Copyright and Disability

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A vast array of copyrighted works—books, video programming, software, podcasts, video games, and more—remain inaccessible to people with disabilities. International efforts to adopt limitations and exceptions to copyright law that permit third parties to create and distribute accessible versions of books for people with print disabilities have drawn some attention to the role that copyright law plays in inhibiting the accessibility of copyrighted works. However, copyright scholars have not meaningfully engaged with the role that copyright law plays in the broader tangle of disability rights.

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This Article fills a gap in the copyright literature by observing that recent progress toward copyright limitations and exceptions elides an ableist tradition in the development of U.S. copyright policy: centering the interests of copyright holders, rather than those of readers, viewers, listeners, users, and authors with disabilities. The Article illuminates this ableist tradition through two contrasting case studies of U.S. policy toward making copyrighted works accessible. First, the Article examines the pre-Civil War institutional approach to creating and distributing accessible books, which became mired in copyright issues at the Library of Congress in the lead-up to the 1976 Copyright Act and forms the basis of today’s paradigm of copyright law’s application to accessibility. Second, the Article traces the divergent approach to captioned films and television, which mostly avoided copyright issues after responsibility shifted away from the Library of Congress and evolved into a radically divergent regulatory approach administered by the Federal Communications Commission.

These case studies demonstrate that copyright’s ableist tradition subordinates the actual interests of people with disabilities to access copyrighted works to the hypothetical interests of copyright holders who may withhold access without reason. This subordination has led to a harmful, invasive, and unnecessary intrusion of copyright’s permission structure and culture into disability policy. The Article argues that copyright limitations and exceptions should not be understood as an expansion of access to people with disabilities but rather as an important-but-modest reversal of copyright’s largely unnecessary presence in disability policy. That reversal leaves unresolved significant questions about how to actually make copyrighted works accessible that must ultimately be answered by disability law, not copyright law.

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INTRODUCTION: ACCESSIBILITY AND COPYRIGHT LIMITATIONS AND EXCEPTIONS

As Eric Johnson has argued, “American intellectual property law has, as a general matter, proceeded in ignorance of disabilities.” Johnson has documented instances in which a failure to consider the perspective of people with disabilities has led to intrinsic miscarriages of intellectual property doctrine and policy—for example, the failure to consider the source-identifying role of trademarks to people who are blind or visually impaired in copyright, right of publicity, and trade dress law.

This Article focuses on a topic adjacent to Johnson’s focus: how intellectual property law’s disregard of the interests of people with disabilities can cause extrinsic harms to the goals of disability law and policy. Specifically, this Article focuses on copyright’s ableist tradition of subordinating the interests of people with disabilities to the ability to profit from works of authorship, even at the cost of causing extrinsic harm to those with disabilities. This Article argues that the Copyright Act’s requirements should be reformed to ensure that it serves the purpose of accessibility and that copyright exceptions are tailored to meet the needs of individuals with disabilities.

As Johnson aptly notes, intellectual property law’s failure to consider the perspectives of people with disabilities denies them the opportunity to equal participation in the cultural life of the nation. Intellectual property law, as written and interpreted, is fundamentally ableist in nature and has resulted in significant extrinsic harms to individuals with disabilities. This Article argues that the Copyright Act’s requirements should be reformed to ensure that they serve the purpose of accessibility and that copyright exceptions are tailored to meet the needs of individuals with disabilities.

2. Id. at 191–204 (discussing the failure to conceive of the importance of three-dimensional objects to people who are blind or visually impaired in copyright, right of publicity, and trade dress law).
people with disabilities in accessing copyrighted works to those of rightsholders in maintaining copyright’s permission structure as a barrier to the accessibility of their works. It does so by unpacking the role of accessibility-oriented copyright limitations and exceptions and situating them in the history of copyright’s decades-long intrusion into disability law and policy.

It can be counterintuitive that copyright law can pose a barrier to making creative works accessible when obligations to make copyrighted works accessible are a significant component of both human and civil rights regimes in international and U.S. disability law. The United Nations Convention on the Rights of People with Disabilities (CRPD) broadly requires signatories to ensure the accessibility of “cultural materials,” “television programmes, films, theatre and other cultural activities.” The CRPD also addresses the accessibility of copyrighted software in information systems and its use in facilitating the distribution of other copyrighted works, by requiring parties to “urg[e] private entities . . . to provide information and services in accessible and usable formats,” to “encourage[e] the mass media . . . to make their services accessible . . .” and to “promote access . . . to new information and communications technologies and systems . . . [and] promote the design, development, production and distribution of accessible information and communications technologies and systems . . .”

While the United States has never ratified the CRPD, various provisions of U.S. disability law also require the accessibility of materials that collectively span all of the categories of copyrighted works specified under Section 102 of the Copyright Act. For example, many types of literary works—namely,

4. Chris Buccafusco has recently begun exploring the role of innovation policy, including patent law, in facilitating accessibility. See Christopher Buccafusco, Disability and Design, 95 N.Y.U. L. Rev. 952 (2020).
5. United Nations Convention on the Rights of People with Disabilities art. 30(1)(a)–(c), Dec. 13, 2006, 2515 U.N.T.S. 3, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-15&chapter=4&clang=_en [https://perma.cc/TS5S-GT25] [hereinafter CRPD]. The CRPD also expressly requires parties to enable people with disabilities to “develop and utilize their creative, artistic and intellectual potential.” Id. art. 30(2). While the topic of copyright policy for authors with disabilities is an important one, it is beyond the scope of this Article.
6. Id. art. 21(c).
7. Id. art. 21(d).
8. Id. art. 9(2)(g)–(h).
10. See 17 U.S.C. § 102(a). The United States’ approach toward mandating the accessibility of some copyrighted works is relatively comprehensive relative to other countries around the world, with some lacking any specific disability laws that require the accessibility of copyrighted works. See BLAKE E. REID & CAROLINE NCUBE, SCOPING STUDY ON ACCESS TO COPYRIGHT PROTECTED WORKS BY PERSONS WITH DISABILITIES 32–33 (2017), https://www.wipo.int/edocs/mdocs/copyright/en/sccr_35/sccr_35_3-executive_summary1.pdf
books\textsuperscript{11}—must be made available in formats accessible to blind and visually impaired people by public libraries and in educational contexts under Title II of the Americans with Disabilities Act (ADA)\textsuperscript{12} and Section 504 of the Rehabilitation Act.\textsuperscript{13} Copyrighted software procured by the federal government and public universities must be made accessible through compatibility with screen readers and other assistive devices under Section 508 of the Rehab Act.\textsuperscript{14}

Some motion pictures and other audiovisual works, and their accompanying sounds\textsuperscript{15} as well as the sound recordings\textsuperscript{16} and musical compositions they contain,\textsuperscript{17} must be made accessible to people with sensory disabilities through the provision of closed captions and audio descriptions under the Telecommunications Act of 1996 and the Communications and Video Accessibility Act of 2010.\textsuperscript{18} Dramatic,\textsuperscript{19} choreographic,\textsuperscript{20} and pictorial, graphic, and sculptural works\textsuperscript{21} must be made accessible to blind and visually impaired people via the provision of audio description when presented in a place of public accommodation, such as a theater or museum—or perhaps the Internet\textsuperscript{22}—under Title III of the ADA.\textsuperscript{23} The ADA even demands the accessibility of copyrighted architectural works\textsuperscript{24} when they are rendered into actual buildings.\textsuperscript{25}

Notwithstanding that the accessibility of copyrighted works is a widely recognized international and domestic policy priority, copyright law routinely arises as a barrier to accessibility. Doctrinally speaking, copyright law issues primarily come about in scenarios where social policy contemplates that third parties, such as libraries or schools, will be obliged to make copyrighted works accessible instead of copyright holders themselves. This is because remediating inaccessible copyright works into accessible forms, such as by creating a Braille version of a book or adding captions to a video, might implicate a copyright holder’s exclusive rights to reproduction, adaptation, and distribution if the remediation is performed by a third party other than the copyright holder.\textsuperscript{26}

\textsuperscript{[https://perma.cc/F3SK-4UB]} (noting that the majority approach among countries responding to a survey about their implementation of the Marrakesh Treaty was a permissive one).

\textsuperscript{11} 17 U.S.C. § 101 (defining “literary works”); id. § 102(a)(1) (including literary works within the subject matter of copyright).

\textsuperscript{12} See 42 U.S.C. § 12132.

\textsuperscript{13} 29 U.S.C. § 794(a).

\textsuperscript{14} 29 U.S.C. § 794d(a).

\textsuperscript{15} 17 U.S.C. §§ 101, 102(a)(6).

\textsuperscript{16} 17 U.S.C. § 102(a)(7).

\textsuperscript{17} 17 U.S.C. § 102(a)(2).


\textsuperscript{19} 17 U.S.C. § 102(a)(3).

\textsuperscript{20} 17 U.S.C. § 102(a)(4).

\textsuperscript{21} 17 U.S.C. § 102(a)(5).

\textsuperscript{22} See generally Blake E. Reid, Internet Architecture and Disability, 95 IND. L.J. 591, 595–604 (2020) (describing myriad issues with the application of Title III of the ADA to the Internet).

\textsuperscript{23} 42 U.S.C. § 12182(a).

\textsuperscript{24} 17 U.S.C. § 102(a)(8).

\textsuperscript{25} 42 U.S.C. § 12183(a).

\textsuperscript{26} See 17 U.S.C. § 106(1), (2), (6); see also Authors Guild, Inc. v. HathiTrust, 755 F.3d 87, 101 (2d Cir. 2014) (discussing the intersection of remediation with the derivative work right). It is not
Where remediation requires circumventing digital rights management technology, it may also implicate the anti-circumvention measures of Section 1201 of the Digital Millennium Copyright Act.\(^{27}\)

As a result, two tracks of accessibility-oriented exceptions have become fixtures of U.S. copyright law. One track centers on the 1996 Chafee Amendment, codified at Section 121 of the Copyright Act, which allows third-party “authorized entit[ies]”—specialized non-profit organizations and government agencies focused on accessibility\(^{28}\)—to remediate and distribute books for people with print disabilities without charge.\(^{29}\) Internationally,

always clear which of a copyright holder’s exclusive rights might be implicated by an effort to make a work accessible. On the one hand, the Chafee Amendment implies that the transformation of books to Braille, large print, and other accessible formats implicates the reproduction and distribution rights. See 17 U.S.C. § 121(a) (“[R]eproduc[ion] or distribut[ion] in accessible formats [of previously published literary works and sheet music] is not an infringement of copyright.”). Likewise, the Marrakesh VIP Treaty obliges signatories to provide for exceptions to the rights of reproduction and distribution. Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled art. 4(1)(a), June 27, 2014, S. TREATY DOC NO. 114-4 (2016), https://www.wipo.int/treaties/en/ip/marrakesh/ [https://perma.cc/M95Y-47QQ] [hereinafter Marrakesh Treaty]. On the other hand, U.S. courts have emphasized that accessibility techniques such as audio description of video programming to make it accessible to blind people require the creation of new content, \(\text{e.g., Motion Picture Ass’n of Am. v. Fed. Commc’n Comm’n, 309 F.3d 796, 798 (D.C. Cir. 2002), and even techniques such as closed captioning that nominally focus on verbatim translations of content from one medium to another entail significant levels of creativity that raise questions about whether these techniques might instead implicate the adaptation right. See Blake E. Reid, Creativity and Closed Captions, BLAKE.E.REID (Oct. 2, 2018), https://blakereid.org/creativity-and-closed-captions/ [https://perma.cc/5FWD-8EED] (reviewing SEAN ZDENEK, [READING] [SOUNDS]: CLOSED-CAPTIONED MEDIA AND POPULAR CULTURE (2015)). Though the Copyright Act is silent on issues beyond accessible-format reproductions of books, it specifically treats “translations” as derivative works. 17 U.S.C. § 101; see also Radji v. Khakhz, 607 F. Supp. 1296, 1300 (D.D.C. 1985) amended by No. 84-0641, 1987 WL 11415 (D.D.C. May 15, 1987). Internationally, the Berne Convention also singles out “translation” as a distinct right. Berne Convention for the Protection of Literary and Artistic Works art. 8, July 24, 1971, 1161 U.N.T.S. 3. As Pamela Samuelson has noted, “[m]ysteries abound about the proper scope of the derivative work right.” Pamela Samuelson, The Quest for a Sound Conception of Copyright’s Derivative Work Right, 101 GEO. L.J. 1505, 1510 (2013).


Chafee’s provisions became the blueprint for the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, aimed at alleviating the “book famine”—the unavailability of books in Braille, large print, and other formats accessible to readers with print disabilities throughout the world. The Marrakesh Treaty largely adopts Chafee’s exceptions for remediating books and adds provisions to facilitate the cross-border exchange of remediated books. The Marrakesh Treaty was adopted in 2013, and the United States subsequently ratified and made conforming adjustments to the Chafee Amendment in the 2018 Marrakesh Treaty Implementation Act. The new Section 121A of the Copyright Act, added by the Marrakesh Treaty Implementation Act, expands Chafee by allowing authorized entities to import and export accessible versions of books. The Library of Congress also maintains regulations that essentially exempt conduct permitted under Chafee from the anti-circumvention provisions of Section 1201.


