digital text available on a commercial basis often employ technology to protect such materials against unauthorized copying in order to safeguard their copyright-protected interests in the digital

environment. The implementation of some of those protection mechanisms have on occasion resulted in an otherwise accessible digital document becoming inaccessible to blind readers or to alternative format producers.

Reference has already been made to the EU Directive on Copyright, which obliges EU members that enact statutory copyright exceptions to enact appropriate further measures to ensure that copyright holders make the means available to beneficiaries of such exceptions to access materials in their lawful possession. The statutory copyright exception that was enacted in the United Kingdom pursuant to the EU Directive provides in this regard:

If the master copy is in copy-protected electronic form, any accessible copy made of it under this section must, so far as it is reasonably practicable to do so, incorporate the same, or equally effective, copy protection (unless the copyright owner agrees otherwise). (Copyright, Designs and Patents Act, 1988, Section 35B(8))

The technology used for digital rights management purposes, that is to say to avoid or detect unauthorized copying or to prevent unauthorized access, cannot in and of itself be analyzed from a legal or even a political perspective. Good technology that achieves its purpose yet does not prevent lawful access seems unobjectionable. Unintended consequences of the deployment of such technology may give rise to different issues, depending on the technology used. In each case the question should be whether access is indeed difficult or actually impossible. In each case the question is whether libraries for the blind might overcome those difficulties by investing in technology themselves or whether better screen-access technology for use by people with print disabilities might solve those access problems.

Libraries for the blind might need to apply similar technologies themselves. In this regard a single note of caution seems in order. Libraries for the blind should take care that their digital rights management mechanisms do not force their readers to purchase equipment supplied by them or especially sourced by them. Different countries have different unlawful competition legislative regimes, but it seems fair to say that an unlawful competition charge by an alternative provider of access technology is something any library for the blind ought to avoid. The print disabled community is relatively well informed. Not even supplying an essential service is necessarily a safeguard against the loss of reputation that might result therefrom (Roos, 2005).

CONCLUSION

At the beginning of the twenty-first century, copyright is enjoying much academic, as well as political, attention. Libraries for the blind would do

well to consider what it is exactly that is being contested in this arena. In much of the developing world, libraries for the blind are still seeking to advance the case for statutory copyright exceptions to benefit readers with print disabilities; in the developed world, such exceptions apply in many countries already, and libraries for the blind are negotiating with the publishing industries in their areas of operation about collaborative arrangements, standards, and permissions.

It is an open question whether libraries for the blind have much to gain from being engaged in current public debates concerning copyright protection in general. No doubt the advent of new technologies have reopened the debate about the legitimate balance between the rights of content creators and the legitimate public interest, and no doubt libraries for the blind and their readers stand to gain from any enlargements to the public domain. Still, they have a cogent case to argue based on particular access needs and particular technological opportunities. Theirs is not a case concerning abstractions but a coherent set of ideals, underpinned by highly specific business models and ethical standards. They therefore have difficult decisions to make. Are they better off joining loosely structured lobbies, or should they pursue their solutions quite separately from current public debates? Whatever the choices made, it is important for libraries for the blind to maintain their own views, not only on what they require but on the best way to achieve those requirements.

Libraries for the blind have much to offer both publishers and their own readers. Their grasp of technological issues concerning accessible publishing might in fact help the publishing industry to access a hitherto untapped market. Their expertise regarding the accessibility of digital materials will, even in such a case, enable them to add value to the digital materials obtained from publishers, and so to provide blind and print disabled readers with the best reading experience that is possible. Moreover, as soon as some degree of consensus between publishers and libraries for the blind emerges concerning the electronic delivery of digital content across national borders, the way will perhaps be cleared for the first time for a truly global library for the blind.

NOTES

1. Interestingly, delays of this nature are the only reason, and therefore presumably the primary reason, that is cited by the National Library Service for the Blind and Print Handicapped of the United States of Congress as a justification for the amendment, in 1996, of U.S. copyright law to benefit alternative format book production. See Library of Congress (1996).
2. Some may argue the proposition in the text to have been overstated. I borrowed numerous textbooks that were read to me on audio cassette by volunteers, which may have been consistent with the normal exploitation of the book, but I kept many of those books for later use, which seems to me to have challenged the boundaries of copyright more than a little.