33. See Marrakesh Treaty, supra note 26, arts. 2–4.

34. See Marrakesh Treaty, supra note 26, arts. 5–6, 9. Though a full treatment of the Treaty is beyond the scope of this Article, there are other interesting features, including requirements for respecting the privacy of people with disabilities. See Marrakesh Treaty, supra note 26, art. 8.


37. See 37 C.F.R. § 201.40(b)(3) (2021); see also Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 83 Fed. Reg. 54,010, 54,013 (Oct. 26, 2018) (discussing the Copyright Office’s recommendation that the exemption be renewed). One part of the exemption is tied directly to compliance with Chafee, see 37 C.F.R. § 201.40(b)(3)(ii) (2021), while the other allows people with print disabilities to remEDIATE books beyond the scope of Chafee so long as the copyright holder is remunerated for the price of the work. See generally 2018 REGISTER’S SECTION 1201 RECOMMENDATIONS, supra note 27, at 22–23 (discussing the most recent rulemaking
A second track of accessibility-oriented exceptions in the United States centers on the Second Circuit’s 2014 holding in *Authors Guild, Inc. v. HathiTrust* that accessibility efforts are non-infringing fair uses under many circumstances.38 In particular, *HathiTrust* recognized that accessibility efforts are likely to be fair because of the long-standing legislative focus in the United States on ensuring access for people with disabilities—both in disability law, including the Americans with Disabilities Act, and in copyright law, including the Chafee Amendment and the legislative history of the 1996 Copyright Act.39 *HathiTrust* also explicitly rests on the historical disinterest of copyright holders in serving the market of people with disabilities.40 While the Librarian of Congress has not yet extended an exemption from the anticircumvention measures of Section 1201 for the full ambit of fair accessibility uses, they have begun to grant exemptions that go beyond the bounds of Chafee and into the territory governed by *HathiTrust*.41

Despite these developments, U.S. disability and copyright law scholars have focused little attention on the intersection of copyright and accessibility. The copyright literature of the past quarter century holds little more than glancing discussions of the Chafee Amendment42 or the accessibility dimensions renewing the exemption). For more on the history of the Office’s proceedings, see discussion infra Part II.D.ii.

38. See *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 101–03 (2d Cir. 2014). The use of fair use to address accessibility is an archetypical example of what Caroline Ncube, Desmond Oriakhogba, and I have described as a “general” exception or limitation—applying an exception or limitation that does not address accessibility explicitly but is applicable in the context of accessibility. See Ncube et al., supra note 29, at 159–60.


40. See *HathiTrust*, 755 F.3d at 103 (“It is undisputed that the present-day market for books accessible to the handicapped is so insignificant that ‘it is common practice in the publishing industry for authors to forgo royalties that are generated through the sale of books manufactured in specialized formats for the blind . . . .’”). See generally Brief of Amici Curiae American Association of People with Disabilities, et al., supra note 39, at 25–28 (detailing historical examples of copyright holders disclaiming interest in making their works accessible).


of HathiTrust. 43 The Marrakesh Treaty has drawn somewhat more attention from scholars, but much of the discussion of the Marrakesh Treaty has focused on tangential aspects of the Treaty such as its international law dimensions. 44

To the extent that scholars have focused on the substance of the Marrakesh Treaty, they have amplified a narrative that the accessibility-oriented copyright limitations and exceptions required by the Treaty are both important and likely to be effective in improving the extent to which people with disabilities can access creative works on equal terms. 45 Comments from U.S. officials have


Treaty, they have amplified a narrative that the accessibility-oriented copyright limitations and exceptions required by the Treaty are both important and likely to be effective in improving the extent to which people with disabilities can access creative works on equal terms. 45 Comments from U.S. officials have
bolstered this narrative with laudatory comments about the Treaty’s likely efficacy for improving access to copyrighted works for people with disabilities.46

Implicit in the prevailing narrative’s valorization of limitations and exceptions is that they are both necessary and sufficient to ensure the accessibility of creative works. In other words, the narrative is premised on the notion that the risk of copyright infringement poses a significant barrier to accessibility but that the adoption of limitations and exceptions will result in a flurry of third-party remediation that will result in people with disabilities being able to access more creative works. Or so the argument goes.

This Article aims to complicate this narrative by offering a thorough historical account of U.S. policy—both in copyright law and disability law—on the accessibility of creative works. Section II begins with a case study of the creation and distribution of accessible books for readers with print disabilities, beginning with pre-Civil War state legislation to fund the institutional creation and distribution of Braille books. The case study tracks efforts by the Library of Congress and publishers to interpose copyright issues and the corresponding rise of a bureaucratic permission structure that ultimately led to the Chafee Amendment, battles over the role of digital rights management under the Digital Millennium Copyright Act, amendments under the Marrakesh Treaty, and the HathiTrust case.

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Part III turns to a case study of the creation and distribution of captioned films and television following the introduction of “talkie” movies in the 1930s and 1940s. By contrast to book accessibility, the captioned films movement largely escaped copyright issues after early legislation shifted responsibility for facilitating captioning from the Library of Congress to the Department of Education. The movement’s evolution into a comprehensive regulatory regime administered by the Federal Communications Commission showcases an entirely different approach to copyright issues. Part IV of the Article concludes with preliminary recommendations about the future of accessible copyrighted works and how disability law and policy can best approach and integrate copyright issues.

II. THE HISTORY OF ACCESSIBLE BOOKS AND COPYRIGHT IN THE UNITED STATES

Though many mediums of copyrighted works have accessibility problems that bear exploration, this Article begins with the accessibility of books. The history of book accessibility in the United States is inextricably intertwined with the interposition of copyright into disability policy and with the development of the prevailing narrative on limitations and exceptions.

This case study proceeds in four parts. First, it deconstructs the conceptualization of tactile printing as an inspiring innovation inherent in the prevailing narrative around copyright limitations and exceptions, tracing the centuries-long failure of innovation policy to foster the necessary technology to make books accessible. Second, it traces the initial efforts to fund book accessibility in the United States and the pre-copyright entrenchment of a third-party model of accessibility. Third, it identifies the entry of copyright law to accessibility policy amid the disability rights movement and development of the Copyright Act of 1996, which linked the third-party accessibility model to copyright’s permission structure and publishers’ demands to serve as gatekeepers for accessibility. Finally, it turns to contemporary efforts at the turn of the twentieth century to extricate copyright’s incursion into accessibility policy with the Chafee Amendment and related developments.

A. Tactile Reading: Inspiration and Innovation Versus a Discriminatory Reality

The history of making books accessible is often presented as an interwoven tale of innovation and inspiration: Louis Braille’s development of a series of embossed dots to convey language in the mid-nineteenth century and Helen Keller’s use of Braille to read on her way to becoming the world’s most well-known DeafBlind writer and advocate in the early twentieth century.47 In this

framing of the history, Braille and Keller collectively ushered in an era of tactile reading through their innovation and perseverance. The prevailing narrative of copyright and accessibility neatly ties off the inspirational framing, declaring that the widespread availability of Braille will allow people with print disabilities to read on essentially equal terms so long as the appropriate copyright limitations and exceptions are in place.

This framing treads uncomfortably close to what disability rights activist Stella Young has labeled “inspiration porn.” Inspiration porn typically involves a timeless, inspiring tale of innovation and progress leading to a disabled person using new technology to overcome barriers that had previously held them back. Inspiration porn is routinely criticized for its treatment of disability as a medical problem (the retrograde “medical model” of disability) rather than as a social construct that results from discriminatory decisions by the architects of the built and digital worlds. Inspiration porn also glosses over the complex history and social salience of the development of technology used to facilitate access, and the difficult path to deploying the technology in the mainstream. As Chris Buccafusco has explained, disability innovation involves a variety of fields of law, including disability law, that are “not typically associated with innovation,” and the presence of inventors that might not be motivated exclusively by innovation law.

While Braille’s and Keller’s landmark contributions are extraordinarily important to the disability rights movement, inspirational stories that center their contributions without exposition of broader context tend to gloss over the uncomfortable reality that the written word’s use as a primary mode of communicating information in human society preceded the development of modern tactile printing by thousands of years. Most of that period passed without regard to the inaccessibility of the medium to people with print disabilities. Contrary to the inspirational notion that an inventive stroke of genius quickly

to-become-trailblazers/2019/01/07/c7e46630-0f72-11e9-831f-3aa2c2be4cbd_story.html


49. Stella Young, We’re Not Here for Your Inspiration, ABC NEWS (July 2, 2012), https://www.abc.net.au/news/2012-07-03/young-inspiration-porn/4107006 [https://perma.cc/2L7J-BPDL].

50. Id. Young’s original critique is of a viral picture of Olympic sprinter Oscar Pistorius, who uses prosthetic legs, running next to a little girl on prosthetic legs with the caption “The only disability in life is a bad attitude.” Id.


52. As Young notes, Pistorius’s prostheses “cost upwards of $20,000 and are completely out of reach for most people with disabilities.” Young, supra note 49.

53. Buccafusco, supra note 4, at 1003.

54. Note that the term “print disability” exists only because of the existence of “print”; that is, a person’s print disability must be understood as a function of the existence of a medium—the non-tactile printing of language—that fundamentally discriminates against them.
brought about a sea change in accessibility for people who are blind or visually impaired, the basic technical innovations at the root of tactile printing—which themselves preceded Braille’s system by many centuries—did not occur for thousands of years after the introduction of writing, and subsequent development and standardization efforts took hundreds of years to gain traction. For those thousands of years until tactile printing technology was conceived and hundreds of years thereafter, generations of people with print disabilities were denied basic access to written materials.

Ironically, cuneiform, potentially the earliest form of writing, involved making inscriptions in clay that were potentially amenable to tactile reading by blind people. But cuneiform was supplanted by other non-tactile forms of writing such as papyrus, parchment, and paper. By the early part of the first millennium A.D., blind people were by and large excluded from the social, cultural, and informational benefits of the written word—well before the primordial soup of copyright began to bubble in the sixth century A.D.

But even the more modern development of a system of tactile reading did not immediately result in a rush of accessible books appearing on the shelves of libraries. Modern techniques for converting the written word into tactile forms to make it accessible to blind people predate Braille’s by centuries. But these techniques languished in obscurity for hundreds of years before coming into relatively mainstream use in the late nineteenth and early twentieth centuries.

Formal tactile printing techniques date back to at least the sixteenth century, when Dr. Girolamo Cardano, an Italian physician, proposed a technique of engraving letters on a metal plate so that blind people could learn to identify them by touch and thereby read in a tactile fashion. Cardano’s techniques did not gain traction. Though it is not entirely clear why, it is unlikely that copyright law, which did not arrive in Italy until more than two centuries later, played any significant role in deterring their development.

55. There is substantial debate over the origins of writing, but it suffices to note as an example the account of archaeologist Denise Schmandt-Besserat, who highlights the appearance of marked geometric tokens as early as 8000 B.C. whose use led to what might arguably be the first instance of writing on clay tablets around 3100 B.C. Denise Schmandt-Besserat, The Origins of Writing: An Archeologist’s Perspective, WRITTEN COMM’N, Jan. 1986, at 31, 34–35.
56. Id. at 34.
58. One of the first arguable impositions of proto-copyright law arose in a dispute over a copy of The Cathach, the “earliest example of Irish writing,” The Cathach / The Psalter of St Columba, ROYAL IRISH ACAD., https://web.archive.org/web/20140702153948/http:/www.ria.ie/Library/Special- Collections/Manuscripts/Cathach.aspx. Asked to adjudicate ownership of the copy, King Diarmait Mac Cerbhaill declared “To every cow belongs her calf; therefore to every book belongs its copy.” Id.
In the seventeenth century, Jesuit priests undertook a second round of efforts toward tactile reading systems in Italy.61 In 1670, Padre Francesco Lana de Terzi proposed an entirely new system of raised dashes similar to Braille’s system of raised dots—more than 150 years before Braille published his system in 1829.62 de Terzi recognized that replicating the alphabet’s visual appearance was neither necessary nor efficient for tactile reading, and that an alternative system specifically designed with tactility in mind might work better.64 However, de Terzi’s interests changed and again, he abandoned the idea before it got any significant traction.66

Yet another unsuccessful pre-Braille tactile reading system was developed in the eighteenth century by Valentin Haüy, a French teacher of students who were blind or visually impaired.67 Haüy accidentally discovered embossed printing when one of his students was able to understand letters on a printed card because they had been so pressed so deeply by the letterpress printer that they made an impression of the letters on the back of the card that could be perceived by feel.68 Haüy’s efforts even led to the proliferation of special schools for students who were blind or visually impaired, patterned after his initial French institute, throughout Europe and the United States in the late eighteenth and early nineteenth centuries.69

Unfortunately, Haüy apparently was not privy to de Terzi’s insight that tactile reading could be accomplished more effectively and efficiently by embossing a bespoke system instead of embossing transliterated letters on paper.

62. See FRANCESCO LANA DE TERZI, PRODROMO 37–43 (1670), https://books.google.com/books?id=RKMMo1El6VAC&ppis=_c&dq=prodromo%20de%20terza&pg=PA37#v=onepage&q&f=false [https://perma.cc/KZV5-D7KG]. In the original Italian, “In qual modo un cieco nato possa non solo imparare a scriuere, ma anche nascondere sotto zifra i suoi segreti, & intendere le risposte nelle medesime zifre” roughly translates to “How a man born blind can not only learn to write, but also hide his secrets under a code and understand the answers in the same code.” The original provenance of de Terzi’s idea cannot be verified; apparently, at least one other portion of PRODROMO, focusing on alchemy, was plagiarized from an unpublished manuscript by another author. See M. G. Grazzini, A Matter of Plagiarism, CONCIATORE (May 28, 2018), https://www.conciatore.org/2018/05/a-matter-of-plagiarism.html [https://perma.cc/WB8C-PGFE].
64. Morse, supra note 59, at 46.
66. Morse, supra note 59, at 46.
68. Id. at 22.
69. Morse, supra note 59, at 54.
As a result, his embossed printing techniques were too complicated for his students to use and too expensive to create. Though French copyright law existed at the time, Haüy’s troubles were much more basic: he faced “shortage[s] of basic materials for his pupils and even constant threats to his own security” in the face of the French Revolution.

Yet another pre-Braille tactile writing system was developed in 1821 by Charles Barbier, a retired French army officer who adopted a new system of tactile reading. Barbier’s system was not initially designed for people who were blind or visually impaired, but rather for military officers to facilitate the sharing of messages on the battlefield that could be read without light. To facilitate the rapid creation of multiple copies of messages on the battlefield where a printer would have been impracticable, Barbier’s system was made by punching a series of small holes into paper using a sharp battlefield tool called a “marlinespike,” resulting in the feeling of a series of “dots.” Unfortunately, the French military was not interested in Barbier’s system and never adopted it.

In a stroke of luck, however, Barbier’s and Haüy’s initial failures converged on success in 1821 when the director of Haüy’s French institute for blind students asked Barbier to demonstrate his system for the students at the institute. In the audience was then-12-year-old Louis Braille, who was inspired by the demonstration and made multiple improvements and changes that were ultimately compiled into Braille’s first manual in 1829, which contained Braille codes both for literary works and musical notation.

But even Braille’s system did not meet with initial success. Competing standards abounded internationally, such as the Moon alphabet, released in the early 1840s in England and still in limited use into the early twenty-first century. And at the time Braille’s system was initially released, American schools for students who were blind or visually impaired used an embossed system similar to Haüy’s, primarily on the grounds that they could be read more easily by teachers who were not blind or visually impaired. A flurry of

70. See Lorimer, supra note 67, at 23.
72. Lorimer, supra note 67, at 23.
73. Id. at 25.
74. Id.
75. Id. at 26–27.
76. Id. at 27.
77. Id.; Mellor, supra note 48, at 60.
78. Lorimer, supra note 67, at 29–32.
80. Irwin, supra note 63, at 3.
competing embossed alphabet standards deriving from both Haüy’s\(^{81}\) and Braille’s, including Boston Line Type, New York Point, and American modified Braille,\(^{82}\) proliferated and drew the battle lines for a full-fledged standards battle.\(^{83}\)

**B. Government Funding and Third-Party Accessibility: The American Printing House for the Blind and the Pratt-Smoot Act**

In the mid-nineteenth century—right around the time of Louis Braille’s death—interest in tactile printed books had taken hold among the blind community,\(^{84}\) the technology and standardization of tactile reading techniques had reached a workable level of technological maturity.\(^{85}\) Yet the payoff of the inspirational tale of widespread tactile reading had yet to occur, and it would still take decades for copyright law to make a significant appearance. The next steps toward widespread accessible books took a different path: securing government funding to pay for it.

**1. The American Printing House for the Blind**

While a number of schools had begun printing embossed books in limited numbers for their own students in the 1850s and 1860s, the first notable national efforts to produce tactile books for people who were blind took place at the American Printing House for the Blind (APH) in Louisville, Kentucky.\(^{86}\) While copyright did not yet pose a significant barrier to the printing of books,\(^{87}\) the

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81. A panoply of embossed letter and symbol systems were used through the early part of the nineteenth century in the United States. See Carol B. Tobe, *Embossed Printing in the United States, in Braille Into the Next Millennium*, supra note 67, at 40, 42–44.


83. Irwin, supra note 63, at 4–7. The standards war culminated in a contentious pair of hearings before the New York Board of Education in 1909 disrupted by violent protests. Id. at 10–11.


85. See Lorimer, supra note 67, at 34–36.

86. Tobe, supra note 81, at 45.

87. The interaction between the book and “print” rights and how the creation of an embossed version of a book might have been treated under the law in the mid-nineteenth century is somewhat unclear, though I was unable to find any contemporary record of copyright being asserted against the creation or dissemination of an accessible format-book. The exclusive right to “copy” was not extended to books until the 1909 Copyright Act. 3 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 8:18 (2021). The contemporary “reproduction” and “distribution” rights from which the modern Chafee Amendment exempt the creation of accessible format copies of books, see 17 U.S.C. § 121(a), and the adaptation right, which may also play a role in the creation of accessible works, see discussion supra note 26, were not added until the Copyright Act of 1976, more than a century after the APH Act. See 3 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 8:21 (2021).
significant expenses of printing did. In a curious arrangement, Dempsey B. Sherrod, a blind man from Mississippi, persuaded the Mississippi Legislature to appropriate several thousand dollars in 1857 to build the APH in Kentucky. In 1858, Kentucky adopted An Act to Establish the American Printing House for the Blind (“APH Act”).

While the APH Act was not concerned with copyright, the Act and its progeny contained numerous features that formed much of the structure of the Chafee Amendment more than a century later. One prominent feature of the APH was that it entitled schools for students who were blind in states who contributed to the APH’s operations to distribute free, accessible copies of books published by the APH to blind students, without remuneration to the holders of the copyrights in the books. Similarly, the Chafee Amendment now permits the unlimited reproduction and distribution of accessible-format book copies to people with print disabilities without remuneration to the holder of the copyright.

The APH Act’s provision permitting accessible copies, while free of charge, came with strings attached—namely, a sense of paternalism about what was appropriate for blind people to read. The Act’s ambitions did not extend to cover the costs of making accessible versions of all books; instead, to choose the books that would be printed, the Act vested each superintendent of schools for the blind in the APH’s member states with the power to vote on the books that “he may deem most desirable for the use of the blind.” This restriction parallels to some extent the pre-Marrakesh Chafee Amendment’s limitation to remediation of non-dramatic literary works.

2. Enter the Library of Congress: The Federal Quota Program and the Pratt-Smoot Act

The APH’s efforts survived the Civil War, and donations began to flow in. Following a petition from the Association of the American Instructors of the Blind, Congress fully nationalized the APH by passing “[a]n act to promote the education of the blind,” which appropriated a $250,000 endowment to the APH. This legislation established the predecessor to the “Federal Quota” Program, which allocates a certain level of money to each state for the

90. Id. § 7.
91. See 17 U.S.C. § 121(a). The Marrakesh Treaty leaves the issue of remuneration up to signatories to decide as a matter of national law. See Marrakesh Treaty, supra note 26, art. 4 § 5.
remediation of books in accessible formats based on data gathered about the recipients of books.96

In 1931, the passage of the Pratt-Smoot Act expanded federal funding of accessible-format books from schools to libraries.97 The Act appropriated $100,000 to the Library of Congress to provide accessible-format books to adult blind residents.98 Congress commissioned the Library in part because of experiments aimed at serving readers who were blind that Librarian of Congress John Russell Young had begun decades earlier.99 The Library would provide the books to readers who were blind or print disabled via local libraries designated as distribution centers through a program now known as the National Library Service for the Blind and Print Disabled (NLS).100

Congress expanded the Pratt-Smoot Act several times during the first half of the twentieth century.101 A notable amendment in 1939 required that the

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100. See § 2, 46 Stat. at 1487.
101. See 36 C.F.R. § 701.6(a) (2021).
102. Act of Mar. 4, 1933, ch. 279, 47 Stat. 1570 (enumerating both raised characters and sound reproductions of books as eligible formats for remediation); Act of June 14, 1935, ch. 242, 49 Stat. 374 (increasing the appropriation to $175,000); Act of Apr. 23, 1937, ch. 125, 50 Stat. 72 (expanding the appropriation to $275,000—$100,000 for books in raised characters and $175,000 for sound reproductions); Act of June 6, 1940, ch. 255, 54 Stat. 245 (increasing the appropriation to $350,000); Act of Oct. 1, 1942, ch. 575, 56 Stat. 764 (increasing the appropriation to $370,000, including $20,000 to replace aging sound reproduction equipment); Act of June 13, 1944, ch. 246, 58 Stat. 276 (increasing the appropriation to $500,000); Act of Aug. 8, 1946, ch. 868, 60 Stat. 908 (increasing the appropriation to $1,125,000); Act of July 3, 1952, ch. 566, 66 Stat. 326 (striking the Act’s limitation to adults); Act of Sept. 7, 1957, Pub. L. No. 85-308, 71 Stat. 630 (making the appropriation open-ended); Act of July 30, 1966, Pub. L. No. 89-522, 80 Stat. 330 (vesting the Library of Congress with the authority to develop regulations implementing the Act’s provisions, now codified at 2 U.S.C. § 135b and 36 C.F.R. § 701.6
Librarian of Congress give preference in sourcing accessible-format books to non-profit organizations and agencies “whose activities are primarily concerned with the blind,” such as the APH.103 Likewise, the modern Chafee Amendment restricts eligibility for the reproduction of accessible works to “authorized entit[ies]”104—non-profit organizations and governmental organizations with “a primary mission to provide specialized services relating to . . . needs of blind or other persons with disabilities.”105 Congress also expanded the Pratt-Smoot Act in 1962 to cover the provision of musical scores, instructional texts, and other specialized materials in accessible formats through the NLS.106

C. Entrenching Third-Party Accessibility in the Disability Rights Movement and the 1976 Copyright Act

Following the instantiation and stabilization of the APH and the NLS as centers for the funding, creation, and distribution of Braille books in the 1950s and 1960s, the disability rights movement began to materialize in legislation. This legislation did not address the accessibility of books directly, but instead entrenched the structural aspects of the APH Act and the Pratt-Smoot Act and their progeny by vesting third-party schools, libraries (including the Library of Congress), and government agencies—rather than publishers or authors—with the responsibility of creating accessible versions of books. None of the legislation contemplated a role for publishers in making books accessible. Moreover, the 1976 Copyright Act further entrenched and complicated the third-party model of book accessibility.

1. The Rehab Act, EHA, and EAHCA

The Rehabilitation Act of 1973 (the Rehab Act) spurned pressure on third parties to begin making works accessible.107 Section 504 of the Rehab Act requires federal executive agencies and other entities receiving federal funding to make their programs and activities accessible to people with disabilities.108 Implementing regulations of the Department of Education, the Department of Health and Human Services, the Department of Labor, the Department of State, and the Department of Justice evolved to require a variety of federally funded entities, including educational institutions, to provide Braille and other accessible versions of books and other curricular material.109 The Education of...
the Handicapped Act of 1970 (EHA)\textsuperscript{110} and the Education for All Handicapped Children Act of 1975 (EAHCA)\textsuperscript{111} (amended and retitled in 1990 as the Individuals with Disabilities Education Act (IDEA)\textsuperscript{112}) exerted additional pressure on educational institutions to generate accessible versions of books. The “individualized education program” provision of the IDEA required that states provide children with disabilities a “free appropriate public education.”\textsuperscript{113}

2. The Copyright Act of 1976

As the EHA and the EAHCA wound their way through Congress in the early 1970s, Congress found itself preoccupied with another task: overhauling U.S. copyright law. These efforts culminated in the mammoth Copyright Act of 1976,\textsuperscript{114} which represented the first major update to U.S. copyright law since 1909 and formed the foundation of modern U.S. copyright law.\textsuperscript{115}

While the 1976 Act did not explicitly address disability or accessibility, its development had significant consequences on book accessibility for people with print disabilities.\textsuperscript{116} Most notably, the development of the 1976 Act further entrenched the third-party model of disability rights legislation. Under this model, Congress held third-party institutions responsible for ensuring the accessibility of books. In doing so, Congress—as well as the Library of Congress and the Copyright Office—reinforced the notion that it was also necessary for those institutions to seek the permission of copyright holders to make books accessible. Moreover, the proceedings leading to the 1976 Act made clear that authors and publishers viewed any willingness to agree to third-party accessibility efforts as a significant, altruistic, and valuable concession. This approach set the stage for the prevailing narrative of limitations and exceptions as an inspiring, necessary, and sufficient act to achieve book accessibility.

Much of the discussion surrounding book accessibility in the lead-up to the 1976 Act did not focus directly on Braille or other tactile versions of books. Instead, discussion centered on a proposal advanced by public disability rights and public radio organizations for a copyright exception to allow books to be

\begin{itemize}
  \item \textsuperscript{111} Act of Nov. 29, 1975, Pub. L. No. 94-142, 89 Stat. 773.
  \item \textsuperscript{113} 20 U.S.C. § 1412(a)(1)(A), (a)(4).
  \item \textsuperscript{115} See 1 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 1-1 (2021).
  \item \textsuperscript{116} In addition to the fair use and public radio provisions discussed later in this section, the 1976 Act also contained an exception to the “manufacture” clause, which banned the importation into the U.S. copies of certain works not manufactured in the U.S. or Canada, “where the copies are reproduced in raised characters for the use of the blind.” See § 601(b)(5), 90 Stat. at 2588. The Copyright Cleanup, Clarification, and Corrections Act of 2010 eventually repealed the manufacture clause. Act of Dec. 9, 2010, Pub. L. No. 111-295, § 4(a)-(b), 124 Stat. 3180.
\end{itemize}
read aloud via special radios distributed to blind people. Walter Sheppard of the Association of Public Radio Stations framed the stakes of the debate:

Must someone—simply because he has no sight—be denied the timely information contained in the daily newspaper or weekly news magazines? Must he rely on 31 minutes of news on the hour and headlines on the half hour? Is it absolutely necessary that he wait months before being able to hear a book being read via talking records? Questions will be raised as to the “free ride” that the blind will now be getting. And we concede that point to you. Not only will the blind be getting special treatment, but so too will those who for other physical reasons cannot read. But we must consider this: How many newspapers, magazines, and books are ever purchased by the blind and those with associated physical disabilities? A human right of access to information in a usable form is the issue.