3. The right of access to information is enshrined in Article 19 of the United Nations Declaration on Human Rights. Libraries and their umbrella organizations and the activities of such organizations are therefore very central to the contemporary human rights model.
4. A notable exception is Sweden. Ingar Beckman Hirschfeldt (2005) points out that from July 2005, as the result of an amendment to the copyright law of Sweden, people with print disabilities are able to buy adapted books.
5. An impressive, but by no means exhaustive, list of such exceptions is provided by Geidy Lung (2004).
6. The Republic of South Africa Constitution, Act 108 of 1996, provides in section 36(1) that even fundamental rights may be limited by law of general application "to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom."
7. The United States Constitution Fifth Amendment reads: "No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation."
8. For Canada, see generally the Copyright Act (R.S., 1985, c. C-42, s. 32; R.S., 1985, c. 10 (4th Supp.), s. 7; 1997, c. 24, s. 19), especially section 32(3). For Australia, see Copyright Act 1968, section 135ZP; also sections 40ff with regard to fair dealing.
9. In Canada a perceptual disability is defined in the Copyright Act as "a disability that prevents or inhibits a person from reading or hearing a literary, musical, dramatic or artistic work in its original format, and includes such a disability resulting from . . . severe or total impairment of sight or hearing or the inability to focus or move one's eyes, . . . the inability to hold or manipulate a book, or . . . an impairment relating to comprehension." Notwithstanding this definition with its all-embracing tone, people with partial sight are excluded.
10. Copyright Act, section 112(a) (ii) and (b) (ii) regarding intellectual disabilities; section 135ZQ(1) regarding print-disabilities.
11. Article 5(3) (b). Article 5(4) and article 5(5) deal further with the distribution of such books.
12. Copyright, Designs and Patents Act, section 31A(2) and 31B(2). Also excluded are instances where musical works are to be copied but where doing so would involve a performance thereof or part thereof.
13. Copyright, Designs and Patents Act, Section 31C. It permits approved bodies to hold intermediate copies, which are necessarily created during the production of accessible copies. Such intermediate copies may be held only for the purpose of making further accessible copies and only for as long as the approved institution remains entitled to do so.
14. UNESCO has endorsed Braille as the only tactile script parallel to print. See Kavanagh and Christensen Sköld (2005).
15. Copyright, Designs and Patents Act, section 31A(1) and 31B(1). The legislature does not appear to have expressly taken cognizance of the fact that pictures, photographs, and the like may be omitted from the accessible copy; nor of the practice of adding, in appropriate cases, descriptive captions to pictures, but, then again, it authorizes the making of an accessible copy, which arguably covers those instances also.
16. Copyright, Designs and Patents Act, section 31A(1) and section 31B(a).
17. Copyright Act, section 112(a) (ii) and (b) (ii) regarding intellectual disabilities; section 135ZQ(1) regarding print disabilities.
18. See <http://www.bookshare.org/web/Welcome.html>.
19. "Copyright laws require that access to Web-Braille be limited to NLS patrons and eligible institutions. Access outside the United States, except to eligible American citizens, is not permitted." See Library of Congress (2003).
20. In section 602(a) (3) provision is made, among others, for libraries' interlending services. Those institutions are restricted to five copies.

21. Copyright, Designs and Patents Act, section 31A(1) and 31B(1).
22. For the work of the committee that is developing the National Instructional materials Standard (NIMAS), see <http://nimas.cast.org>.
23. See <http://www.euain.org>.