While the American Association of Publishers (AAP) did not object to the radio exception, the Authors League of America vigorously opposed the proposal as unnecessary on the grounds that blind readers could already access books through the NLS. Despite the organizations’ differing perspectives, two common threads emerged from the hearing.

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117. One version of the proposal came from the American Council of the Blind. *Hearings on H.R. 2223 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the H. Comm. on the Judiciary, 94th Cong. 884–85 (1975)* [hereinafter *Hearings on H.R. 2223*] (statement of the American Council of the Blind). The Association of Public Radio Stations advanced a more expansive version of the proposal that would have more broadly exempted accessibility-oriented radio broadcasts. *Id.* at 877–78 (statement of the Association of Public Radio Stations). Lengthy debate over the proposals ensued. The Register of Copyrights, Barbara Ringer, expressed concern that the exception covered non-dramatic works and could open the door to the broadcast of explicit materials on the radio, such as *Joy of Sex and Fear of Flying*, without permission from their authors. *Id.* at 1847–48. The final version of the 1976 Act included an exception that permitted non-commercial performances of non-dramatic literary works on governmental, non-commercial, or subcarrier radio channels. The 1976 Act also included a more restrictive exception for only a single non-commercial performance of a dramatic literary work over a subcarrier channel. § 110(8)–(9), 90 Stat. at 2549. These exemptions remain in a relatively similar form today. See 17 U.S.C. § 110(8)–(9).


120. *Id.* at 1759 (statement of Townsend Hoopes, President of the American Association of Publishers).

121. *Id.* at 1760, 1765 (statements of Irwin Karp, counsel to the Authors League of America).
First, AAP and the Authors League both took the position that it was necessary to seek the permission of copyright holders to remediate books. Townsend Hoopes, President of the AAP, emphasized that AAP’s non-objection to the radio exception was a concession that required the “relinquishment of rights of copyright owners, and . . . a degree of risk and vulnerability to abuse.”

Irwin Karp, counsel to the Authors League, likewise insisted that authors, “a section of the . . . creative community in this country,” had consistently consented to the creation of accessible versions of their works but should retain the right to decide whether or not “to make available [their] property for free use by the blind,” and that the adoption of accessibility exemptions would “[take] that right . . . away . . . without any justification.” Karp maintained that the radio exception was unnecessary, given the availability of books through the NLS. He argued that “[t]he thousand titles currently in print under [the NLS] ma[de] available enormous diversity of choice” that enabled a blind reader to “choose any book he wishes without charge.”

Hoopes and Karp both emphasized that their accession to third parties making accessible versions of books was a beneficent and altruistic act. Hoopes noted that publishers were willing to relinquish their rights “in the belief that blind and deaf people [were] deserving of special consideration.” Karp proudly quoted a statement by the Librarian of Congress that the Library of Congress “appreciat[ed] [authors’ and publishers’] significant contribution in helping [the NLS] make available educational, recreational and informational materials in Braille.

Second, the hearing made clear that copyright concerns had affected the NLS for the first several decades of its operation. The Library of Congress had made a practice of seeking permission from authors and publishers before creating Braille and other accessible versions of books. Karp explained that the typical procedure was for NLSPBD staff to issue requests for permission to make Braille and audio copies of books “on a standardized clearance form,” after which the APH and the American Foundation for the Blind produced the accessible versions. Karp quoted a statement from the Library of Congress that “publishers and authors ha[d] been extremely cooperative in allowing [the remediation of] materials on a nonfee basis.”

Margaret Rockwell of Washington Ear, a non-profit remediation organization, complained that it often took years to obtain permission from

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122. Id. at 1760.
123. Id. at 1761.
124. Id. at 1762.
125. Id. at 1761, 1767.
126. Id.
127. Id. at 1761.
128. See id. at 1765.
129. See id.
publishers and that even the Library of Congress had struggled to secure clearances, leading to delays in the NLS’s operations.\(^\text{130}\) Nevertheless, Karp reemphasized that accessible versions of books were made “only with the consent of their authors,”\(^\text{131}\) and Register of Copyrights Barbara Ringer underscored that grants of permission to the NLS were “a completely voluntary thing.”\(^\text{132}\)

Section 710 of the Copyright Act resulted from general recognition of NLS’s problematic permission structure. Section 710 required the Register of Copyrights to establish standard forms and procedures by which copyright holders could voluntarily grant the Library permission to create Braille and audio versions of nondramatic literary works when registering them.\(^\text{133}\) The AAP supported the provision,\(^\text{134}\) and Register Ringer argued that the forms would “expedite clearances and make the whole thing rather automatic and self-operating.”\(^\text{135}\)

However, in practice, Section 710 made explicit in law the formerly tacit understanding that—a absent permission from the copyright holder—the bulk remediation of inaccessible books in accessible formats would raise the specter of copyright infringement. The Chafee Amendment later made permission compulsory due to publishers’ widespread failure to observe this permission structure.\(^\text{136}\)

The hearings also raised the prospect that the 1976 Act could more broadly impose barriers to accessibility beyond Braille and audio versions of books. In a 1967 hearing, Anthony G. Oettinger, the President of the Association for Computing Machinery (ACM), presciently predicted the rise of automated text-to-speech conversion,\(^\text{137}\) which would become a primary mode for blind people to read e-books decades later and would face copyright troubles of its own.\(^\text{138}\) Oettinger worried that the Act “would create the anomaly that a normal [sic] man who has purchased a book at a bookstore or borrowed it from a library would be within his rights in reading this book any time and anywhere he pleases, but a blind man who would be using his prosthetic [text-to-speech] machine might well be infringing a copyright.”\(^\text{139}\)

\(^{130}\) See id. at 1764 (statement of Margaret Rockwell, Washington Ear).

\(^{131}\) See id. at 1765.

\(^{132}\) See id. at 1849.


\(^{134}\) Hearings on H.R. 2223, supra note 117, at 1759.

\(^{135}\) See id. at 1849.

\(^{136}\) See discussion supra Part II.D.

\(^{137}\) Hearings on S. 597 Before the Subcomm. on Patents, Trademarks, and Copyrights of the S. Comm. on the Judiciary, 90th Cong. 584 (1967) [hereinafter Hearings on S. 597].

\(^{138}\) Issues around speech-to-text conversion became a mainstay of the Library of Congress’s and Copyright Office’s triennial review of exemptions from the anticircumvention measures of Section 1201 of the Digital Millennium Copyright Act. See discussion infra Part II.D.ii.

\(^{139}\) Hearings on S. 597, supra note 137, at 584.
Oettinger’s concerns did not resurface during subsequent hearings or in the text of the 1976 Act, but they had an important ripple effect. The House Report on the 1976 Act included a paragraph clarifying that the provisions of Section 710—which seemingly required securing permission from a copyright holder to make an accessible-format copy of a book—were only applicable to efforts to make multiple copies of a book.140 More importantly, the House Report clarified that making individual copies was an exemplary, non-infringing act under the newly codified fair use standard in Section 107 of the Act:

While the making of multiple copies or phonorecords of a work for general circulation requires the permission of the copyright owner, a problem addressed in section 710 of the bill, the making of a single copy or phonorecord by an individual as a free service for a blind person [sic] would properly be considered a fair use under section 107.141

The Report recognized that Braille versions of books “are not usually made by the publishers for commercial distribution,”142 implying that the impact on the publisher’s market of the third-party creation and distribution of single copies of Braille books was negligible and thereby tilted the analysis definitively in favor of fair use. Again, the 1976 Act explicitly entrenched the norm that publishers did not directly serve the market of people with print disabilities—a theme that formed an important part of the basis for the Second Circuit’s decision in HathiTrust several decades later.143

The House Committee Report’s address of Oettinger’s concerns continued to ripple when the Supreme Court adopted the Report’s declaration of fair use. In 1984, the Court wrote in Sony v. Universal City Studios that “making a copy of a copyrighted work for the convenience of a blind person is expressly identified by the House Committee Report as an example of fair use.”144 The Court emphasized that the broad application of fair use to accessibility purposes, noting that the Report contained “no suggestion that anything more than a purpose to entertain or to inform need motivate the copying” to count as a non-infringing fair use.145

3. The Americans with Disabilities Act

Finally, 1990 brought the arrival of the Americans with Disabilities Act (ADA).146 Though the ADA is typically regarded as the crown jewel of American disability law, its role in the provision of accessible books was comparatively limited because of the third-party model of book accessibility.

141. Id.
142. Id.
143. Authors Guild, Inc. v. HathiTrust, 755 F.3d 87, 103 (2d Cir. 2014); see also discussion supra Part I.
145. Id.
Title III of the ADA, in particular, had little impact on the provision of accessible books. Title III requires places of public accommodation, such as hotels, restaurants, shopping centers, and various other establishments to be accessible to people with disabilities. While Title III ostensibly covers bookstores and other establishments that sell books to the public, the Department of Justice’s implementing regulations expressly “d[o] not require a public accommodation to alter its inventory to include accessible or special goods”—specifically, Braille or other accessible-format versions of books.

Title II of the ADA, which requires public entities—mainly, state and local governments—to make their services, programs, and activities accessible, further entrenched the notion that third parties would provide accessible books. Under regulations established by the Department of Justice, public entities covered by Title II must take necessary steps to ensure “effective communication” in their services, programs, and activities. These necessary steps include the provision of “auxiliary aids” in “accessible formats” such as “Braille.” As a result, the provision of books by state and local governments primarily materializes in schools and libraries, whose accessibility efforts are overseen primarily by the Department of Education. Because Title II is largely silent about the sourcing of accessible materials, it became widely understood that schools and libraries would be responsible for acquiring or creating their own copies of accessible materials, with all of the copyright issues that entailed.

D. Reversing Copyright’s Incursion: The Chafee Amendment, the DMCA, the Marrakesh Treaty, and HathiTrust

As schools and libraries faced increasing pressure to source accessible versions of books for students and patrons with print disabilities, issues surrounding fear of copyright liability began to boil over after the 1976 Copyright Act. As a result, Congress began the long-running process of reversing copyright’s incursion into the third-party model of disability access with an ongoing foray into copyright limitations and exceptions.

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149. 28 C.F.R. § 36.307(a) (2021).
150. Id. § 36.307(c).
152. Id. § 12132.
154. Id. § 35.160(b)(1)–(2).
155. Id. § 35.104.
156. See id. § 35.190(b)(2). The Department of Health and Human Services is charged with overseeing the provision of accessible books in medical, dental, and nursing schools. Id. § 35.190(b)(3).
1. **The Chafee Amendment**

This foray began with the enactment of the Chafee Amendment in 1996. The Amendment, part of the Legislative Branch Appropriations Act of 1997, is named after Republican Senator John Chafee, who proposed the provision. In isolation, Chafee’s provisions seem fairly broad: the Amendment created an exception to a copyright holder’s exclusive rights under Section 106 and Section 710 of the Copyright Act that declares the reproduction and distribution of books in “specialized formats,” including Braille, non-infringing under certain circumstances. However, the specific circumstances under which it applies make clear that it is largely intended to entrench the historical framework laid out by the 1976 Act, the APH Act, and the Pratt-Smoot Act:

- First, Chafee applied only to non-dramatic literary works—i.e., non-fiction books. This limitation mirrors Section 710, which also limited the voluntary consent form for bulk remediation provided to non-dramatic literary works, consistent with the APH Act’s focus on the accessibility of books chosen by school superintendents for educational purposes.

- Second, Chafee’s eligibility was limited to “authorized entit[ies]” defined as “a nonprofit organization or a governmental agency that has a primary mission to provide specialized services relating to training, education, or adaptive reading or information access needs of blind or other persons with disabilities,” reflecting the provision of funds to the Library of Congress in the Pratt Smoot-Act and the APH as part of the Federal Quota program. Senator Chafee made clear in introducing the amendment on the floor that this language was at least intended to encompass the NLS and the APH.

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159. § 316, 110 Stat. at 2416 (codified at 17 U.S.C. § 121(a), (b)(1), (c)(3)).
160. Id.
161. Id.
162. This limitation was later removed in the Marrakesh Implementation Act of 2018. See discussion *infra* Part II.D.iii.
164. See An Act to Establish the American Printing House for the Blind, ch. 115, § 8, 1858 Ky. Acts 192, 193–94; see also discussion *supra* Part II.B.
165. § 316, 110 Stat. at 2416 (codified at 17 U.S.C. § 121(a)).
166. Id. (codified at 17 U.S.C. § 121(c)(1)).
168. See discussion *supra*, Part II.B.ii.
169. 142 CONG. REC. S9,066 (daily ed. July 29, 1996). The *HathiTrust* district court also interpreted this language to cover libraries of educational institutions, which have as a “primary mission”
• Third, Chafee’s provisions applied under circumstances where an accessible book was “exclusively for use by blind or other persons with disabilities”\(^{170}\) and required the inclusion of a copyright notice\(^{171}\) and warnings that further reproduction or distribution of the book was an infringement.\(^{172}\) These requirements mirrored the authentication requirement in the APH Act and Federal Quota program\(^{173}\) and the extensive eligibility requirements imposed by the Library of Congress for receipt of books from the NLS.\(^{174}\) Chafee’s pre-Marrakesh Treaty definition of “blind or other persons with disabilities” likewise incorporated the definition of the same term from the Pratt-Smoot Act.\(^{175}\)

Chafee’s only significant substantive addition,\(^{176}\) then, was to make compulsory the voluntary consent to the bulk remediation of copyrighted works that had been contemplated under Section 710 in the 1976 Act.

Contrary to Karp’s contentions that publishers and authors were quick in their responses to requests for consent, Senator Chafee explained on the floor of the Senate that NLS routinely waited months or years for publishers to clear requests, which created (among other things) problems for blind students waiting for remediated versions of textbooks that arrived far too late to be used in their classes.\(^{177}\) The delays, according to Senator Chafee, did not occur “because the publishers ha[d] a desire to withhold permission” but rather because providing consent was “simply a low priority” that publishers “just set . . . aside.”\(^{178}\)

As a result, the AAP, the National Federation of the Blind, the American Foundation for the Blind, the APH, and the Copyright Office negotiated and agreed on the terms of the amendment.\(^{179}\) The amendment was then added to the appropriations bill with little further discussion.\(^{180}\) Shortly after Chafee’s

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\(^{170}\) § 316, 110 Stat. at 2416 (codified at 17 U.S.C. § 121(a)).

\(^{171}\) Id. (codified at 17 U.S.C. § 121(b)(1)(B)).

\(^{172}\) Id. (17 U.S.C. § 121(b)(1)(C)).

\(^{173}\) See An Act to Establish the American Printing House for the Blind, ch. 115, § 7, 1858 Ky. Acts 192, 193; discussion supra Part II.B.

\(^{174}\) See 36 C.F.R. § 701.6(e) (2021) (limiting use of accessible versions of books to eligible readers who are blind or print disabled).


\(^{176}\) Chafee added a novel exclusion for testing materials and computer programs, § 316, 110 Stat. at 2416 (codified at 17 U.S.C. § 121(b)(2)), the latter of which was an addition to the tangle of copyrightable subject matter in the 1976 Act and subsequent amendments. See 2 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 3:70 (2021).

\(^{177}\) 142 CONG. REC. S9,066 (daily ed. July 29, 1996).

\(^{178}\) Id.

\(^{179}\) Id.

\(^{180}\) Id. at S9,067.
enactment, the Work Made for Hire and Copyright Corrections Act of 2000 repealed Section 710.181

2. Section 1201 and Triennial Anticircumvention Exemptions

Shortly after Chafee was passed in 1996, the Digital Millennium Copyright Act of 1998 (DMCA) added a new dimension of concern. Facilitating accessibility increasingly required breaking digital locks as electronic e-books encumbered with digital rights management technologies became more widespread. The anti-circumvention provisions of Section 1201 of the DMCA made it illegal in most circuits182 to circumvent technological locks that controlled access to copyrighted works,183 including books. As a result, making accessible versions of electronic books available to people with print disabilities was again mired in copyright.

Section 1201, however, requires the Librarian of Congress to promulgate temporary exemptions from the anticircumvention measures under a notice-and-comment rulemaking procedure administered by the Copyright Office in consultation with the National Telecommunications and Information Administration.184 In 2002, the American Foundation for the Blind (AFB), among others, petitioned the Librarian to exempt literary works from the anticircumvention measures.185

A coalition of copyright holders, including AAP, conceded that people with print disabilities “enjoy less comprehensive access to literary works,” but opposed the exemption on the grounds that people with print disabilities could continue to read non-electronic books.186 AAP, writing separately, complained that it had already engaged in a variety of “altruistic” activities to improve accessibility pursuant to IDEA, the Rehab Act, and the ADA for which publishers had not been paid, and that the framework established by the APH Act and the Chafee Amendment was sufficient to meet the needs of people with print disabilities.187 AAP went out of its way to disclaim that “nothing in the

182. See 5 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 16A:4.50 (describing the circuit split over the requirement of a “[n]exus” with copyright infringement for liability under Section 1201).
184. Id. § 1201(a)(1)(B)–(D).
Chafee Amendment requires the publisher of a copyrighted literary work to ensure that the published format meets the accessibility needs of persons with print disabilities.188

Register of Copyrights, Marybeth Peters, largely rejected AAP’s arguments, concluding that the requested exemption was consistent with Chafee and “most likely . . . a fair use,” and recommended an exemption allowing the circumvention of digital locks on books that interfered with read-aloud software and screen readers.189 The Library of Congress subsequently affirmed Peters’s recommendation.190 In 2006, the Library renewed the exemption and expanded it to cover books with digital locks that interfered with either read-aloud functions or screen readers.191

In 2009, copyright holders, including AAP, accused AFB of “fail[ing] to produce any evidence that the exemption ha[d] been used.”192 Register Peters agreed, concluding that there was “no factual basis” for renewing the exemption, and recommended against implementing it.193 In a rare rebuke, however, Librarian of Congress, James Billington, overruled Register Peters and renewed the exemption. Billington criticized the Office for failing to develop the record or acknowledge the NTIA’s support for the exemption.194 In 2012, the exemption was reformulated to more neatly track the contours of Chafee195 and was renewed in the same form in 2015196 and 2018.197

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188. Id. at 14–15.
189. See Memorandum from Reg. of Copyrights on Recommendation in RM 2002-4 to Libr. of Cong. at 64–82 (Oct. 27, 2003), https://cdn.loc.gov/copyright/1201/docs/registers-recommendation.pdf [https://perma.cc/7XA7-AFGJ].
197. See discussion supra note 37 (describing the full context of the 2018 triennial review and ongoing proceedings).
3. The Marrakesh Treaty Implementation Act

Though a full recount of the Marrakesh Treaty is beyond the scope of this Article, the U.S. implementation of the Treaty via the Marrakesh Treaty Implementation Act of 2018,198 the only substantial modification to Chafee since its enactment,199 provides a window into the relatively modest changes Marrakesh brought to copyright dimensions of accessible works in the United States.200 In addition to Marrakesh’s complex cross-border provisions,201 the Marrakesh Implementation Act modified the core of Chafee by:

- Removing Chafee’s limitation to non-dramatic works;202
- Adding to Chafee’s exemption from liability the reproduction and distribution of musical scores in accessible formats,203 mirroring the long-standing provision of musical scores by the Library of Congress under amendments to the Pratt-Smoot Act,204
- Expanding Chafee’s definition of “specialized formats” into which works could be remediated, which had previously been limited to “braille, audio, or digital text,”205 to a more open-ended set of “accessible formats” that allows reproduction or distribution into any “alternate manner or form” that gives a print-disabled reader access to the work;206 and
- Updating Chafee’s definition of eligible “blind or other persons with disabilities” to whom remediated works could be distributed207 to a more expansive definition that includes


203. Id. § 2(a)(1)(A)(iii) (codified at 17 U.S.C. § 121(a)).


206. § 2(a)(1)(C), (D)(i)–(iv), 132 Stat. at 3667 (codified at 17 U.S.C. § 121(d)(1)).

207. § 316(a), 110 Stat. at 2416 (codified at 17 U.S.C. § 121(c)(2)).
people who are blind,208 visually print disabled,209 or physically print disabled.210

4.  Authors Guild, Inc. v. HathiTrust

Finally, Chafee has been seldom tested in court, but one notable affirmation occurred in the aforementioned HathiTrust litigation in 2012. HathiTrust, a University of Michigan service involving the libraries of several universities, partnered with Google to allow the digitization of the libraries’ collections—in part to help facilitate the rapid remediation of books in the collection into accessible forms for students with print disabilities.211 After the Authors Guild sued HathiTrust and its members for copyright infringement, the National Federation of the Blind (NFB) intervened in the case as a defendant.212

The district court concluded that the University of Michigan was an “authorized entity” eligible for Chafee’s protections and that the digitization of books for accessibility purposes “fits squarely within the Chafee Amendment.”213 The HathiTrust district court also concluded that entities digitizing books for accessibility purposes could “certainly rely on fair use . . . to justify copies made outside [the scope of Chafee] or in the event that they are not authorized entities.”214 While the Second Circuit focused its analysis on affirming the district court’s fair use holding,215 it left undisturbed the district court’s interpretation of Chafee.

III.
ACCESSIBLE FILMS AND TELEVISION IN THE UNITED STATES

Against the backdrop of copyright’s interposition and subsequent reversal in the context of accessible books, this Article turns, then, to the countervailing story of the accessibility of films and television for people who are deaf or hard of hearing through the provision of captions. As well as covering two of the most important mediums of the twenty-first century, the story of accessible films and television provides a parallel story where copyright—largely by luck and happenstance—failed to intervene, leading to radically different results.

This case study begins in parallel to the story of accessible books, deconstructing a similar “inspiration porn” conceptualization of captioning as an

209. Id. (codified at 17 U.S.C. § 121(3)(B)).
210. Id. (codified at 17 U.S.C. § 121(3)(C)).
212. Id. at 447.
213. Id. at 465. Crediting an “eloquent oral argument” by NFB’s attorney Dan Goldstein and a declaration by accessibility expert George Kerscher, the Southern District of New York declared that “academic participation by print-disabled students has been revolutionized by [HathiTrust].” Id. at 448–49.
214. Id.
215. HathiTrust, 755 F.3d at 101–03. See discussion supra Part I.
inspiring innovation and tracing the impact of the shift from silent to “talkie” movies on the American deaf community. It turns to similar efforts by captioned film advocates to secure government funding. It then describes a profoundly fortuitous shift of captioning funding away from the Library of Congress and toward the Department of Health Education and Welfare, concluding with the evolution of policy into a regulatory regime administered by the Federal Communications Commission.

A. Captions and the Regressive Discrimination of Innovation


The story of captions more accurately begins in the late nineteenth century, when silent movies took the United States by storm.\footnote{See John S. Schuchman, Silent Movies and the Deaf Community, 17 J. POPULAR CULTURE 58, 58 (1984).} Silent movies, which featured no audible dialogue and even included textual narrative on the screen, were a fully accessible medium for people who were deaf or hard of hearing.\footnote{Id. at 58–59. Of course, silent movies were decidedly inaccessible to people who were blind or visually impaired.} Their value stemmed not just from the inclusion of captions, but from the fact that the lack of sound forced actors and actresses to adopt “expert use of facial and body expressions for communications.”\footnote{Gail L. Kovalik, “Silent” Films Revisited: Captioned Films for the Deaf, 41 LIBR. TRENDS 100, 101 (1992) (citing Schuchman, supra note 219).} Silent films became an important tool for entertainment and pedagogy at deaf schools, and more broadly served as a cultural touchpoint for the deaf community in the early twentieth century\footnote{See Schuchman, supra note 219, at 58–89.} as the use of sign language came under cultural and political attack in America and internationally.\footnote{See John S. Schuchman, The Silent Film Era: Silent Films, NAD Films, and the Deaf Community’s Response, 4 SIGN LANGUAGE STUD. 231, 232 (2004).} Silent films even began to feature deaf actors, including...
Emerson Romero, who starred in a variety of American and Cuban silent films, and Granville Redmond, who starred in numerous films with Charlie Chaplin.

The introduction of “talkies”—movies with spoken dialogue soundtracks—in the early 1930s was devastating to the deaf community. Emil S. Ladner, Jr., a freshman at Gallaudet University, declared in a widely circulated 1931 essay, *Silent Talkies*:

> The disappearance of the silent film has been a calamity to the deaf. Heretofore, much of our entertainment, and much of our learning has been derived from the silent screen, but now that the “talkies” have taken the place of the silent film, what are we to do?

Ladner bitterly concluded his essay with a poignant lament about a silent movie of explorer Robert Byrd flying over the South Pole:

> How thankful we deaf are that Rear-Admiral Byrd’s picture of the South Pole was a “silent talkie,” and may he visit a few more poles every now and then, so we deaf may have a “silent talkie.”

Other members of the deaf community in the United States joined Ladner in protesting the failure of the movie industry to consult with deaf viewers about the rollout of talkies.

People who were deaf or hard of hearing could no longer experience movies on equal terms to their hearing peers. As a result, many deaf institutions shifted to more insular screenings, aimed primarily at deaf people, of old silent movies. These screenings became increasingly difficult as the films began to physically degrade with use. Many deaf actors turned to theatrical performances using sign language, including the traveling National Theater of the Deaf. And independent deaf filmmakers, including Ernest Marshall, a noted actor and sign language expert, began to produce their own silent movies, following the well-known “NAD Films” that the National Association of the Deaf (NAD) had developed during the silent movie era.