REFERENCES

- Beckman Hirschfeldt, I. (2005, August). *Libraries for all: The Swedish way*. Paper presented at the 71th IFLA General Conference and Council, Oslo, Norway. Retrieved February 6, 2006, from <http://www.ifla.org/IV/ifla71/papers/085e-Beckman-Hirschfeldt.pdf>.
- Berne Convention for the Protection of Literary and Artistic Works (1886).
- Copyright Act 1968, Commonwealth of Australia Consolidated Acts (1968).
- Copyright Act, R.S., 1985, c. C-42 [Parliament of Canada] (1985).
- Copyright Act, No. 98 of 1978 [Parliament of the Republic of South Africa] (1978).
- Copyright, Designs and Patents Act 1988, c. 48 [United Kingdom Parliament] (1988).
- De Klerk, C. (2005, January). *Access to publishers' files*. Paper presented at the Cost of a Culture of Reading in Accessible Formats Conference, Port Elizabeth, South Africa.
- European Parliament and Council. (2001) *Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society* (Directive 2001/29/EC). Retrieved December 7, 2006, from <http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0029:EN:HTML>.
- Francillon, R. E. (1896). *Gods and heroes* [Electronic version]. Retrieved December 7, 2006, from http://www.mainlesson.com/display.php?author=francillon&book=gods&story=_contents.
- Fruchterman, J. (2006). Building a global library for people with print disabilities [Electronic version]. *The Braille Monitor*, 49(1). Retrieved December 6, 2006, from <http://www.nfb.org/Images/nfb/Publications/bm/bm06/bm0601/bm060106.htm>.
- Garnett, N. (2006). *Automated rights management systems and copyright limitations and exceptions* (Standing Committee on Copyright and Related Rights Fourteenth Session) [Electronic version]. Geneva, Switzerland: World Intellectual Property Organization. Retrieved December 13, 2006, from www.wipo.int/edocs/mdocs/sccr/en/sccr_14/sccr_14_5.doc.
- Ghylling, M. (2003, April). *DAISY: A new approach to Braille and talking books*. Paper presented at the BrailleNet WorkShop 2003: New Technologies for a More Accessible Society, Paris. Retrieved February 6, 2006, from http://daisy.org/publications/docs/20040517192032/daisy_a_new_approach_v1.html.
- International Council on English Braille. (2004). *2004 General Assembly Resolutions*. Retrieved December 13, 2006, from <http://www.iceb.org/gares04.html>.
- International Federation of Library Associations and Institutions (IFLA). (2001). *Professional priorities*. Retrieved February 10, 2005, from <http://www.ifla.org/III/misc/pp1.pdf>.
- International Federation of Library Associations and Institutions (IFLA), Libraries for the Blind Section. (2006). *Strategic plan 2006–2007*. Retrieved December 6, 2006, from <http://www.ifla.org/VII/s31/annual/sp31.htm>.
- Kavanagh, R., & Christensen Sköld, B. (Eds.). (2005). *Libraries for the blind in the information age: Guidelines for development* (IFLA Prof. Rep. No. 86). The Hague, Netherlands: International Federation of Library Associations and Institutions.
- Kerscher, G. (1999, August). *Braille production the DAISY way*. Paper presented at the 65th IFLA Council and General Conference, Bangkok, Thailand. Retrieved December 6, 2006, from <http://www.ifla.org/IV/ifla65/65gk-e.htm>.
- Kerscher, G., & Fruchterman, J. (n.d.). *The soundproof book: Exploration of rights conflict and access to commercial e-books for people with disabilities*. Retrieved February 6, 2006, from http://daisy.org/publications/docs/soundproof/sound_proof_book.html.
- Kilmurray, L., & Faba, N. (2005). *Access to academic materials for post-secondary students with print disabilities* [National Educational Association of Disabled Students Report]. Retrieved February 6, 2006, from <http://www.neads.ca/en/about/projects/atom/>.
- Kimbrough, P. (2005). How Braille began [Electronic version]. *Braille Monitor*, 48(7). Retrieved February 6, 2006, from <http://www.nfb.org/Images/nfb/Publications/bm/bm05/bm0507/bm050703.htm>.
- King, S., & Mann, D. (2004, August). *Copyright: How can barriers to access be removed? An action plan for the removal of some copyright barriers that prevent equitable access to information*. Paper

- presented at the 70th IFLA General Conference and Council, Buenos Aires, Argentina. Retrieved December 6, 2006, from www.ifla.org/IV/ifla70/papers/173e-King_Mann.pdf.
- Library of Congress. (1990). *NLS factsheets: International interlibrary loan*. Retrieved February 6, 2006, from <http://www.loc.gov/nls/reference/factsheets/ill.html>.
- Library of Congress. (1996). *NLS factsheets: Copyright law amendment, 1996*. Retrieved February 6, 2006, from <http://www.loc.gov/nls/reference/factsheets/copyright.html>.
- Library of Congress. (2003). *NLS factsheets: Web-Braille*. Retrieved February 6, 2006, from <http://www.loc.gov/nls/reference/factsheets/webbraille.html>.
- Lung, G. (2004, August). *Copyright exceptions for the visually impaired: International perspective*. Paper presented at the 70th IFLA General Conference and Council, Buenos Aires, Argentina. Retrieved February 6, 2006, from <http://www.ifla.org/IV/ifla70/papers/177e-Lung.htm>.
- Mellor, C. M. (1998). Making a point: The crusade for a universal embossed code in the United States. In J. Desormeaux (Ed.), *Second International Conference on the Blind in History and the History of the Blind*. Paris: Association Valentin Haüy.
- Owen, V. (2004, August). *Towards the ideal: Steps towards improved access*. Paper presented at the 70th IFLA General Conference and Council, Buenos Aires, Argentina. Retrieved February 6, 2006, from <http://www.ifla.org/IV/ifla70/papers/121e-Owen.htm>.
- Roos, J. W. (2005). Copyright as access barrier to people who read differently: The case for an international approach. *IFLA Journal*, 31(1), 52-67.
- Sterling, J. A. L. (2005, December 2). Copyrights and wrongs. *The Times (London)*, p. 24.
- United States Copyright Act, 17 U.S.C. § 121 (1996).
- Wagg, H. J., & Thomas, M. G. (1932). *A chronological survey of work for the blind: From the earliest record up to the year 1930* [Electronic version]. London: Sir Isaac Pitman & Sons. Retrieved December 6, 2006, from http://www.rnib.org.uk/xpedio/groups/public/documents/visugate/public_surwrkbl.hcsp.

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