The notion of restoring accessibility through the provision of captions arose relatively quickly. In *Silent Talkies*, Ladner also presciently proposed what would materialize in the following decade as captions:

Perhaps, in time, an invention will be perfected that will enable the deaf to hear the “talkies,” or an invention which will throw the words spoken

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224. See Kovalik, supra note 221, at 102.
225. See Schuchman, supra note 219, at 67.
226. See id. at 58.
228. Emil S. Ladner, Jr., *Silent Talkies*, in 76 AM. ANNALS DEAF 323, 323 (1931).
229. Id. at 324.
230. See Schuchman, supra note 219, at 70.
231. Schuchman, supra note 223, at 235.
232. Id. at 236.
directly under the screen as well as being spoken at the same time.233

However, Ladner, like Haüy and de Terzi before him, did not see his idea quickly come to fruition. The first meaningful step came when Emerson Romero, who was no longer hired for acting jobs following the end of the silent movie era, developed in the 1940s a rudimentary captioning system that involved splicing frames of dialogue into “talkies,” which he rented out to deaf organizations and churches as “captioned films.”234 Romero’s techniques did not succeed because they both disrupted and lengthened the movie,235 and because they were prohibitively expensive.236

In another unsuccessful experiment, British movie producer J. Arthur Rank developed another system where captions were etched onto glass and projected to a second screen located below and to the left of the main screen.237 But the system was cumbersome and required a second projectionist to align the timing of the captions with the main film, and it was difficult for readers to follow dynamic content on two separate screens.238 Londoners who were deaf or hard of hearing tried and rejected the idea.239 Another experiment using the same technique by Dr. Clarence D. O’Connor, Superintendent of the Lexington School for the Deaf, also failed in America.240

However, the efforts of Romero, O’Connor, and Rank fostered an ongoing interest in captioned films for both educational and entertainment purposes,241 and in 1949 a Belgian company developed a captioning process for etching captions right onto the finished print of films242—a process later described as “open captioning.”243 Titra Film Laboratories in New York became the U.S. franchisee for the Belgian company, and suddenly captions of acceptable quality became available in the United States.244

233. See Ladner, supra note 228, at 324.
234. See Kovalik, supra note 221, at 102.
235. Id.
238. Id.
239. Id.
240. Id.
242. See STRAUSS, supra note 218, at 205.
243. The usage of “open” captions displayed for all viewers evolved as an antonym for “closed” captions that could be turned on or off at the user’s option.
244. See Boatner supra note 237, at 521.
While the birth of captioned films came much sooner after the advent of television than standardized tactile reading systems after the advent of the book, the basic technical ideas behind captioning still took decades to gain traction. Over the course of those decades—during which television changed the American media landscape—deaf and hard of hearing people were effectively excluded from a critical period in American democracy and culture. And it would take decades more before captioning would become mainstream.

B. Captioning and Government Funding to Overcome Piracy Concerns

The model for government funding of making copyrighted materials accessible that had taken root in accessible books was an appealing one that also began to take root in film accessibility—but for a different reason. While copyright had not proved a significant barrier to early efforts to make books accessible, concern about illicit copying proved a serious problem in the initial deployment of captioning. The government used funding, not copyright limitations and exceptions, to address concerns over copyright infringement.

In 1949, Clarence O’Connor and Edmund Burke Boatner, two superintendents of schools for the deaf in the United States, formed Captioned Films for the Deaf (CFD) and used the new Titra caption engraving process to create and distribute captioned films. While funding generally continued to be a substantial barrier to producing captioned films, another problem arose: film producers were simply unwilling to sell or lease prints of their most popular films because they were concerned about piracy. Though CFD was willing to sign agreements to guarantee that the captioned films would only be shown in schools for students who were deaf, many film producers simply refused to provide the films.

While concerns about copyright infringement were at the root of the accessibility problem, they manifested in a way that copyright limitations and exceptions could not solve. This is because it was simply not possible for CFD to obtain prints of films other than from the film’s producers. The producers were not concerned about the addition of captions infringing their copyright; they were concerned that the physical distribution of copies of their films for accessibility purposes would lead to more general infringement of copyright.

245. In February 2020, the American School for the Deaf (ASD) released a posthumous report acknowledging what it described as “highly credible and corroborated” allegations of an alum of the ASD that Boatner had “engaged in grooming and sexual contact with her from the late 1950’s [sic] through the early 1960’s [sic] that ended after graduation.” Findings, AM. SCH. FOR DEAF (Feb. 21, 2020), https://www.asd-1817.org/findings [https://perma.cc/99Z9-KGV4]. Though there is no apparent relationship between these allegations and Boatner’s accounts cited in this Article, I note the ASD report to allow readers to reach their own judgments about Boatner’s credibility given that many of the details in this section rely on his first-hand reports.

246. See Boatner, supra note 237, at 521. J. Pierre Rakow, a deaf businessman, significantly aided O’Connor and Boatner in their efforts. See id. at 523.

247. Id. at 522.

248. Id.
The aggressive assertion of concerns about piracy unexpectedly led to an early insight that copyright holders could play a significant role in captioning their own films. Desperate to find a film production partner that would work with them, CFD was able to establish a relationship with one studio, RKO, and their caption efforts began in earnest with films provided by RKO. But CFD encountered another problem: synchronizing the captions to be properly timed with the film posed a difficult technical challenge. Ironically, RKO had unintentionally resolved much of the technical challenge in captioning films without even realizing it. In the course of exporting films to other countries and creating foreign-language subtitles, RKO created English-language transcripts to serve as a basis for translation. CFD’s principals realized they could use the transcripts to much more easily create the captions for the captioned versions of the films.

In other words, the copyright holder in the creative work at issue had inadvertently created nearly complete versions of the captions needed for the accessibility of its own works without realizing it. All it took was for an accessibility organization to point out to the copyright holder that it had already done much of the work necessary to enable viewers who were deaf or hard of hearing to view the rightsholder’s films on equal terms—presaging later developments that would place responsibility for closed captioning on copyright holders directly.

Nevertheless, by 1958 the difficulties in obtaining film prints for captioning and the limited scale of CFD’s modest budget had resulted in the creation of only twenty-nine captioned films, a small fraction of the films that were available in theaters and the growing number of programs delivered via broadcast television. O’Connor and Boatner decided to turn to the federal government for help.

It is at this point that the stories of Braille and captioning nearly converged. With the help of Republican Senator William Purtell, Democratic Representative John Clarence Watts sponsored a bill that would have expanded the appropriation to the Library of Congress for the production and distribution of Braille books to also encompass captioned films. The bill was supported by the acting Librarian of Congress, Verner Clapp, who had graduated from a college in Hartford, Connecticut (where CFD was located) and seemed keen to expand the Library of Congress’s support for accessible books into films.

249. Id.
250. Id. at 523.
251. Id.
252. See id.
253. See discussion infra Part III.E.
255. Id.
256. See id.
257. Id.
The bill, largely structured like the Pratt-Smoot Act, would have required the Library of Congress to establish a parallel program to the NLS to provide a lending service for captioned films.258 Had the original Purtell-Watts Act passed, U.S. policy for the provision of accessible video programming might have ended up on the same track as policy for accessible books: provided primarily by third parties and eventually ensnared in copyright challenges that would require the development of copyright limitations and exceptions.

However, a captioned film program overseen by the Library of Congress was not to be. Acting Librarian Clapp was replaced as permanent Librarian F. Quincy Mumford resumed his duties.259 At a conference at the Library of Congress, Mumford allegedly confronted O’Connor and Boatner, telling them that he did not want the Library to provide captioned films.260 When O’Connor and Boatner pointed out that the Library provided Braille books through the NLS, Mumford declared that if he had his way he would likewise put an end to the Library’s support for book accessibility.261 O’Connor and Boatner were dismayed at Mumford’s reversal because the Library’s large collection of copyrighted films—collected, ironically, because of copyrighted deposits—was one of the largest collections of film prints in the world, and access to it could have solved one of the biggest barriers to making films accessible.262

Nevertheless, as a result of Mumford’s allegedly ableist inclinations, and on the advice of Mary Switzer, the director of the Office of Vocational Rehabilitation in the U.S. Department of Health, Education, and Welfare (HEW),263 the bill’s proponents reconfigured it to vest responsibility for the captioned films program in HEW rather than the Library of Congress.264 The bill, entitled the Closed Caption Loan Service of Films Act of 1958, passed and was signed into law by President Eisenhower later in 1958.265 CFD was dissolved and its library of captioned films donated to the federal government for distribution.266

While the Closed Caption Loan Service Act retained most of the features of the Pratt-Smoot Act—i.e., that the HEW Secretary would source, caption, and distribute films—it went beyond Pratt-Smoot in expressly acknowledging the role of copyright. It also offered a specific approach to navigating the possible barriers. Specifically, the Closed Caption Loan Service Act contemplated that the HEW Secretary would simply acquire the “rights” to films by purchase or

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258.  H.R.J. Res. 385, 85th Cong. § 3(a) (1957).
259.  Boatner, supra note 237, at 524.
260.  Id.
261.  Id.
262.  See id.
263.  HEW is the predecessor of the modern Department of Health and Human Services.
264.  Boatner, supra note 237, at 524.
266.  Norwood, supra note 236.
lease before providing them in captioned form.267 This procedure set the stage for an approach that would become more typical in navigating copyright issues in captioning: operating under the assumption that entities obliged to provide captioning would work out licensing arrangements with film producers.268

C. The Disability Rights Movement, the Rise of Television, and Doubling Down on Government Funding

While the redirection of responsibility for the development of the captioned films program from the Library of Congress to HEW seemed a relatively insignificant decision at the time, it placed captioned videos on a significantly different trajectory than accessible books through the remainder of the twentieth century. At the same time the Library of Congress had begun miring Braille books in a morass of copyright questions, HEW instead began efforts in collaboration with industry and disability organizations to press the technological state of the art forward. Generally speaking, the captioning movement steamrolled, navigated around, or simply ignored copyright issues that arose.

HEW’s first efforts built on the Closed Caption Loan Service Act by working with Congress to advance the technological state of the art on captioning.269 An expansion to the Act in 1962 authorized appropriating to HEW more than a million dollars to expand research on the production and distribution of captioning.270 A 1965 expansion increased the authorization to $7 million.271

In the 1960s, the film industry saw a new competitor arise: broadcast television. As TV skyrocketed in popularity, network executives and producers revolted at the prospect of captions. The captioning innovations of the 1940s and 1950s delivered “open” captions, which would be seen by all viewers and could not be turned on or off.272 But the television industry worried that captions would alienate hearing viewers who did not want to see captions and would pose a risk to the artistic integrity of the creative content of broadcast programming.273

Empirical studies at the time suggested it was unlikely that hearing viewers would actually object to open captions,274 and some stations, primarily public broadcasters, pressed forward with open captions. In 1972, Boston’s WGBH-
TV, a PBS station, aired the first open-captioned television program—the aforementioned rerun of *The French Chef* with Julia Child—and continued to distribute a variety of open captioned programming throughout the 1970s. ²⁷⁵

In 1973, WGBH encountered one of the first formal copyright issues in television captioning when it aired a captioned version of President Richard Nixon’s inauguration. ²⁷⁶ PBS had not purchased the rights to redistribute the video feed provided by National Broadcasting Company (NBC), the network actually filming the inauguration, and NBC could not grant PBS free access to the feed when other networks had paid for it. ²⁷⁷ However, in what became typical of the approach to copyright issues in television captioning over the next several decades, NBC and WGBH simply worked around them. The NBC producer in charge of the video feed negotiated to offer WGBH the video without the audio, and WGBH arranged to replace the audio with a Spanish language version of Nixon’s speech. ²⁷⁸

Notwithstanding the relative success of open captioning, the television industry pressed its opposition to captioning. HEW convened a conference in 1971 to investigate the possibilities of “closed” captions that could be enabled or disabled at each individual viewer’s option. ²⁷⁹ The National Bureau of Standards tested a new technique, “Line 21” captions, that could be invisibly encoded into the twenty-first line of the “vertical blanking interval”—an ordinarily blank part of the broadcast television signal designed to accommodate the need for cathode-ray televisions to periodically refresh their displays. ²⁸⁰ PBS engineers developed a prototype caption decoder, and the Federal Communications Commission (FCC) granted PBS special permission to conduct a successful test of Line 21 captioning. ²⁸¹

PBS then petitioned the FCC to open up Line 21 captioning to the entire industry. ²⁸² Fearing that they would face pressure to provide captions for their content, commercial broadcasters opposed the petition. ²⁸³ But the Senate passed a resolution urging the FCC to grant PBS’s petition; ²⁸⁴ the resolution’s sponsor declared that it would be “tragic and highly discriminatory to continue to exclude deaf and hearing impaired Americans from full enjoyment of television.” ²⁸⁵ Gerald Ford likewise released a statement urging the FCC to grant the petition. ²⁸⁶

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²⁷⁵ Id. at 207.
²⁷⁶ Id.
²⁷⁷ Id.
²⁷⁸ Id.
²⁷⁹ Id. at 206.
²⁸⁰ See id. at 207.
²⁸¹ Id. at 208.
²⁸² See id. at 209.
²⁸³ See id.
²⁸⁵ 122 CONG. REC. 34,717 (1976).
²⁸⁶ STRAUSS, supra note 218, at 209.
In 1976, the FCC granted PBS’s petition and opened the doors for broadcasters to begin experimenting with closed captions. The experiments were modest but technologically successful, and in 1979 the American Broadcasting Company (ABC), NBC, and PBS—but not Columbia Broadcasting System (CBS), which had resisted the migration toward Line 21 captions—reached an agreement to provide 16-20 hours of captioned programming each week. Sears also began to sell closed captioning decoder units and televisions with integrated decoders to the public. In 1979, Congress passed an expansion to HEW’s funding to authorize the creation of the National Captioning Institute, which would provide expanded availability of captioning. And in 1980, the first closed-captioned television broadcasts appeared: *Sunday Night Movie*, *Barney Miller*, *The Wonderful World of Disney*, *Mystery!* and *3-2-1 Contact*.

D. Captioned Television and the Shift to Mandatory Captioning Under Telecommunications Law

Despite the percolation of captioning experiments, viewers who were deaf or hard of hearing still lacked access to significant levels of captioned programming through the 1980s. Though the FCC had opened the door for captioning through amendment of its technical rules, it had not taken any efforts to require captioning. Sue Gottfried, a deaf advocate in California, along with the Greater Los Angeles Council on Deafness, Inc. (GLAD) and the California Association on the Deaf, petitioned the FCC to revoke the licenses of several California stations for failing to caption their programming, but the FCC rejected the petition in a decision later upheld by the Supreme Court. Moreover, the high price of caption decoders had precluded many deaf viewers from buying them. Overall penetration of the technology remained relatively low, and networks in turn began to resist deploying additional captioned programming.

Captioning advocates, with the help of NCI and other allies, pressed for captioning mandates through legislation. As with accessible books, captioning did not receive much direct attention in the ADA, though the accessibility mandate for public accommodations in Title III of the ADA was subsequently

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288. STRAUSS, supra note 218, at 211.
290. STRAUSS, supra note 218, at 211.
293. STRAUSS, supra note 218, at 212–16.
294. Id. at 216–21.
295. See discussion supra Part II.C.iii.
leveraged to force movie theaters to provide captions voluntarily included by the movie studios.296

However, captioning advocates successfully pressed for legislation on a separate track from the ADA. Their first success came with the passage of the Television Decoder Circuitry Act of 1990 (TDCA),297 which forced the consumer electronics industry to begin incorporating captioning features in televisions.298 The TDCA extolled the virtues of closed captioning at length, declaring among a series of Congressional findings that “to the fullest extent made possible by technology, deaf and hearing-impaired people should have access to the television medium.”299 Instrumentally, the TDCA required all newly manufactured televisions with screens of at least thirteen inches to include built-in closed caption decoders.300 Despite rightsholders’ worries during the 1976 Copyright Act hearings that new technological means of rendering accessibility features would run afoul of copyright,301 the topic did not arise during the hearings leading up to the TDCA.

Though the TDCA arguably addressed concerns about the penetration of caption decoders, the television industry continued to resist deploying captioning more widely.302 As a result, legislative efforts toward a bill to compel captioning began to take hold.

In 1993, advocates began lobbying Congress to include closed captioning requirements303 for broadcast, cable, and satellite television providers in the proposed National Communications Competition and Information Infrastructure Act (NCCIIA), an omnibus bill to overhaul national telecommunications regulations that would later form the basis of the landmark Telecommunications Act of 1996.304 The House Telecommunications and Finance Subcommittee initially agreed to incorporate the requirements into the NCCIIA without consulting industry representatives.305

A heated debate unfolded over the requirements when the President of the conservative Media Institute, Patrick D. Maines, sent letters to members of the subcommittee insisting that mandating closed captioning and video description


298. See generally STRAUSS, supra note 218, at 227–41 (describing the full history of the Act’s development and implementation).

299. § 2(1), 104 Stat. at 960.


301. See discussion supra Part II.C.

302. STRAUSS, supra note 218, at 246.

303. Many of the efforts also sought the addition of audio description of video for viewers who are blind or visually impaired, though that topic is beyond the scope of this Article. Id. at 247.

304. H.R. 3636, 103d Cong. (1994); STRAUSS, supra note 218, at 248 & n.9.

305. STRAUSS, supra note 218, at 250.
would violate the First Amendment rights of both video creators and distributors.\textsuperscript{306} The Media Institute found an unlikely ally in the American Civil Liberties Union (ACLU), whose Legislative Counsel, Robert Peck, sent a similar letter questioning the constitutionality of captioning mandates.\textsuperscript{307}

Though a congressional hearing following the letters revolved primarily around the constitutionality of a captioning mandate, the ACLU also argued that a mandate would violate copyright law. Peck implied that accessibility mandates would interfere with video creators’ copyrights.\textsuperscript{308} Pressed for clarification, Peck tried to tie the copyright argument to the ACLU’s First Amendment concerns, insisting that “[c]opyrights . . . are considered an engine of free expression and promote free expression values” and that video accessibility mandates implicated “creative work[s] by some author.”\textsuperscript{309} Peck further contended that “you cannot show [a creative work] in a way that is different from what was intended by the author unless you have their permission.”\textsuperscript{310}

The constitutional and copyright concerns ultimately did nothing to derail the NCCIIA, which passed the House with the captioning mandate intact by a vote of 423-4.\textsuperscript{311} The bill stalled in the Senate on grounds unrelated to captioning and died at the end of the congressional session in late 1994.\textsuperscript{312} But without congressional mandate, the FCC proactively launched an inquiry into mandatory closed captioning in December 1995 that would soon materialize in legislation.\textsuperscript{313}

\textbf{E. Captioning Mandates, Copyright, and the “Figure-It-Out” Policy}

Shortly before print-disabled advocates succeeded in securing the passage of the Chafee Amendment, President Bill Clinton signed into law the 1996 Telecommunications Act, which added a new video accessibility mandate to the Communications Act of 1934.\textsuperscript{314} The 1996 Act mandated that all video programming be closed captioned, subject to exemptions for undue economic

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\textsuperscript{307} \textit{STRAUSS, supra} note 218, at 252.

\textsuperscript{308} *NCCIIA Hearings, supra* note 306, at 655.

\textsuperscript{309} Id.

\textsuperscript{310} Id. at 656.

\textsuperscript{311} \textit{STRAUSS, supra} note 218, at 257.

\textsuperscript{312} Id.

\textsuperscript{313} Notice of Inquiry, Closed Captioning & Video Description of Video Programming, No. 95-176, 11 FCC Rcd. 4912 (Dec. 4, 1995).

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burden and conflicts with existing contracts.\textsuperscript{315} It also gave the FCC exclusive jurisdiction to enforce the mandate.\textsuperscript{316}

In response to the FCC’s inquiry, industry representatives began fleshing out the offhanded copyright arguments that the ACLU had earlier asserted, seeking to stall the mandates in the 1996 Act. The objections to a captioning mandate came not primarily from copyright holders,\textsuperscript{317} but rather from distributors who asserted that a captioning mandate would subject them to liability for copyright infringement:

The Bell Atlantic companies argued that “programming distributors or network operators would be at substantial legal risk for copyright infringement if required to . . . superimpos[e] [closed] captioning or [video] description” due to prohibitions on altering broadcast content under section 111 of the Copyright Act and due to contractual prohibitions on altering non-broadcast content.\textsuperscript{318}

The Satellite Broadcasting and Communications Association (SBCA) argued that only “copyright holders themselves” could add closed captioning or video description and worried that it might not be “possible to physically locate the copyright holders” of all

\textsuperscript{315} Id. sec. 305, § 713(b)–(e).
\textsuperscript{316} Id. sec. 305, § 713(h).
\textsuperscript{317} Copyright holders did weigh in on the FCC’s parallel inquiry into requiring audio description of television programming for blind and visually impaired viewers. The Motion Picture Association of America (MPA) argued that “mandatory video description may conflict with copyright holders’ exclusive rights to create derivative works from their copyrighted works” noting that “[t]he narrative provided by video description requires a creative effort by the person generating the service which may be subject to federal copyright laws.” Comments of Motion Picture Association of America, Inc. at iii, 10, No. 95-176 (Mar. 15, 1996), https://ecfsapi.fcc.gov/file/1564860001.pdf [https://perma.cc/KTX6-XMB8]. The MPA opined that “[b]y virtue of its creative nature, video description may be a ‘derivative ‘work’ under copyright law’ and that ‘unauthorized video description’ might ‘constitute copyright infringement.’” Id. at 10 & nn.20–21 (citing 1 DAVID NIMMER, NIMMER ON COPYRIGHT §§ 3.03, 3.06 (1995)). The MPA insisted that any mandatory video description requirement would require “a statutory change creating some form of compulsory license for video description” to avoid “conflict with copyright holders’ exclusive rights to creative derivative works.” Id. at 10–11. The MPA also speculated that creating video description might infringe on the public performance right. Id. at 10 n.21 (citing 17 U.S.C. §§ 101, 106(4)). Home Box Office (HBO) insisted that the FCC consider “[c]opyright issues . . . such as who possesses the rights to add video description material to a title and who ‘owns’ the video description material once it is incorporated into a program.” Comments of Home Box Office at 11 n.10, No. 95-176 (Mar. 15, 1996), https://ecfsapi.fcc.gov/file/1563870001.pdf [https://perma.cc/HL7Z-4T6Y]. Distributors likewise complained about the video description rules. The National Cable Television Association (NCTA) similarly argued that “[v]ideo description . . . would require creation of an entirely new product, raising serious copyright questions regarding the permissibility of creating a derivative work.” Comments of the National Cable Television Association, Inc. at 14, No. 95-176 (Mar. 15, 1996), https://ecfsapi.fcc.gov/file/1563930001.pdf [https://perma.cc/983-C-V2R2]. The National Association of Broadcasters (NAB) argued that “video description would . . . constitute a separate ‘work’ for copyright purposes, possibly requiring additional clearances and other revisions to contractual obligations.” Comments of the National Association of Broadcasters at 13, No. 95-176 (Mar. 15, 1996), https://ecfsapi.fcc.gov/file/1563900001.pdf [https://perma.cc/7ZTJ-NAV].

Captioning advocates largely ignored the industry’s copyright attacks.320 The most explicit statement from captioning advocates about copyright was to highlight a concession from WGBH, which had created the “CC” symbol used to designate closed captioning in program listings, that the symbol itself was not under copyright.321 Some accessibility advocates even argued that copyright prohibited the alteration or removal of captions out of concern that distributors would take captions off videos.322

The FCC submitted a report to Congress in 1996 describing the state of closed captioning and video (audio) descriptions.323 Though the Commission articulated extensive concerns about the copyright implications of video descriptions for people who are blind or visually impaired,324 it essentially ignored closed captioning copyright issues on the grounds that “closed captioning is essentially a verbatim transcript of the original script” of a video and thereby not a derivative work.325

In 1997, the FCC formally proposed that broadcasters, cable, and satellite companies be required to caption the programming they deliver.326 In the proposal, the FCC also pondered the possibility that the 1996 Act gave it the


320. Perhaps owing to their experience with the copyright issues in Braille printing, blind advocates were more vocal in their responses to the copyright arguments made against video description. The Metropolitan Washington Ear (MWE) insisted that video descriptions were not “artistic products” separate from the underlying work, but primarily argued that copyright issues could more easily be resolved by imposing video description requirements on content producers rather than distributors. Reply Comments of the Metropolitan Washington Ear at 5–6, No. 95-176 (Mar. 29, 1996), https://ecfsapi.fcc.gov/file/1576930001.pdf [https://perma.cc/XLY8-QRGP]. The American Foundation for the Blind (AFB) similarly argued that a video description mandate would “not be so broadly drawn or liberally construed as to allow any entity to cure a program’s lack of video description by violating the rights of the copyright owner.” Reply of the American Foundation for the Blind at 1, No. 95-176 (Apr. 1, 1996), https://ecfsapi.fcc.gov/file/1575700001.pdf [https://perma.cc/XTN8-976W].


322. Comments of VITAC at 5, No. 95-176 (Feb. 29, 1996), https://ecfsapi.fcc.gov/file/1561530001.pdf [https://perma.cc/7CK3-RGC4] (“Closed captions are an integral, essential, and usually copyrighted part of such programming; any entity (other than the program’s copyright holder) which intentionally or unintentionally removes captions from a program has altered, indeed damaged, the program which the program’s owner exhibited.”).


324. The Commission entertained the possibility that such descriptions would implicate the derivative work right of copyright holders. See id. at 19, 221–22, 19,263, ¶ 22, 121.

325. See id.

authority to directly require video creators and copyright owners to caption their programming.327

Broadcast, cable, and satellite organizations again brought copyright into the mix, arguing that requiring certain distributors to add captions would violate the limitations on altering retransmitted broadcast and satellite content that had been added in the 1976 Copyright Act.328 Various content creators and distributors also argued that distributors could not caption content without infringing the copyright in the video, as well as the moral rights assigned to some video creators under international copyright law.329

Again, the FCC largely dismissed the copyright concerns, ordering broadcasters and cable and satellite companies to begin providing closed


captioning for their programming over a ten-year period. In contrast to the Library of Congress’s deferential approach of first seeking consent from copyright holders and later helping negotiate specific limitations and exceptions for tactile printing, the FCC articulated what amounted to a “figure-it-out” policy of copyright.

Essentially, the FCC compelled distributors to work with copyright holders to sort out whatever infringement and licensing issues might arise in the course of the creation and distribution of captions. It noted that “[a]lthough we are placing the ultimate responsibility on program distributors, we expect that distributors will incorporate closed captioning requirements into their contracts with producers and owners, and that parties will negotiate for an efficient allocation of captioning responsibilities.”

Refusing to address the argument that requiring distributors to caption content might violate copyright law, the FCC simply insisted that copyright owners would have “significant incentives” to resolve any copyright concerns via contract if they “wis[h] the[ir] programming to retain any significant value.” The implication was clear: copyright holders would be unable to air their programming if they didn’t cooperate with the FCC’s captioning mandate.

While the FCC concluded that adding captions could raise copyright issues in some limited circumstances relating to the retransmission of broadcast content on cable and satellite, it simply determined that in those cases, copyright holders, rather than distributors, would be held directly responsible for captioning. Two decades later, the FCC shifted even more responsibility for captioning to copyright holders directly, not because of copyright concerns but because the Commission concluded copyright holders were best positioned as a practical matter to ensure the quality of captions.

Though the full story of captioning requirements for Internet-based programming is beyond the scope of this Article, it is worth noting as a brief coda to the television captioning story that the FCC’s policy of non-engagement with copyright issues largely held firm throughout the transition to Internet video. In 2010, as a part of the Twenty-First Century Communications and Video Accessibility Act (CVAA), Congress required the FCC to adopt requirements for video programming delivered using Internet Protocol that had been published

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331. Id. at 3286, ¶ 28.

332. See id. at 3357, ¶ 181.

333. See id. at 3287, ¶ 29.


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or exhibited on television. The Commission confronted copyright issues in two contexts.

First, the requirement that third parties caption content raised copyright concerns. However, the Commission resolved the concerns as it had previously by allocating a significant level of responsibility to copyright holders directly. The Commission rejected an argument by the MPAA that a “potentially complicated chain of copyright ownership” warranted against regulating copyright owners, concluding instead that any complexities related to copyright law counseled toward regulating copyright holders directly.

Second, the Commission confronted a question of whether it was possible for Internet-based distributors of video programming to improve the quality of captions or fix captioning errors. Several commenters argued that improving the quality of captions provided by others would implicate copyright infringement, while a coalition of deaf and hard of hearing consumer organizations and accessibility researchers, joined by Public Knowledge, strenuously argued that improving the quality of closed captions would be a non-infringing fair use. The Commission again punted, concluding that it saw “no need to determine . . . whether a [distributor] may, consistent with copyright law, improve caption quality without the consent of a [copyright holder]” and noted its expectation that distributors and copyright holders would “typically agree through their contractual negotiations about the appropriate extent” of distributors making improvements to captions.

IV. THE FUTURE OF ACCESSIBLE COPYRIGHTED WORKS

The prevailing narrative about copyright limitations and exceptions as an inspirational panacea for the accessibility of copyrighted works to people with disabilities is understandable given the nearly half-century-long focus in U.S. policymaking on the role of copyright in accessibility. The interposition of the Copyright Act of 1976 into disability policy for books and the subsequent curtailing of copyright doctrine beginning with the Chafee Amendment form a significant body of history and law. Against that backdrop, it is no wonder that

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338. Id. at 803, ¶ 24.


341. See 27 FCC Rcd. at 814, ¶ 39.

342. Id. at 814, ¶ 39.
a narrative of copyright as an essential barrier to the accessibility of creative works and limitations and exceptions as an essential solution has taken hold.

However, limitations and exceptions must be considered in light of decades—centuries, really—of inaccessible books, the decision to focus accessibility on a government-funded, third-party model, and a disability rights movement that was (understandably) more concerned with the accessibility of public institutions than the accessibility of creative works. More importantly, it is critical to understand how the interposition of copyright law into disability policy for books was a result of deliberate efforts by powerful publishers who sought to assert their power, exercising a valuable right despite the discriminatory impact and relinquishing it as a reluctant exercise in perceived beneficence and altruism. It is also critical to understand how their efforts were institutionally enabled and fueled by Congress and the Library of Congress in an implicitly ableist policymaking tradition that subordinated the civil rights of people with disabilities to those of copyright holders.

It is also critical to reflect on how that ableist tradition ironically redirected the trajectory of accessible film and television policy away from the Library of Congress, and away from copyright’s overgrowth. The redirection of captioned film and television ultimately led to disability policy—albeit administered under the ambit of telecommunications law—that sought to directly address the inaccessibility of the medium.

The differences between the book and video case studies aren’t hypothetical; they demonstrate different results. After decades of focus on copyright policy, the vast majority of books still remain largely inaccessible to blind people, both in the United States and internationally. Rightsholders’ ambitions for progress remain limited: asked to speculate about the future of accessible books, Hugo Andreas Setzer, the Chief Executive Officer of the International Publishers Association, suggested that it would be a “very good start” if by 2023, a mere twenty percent of books were accessible. On the flip side, a significant portion of television programming was delivered with closed captions in the US by the early part of the twentieth century. Indeed, the FCC required broadcast, cable, and satellite television distributors to provide all


346. See id.
of their new programming with closed captions, subject to a set of limited exceptions.

Of course, a disclaimer is warranted: the Braille and captioning case studies represent an incomplete account of the broader array of policy considerations surrounding the accessibility of creative works—even with respect to the accessibility of books and video. The two case studies cover only a small part of the wide range of creative works, of disabilities, and of the technologies and techniques that can be used to make those works accessible to people with disabilities.

Among other things, the two case studies are focused primarily on eras before the dawn of the commercial Internet. The proliferation of digital technologies has raised a slew of new opportunities and challenges around making works accessible. It remains unclear, for example, whether the FCC’s policy for allocating captioning responsibilities across the television distribution chain is adaptable to today’s world, where video content is generated by a diverse array of creators and delivered at enormous scale by platforms such as YouTube. Books, likewise, are increasingly delivered in accessible electronic formats that are compatible with automatic text-to-speech software, refreshable Braille displays, screen magnification devices, and other technologies. The industry of ebook delivery systems is in a constant state of evolution.

Nevertheless, the case studies of accessible books and film and TV have important lessons to offer for both how to approach the accessibility of creative works and how copyright should (and shouldn’t) play a role in achieving that end. While I hope to turn to a more comprehensive prescription in a future paper, this Section briefly unpacks several initial considerations for approaching the future accessibility of copyrighted works.

Making creative works accessible first requires developing technical and creative workarounds to address inaccessibility. Both case studies begin with examples of a creative medium whose affordances effectively exclude people with disabilities. Inherent in the typical instantiation of a new creative medium is the reality that copyright holders and the surrounding industry are not merely disinterested in serving people with disabilities but may not even be cognizant of the exclusionary and discriminatory effects of the medium on people who cannot access that medium on equal terms. The initial challenge for accessibility, then, is not the need to secure the permission of copyright holders to serve the market of people with disabilities, but rather to grapple in technological and creative terms with what changes are conceptually necessary to make the medium accessible.

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348. The FCC exempts certain categories of content from the captioning rules, 47 C.F.R. § 79.1(d) (2021), and likewise has the authority to grant exemptions to individual programmers and programs where captioning would impose an undue burden. 47 U.S.C. § 613(d)(3). (e).
Deploying technical and creative approaches to accessibility is likely to require overcoming market failure. The second lesson of the case studies is that the innovation of technology to address the inaccessibility of a creative medium in principle—e.g., the inventions of tactile printing and captioning—are seldom enough to ensure the deployment of the technology by the relevant copyright industry. The notion that book publishers might have printed their own works in Braille in the nineteenth or early twentieth century does not even make an appearance in the story—and the film and television industries actively opposed the early development of captions. If left to their own devices, copyright industries may be unlikely, at least initially, to embrace or care about fully serving the market of people with disabilities. The question that follows, then, is how to overcome that failure.

Successfully making a creative medium ubiquitously accessible is likely to require the allocation of responsibility under disability law. The case studies demonstrate the limitations of relying on voluntary efforts by third parties, even when backed by government funding, to achieve the accessibility of a medium. With both books and film and TV, government funding initially resulted in only a modest collection of accessible works. Leveraging beyond an initial collection of government-funded accessible works for captioned television programming required government compulsion of the television industry to undertake accessibility itself. It is critical for disability law to consider, particularly in an intermediated Internet ecosystem, how to allocate responsibility for the accessibility of creative works to ensure not merely that someone can, in theory, make them accessible, but indeed that someone must do so.

Disability law must consider the role of copyright holders in making their own works accessible. Though a comprehensive framework for allocating responsibility for the accessibility of creative works is beyond the scope of this Article, the case studies illustrate that copyright holders must play a role in a framework that allocates responsibility for the accessibility of creative works. Vesting responsibility exclusively in third parties to make the works they distribute accessible can result in technical and economic inefficiencies that might be more easily overcome by the copyright holder.

For example, it may be much more expensive for a school to generate a single copy of a textbook in Braille format than for a publisher to make the book available to blind students across the country. And as initial efforts to caption films in the 1950s revealed (and as the FCC rediscovered several decades later), it may be easier for a copyright holder to generate or contract for the generation of high-quality captions for a program because the copyright holder can supply the captioner with preparatory material, such as a written script for a program, that can help overcome aural ambiguities in generating captions. The copyright holder may also be in a better position to help make creative decisions required in describing sound effects, music, and other aspects of a soundtrack.
Copyright issues can be minimized by a sufficiently strong regulatory regime. Copyright limitations and exceptions are necessary where disability law determines that third parties must play a role. But where a copyright holder can and must effectuate the accessibility of its works entirely on their own, the onus is more properly placed on disability law to ensure that the copyright holder follows through on their obligations. And, by way of counterexample, the Library of Congress’s decision to seek publishers’ permission to create Braille versions of books largely flowed from a failure of policymakers to consider the possibility of requiring publishers themselves to make Braille versions of books available—and of the Library’s institutional proximity to copyright policymaking.

As the FCC’s captioning regime illustrates, copyright issues can even be avoided altogether in some third-party scenarios when a regulatory regime encompasses an entire creation and distribution ecosystem. The FCC’s “figure-it-out” policy demonstrates that courts and agencies implementing disability law mandates can avoid copyright law altogether by requiring the parties to negotiate copyright considerations as a part of their broader licensing arrangements for the underlying copyrighted works.

Where third-party accessibility efforts necessitate limitations and exceptions, copyright policymaking should center the interests of people with disabilities. Despite the prospect for approaches that avoid copyright considerations altogether, it is inevitable that copyright will arise as a concern in the context of both voluntary and mandatory accessibility efforts, thereby necessitating the availability of specific and general limitations and exceptions. It is critical in those circumstances that copyright policymakers do a better job centering the interests and needs of people with disabilities and the priorities of disability policy.

One area where copyright policy has evolved with the interests of people with disabilities in mind is the doctrine of fair use, which in many cases can do much of the heavy lifting where an exception or limitation is needed, at least in the United States. As the Second Circuit underscored in *HathiTrust*, third-party accessibility efforts are likely to constitute non-infringing fair uses where (a) the copyright holder is unable or unwilling to make its own work accessible and (b) the efforts are consistent with the aims of disability law. If policymakers focus disability law obligations on third parties in situations where copyright owners cannot or will not make their own works accessible, then fair use is likely to obviate many copyright concerns.

However, the availability of fair use does not obviate the need for specific copyright limitations and exceptions. Specific limitations and exceptions provide additional clarity for parties that fear liability for engaging in arguably fair uses.

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349. Specific limitations may be necessary in countries that do not have general exemptions, such as fair use, in place. See Reid & Ncube, supra note 10, at 18–21.
of copyrighted works by eliminating uncertainty. Specific limitations and exceptions also facilitate approaches by third parties that go beyond the scope of what fair use might permit—such as the Chafee Amendment, which permits third parties to distribute multiple copies of a creative work to people with disabilities in accessible formats free of charge.\textsuperscript{351} And the continuing presence of the anticircumvention measures of Section 1201 of the Copyright Act necessitate continued attention to accessibility-specific limitations and exceptions by the Library of Congress and the Copyright Office.

The case study of accessible books underscores an observation that Caroline Ncube, Desmond Oriakhogba, and I have made in other contexts: existing limitations and exceptions are far too narrowly drawn.\textsuperscript{352} Both the Chafee Amendment and the Marrakesh Treaty are silent on significant categories of creative works and disabilities.\textsuperscript{353} They cover only a narrow subset of copyrighted works—books and closely-related subject matter.\textsuperscript{354} They likewise permit the remediation of works into accessible formats only for a narrow subset of people with disabilities—i.e., people with print disabilities.\textsuperscript{355} These limitations mean that the leading specific exemptions and limitations do not even purport to address significant disability rights priorities, such as the provision of video programming with closed captions and audio description, of arbitrary web content in accessible forms, of software applications and video games with accessible controls, and of a wide range of other digital content with accessibility shortcomings.\textsuperscript{356} Future approaches to copyright limitations and exceptions must take a broader, cross-disability, cross-medium approach.

\textsuperscript{351} Specific limitations and exceptions can also help avoid “reluctant defendant” scenarios where third parties subject to disability mandates assert copyright concerns and ignore the availability of fair use. These scenarios can arise because the prospect of infringement might prove an excuse to evade the disability law obligations—especially when an agency or court charged with enforcing the disability law is unsophisticated about copyright law. See, e.g., John Stanton, \textit{[SONG ENDS]-Why Movie and Television Producers Should Stop Using Copyright as an Excuse Not to Caption Song Lyrics}, 22 UCLA ENT. L. REV. 157 (2015); Nat’l Ass’n of the Deaf v. Netflix, 869 F. Supp. 2d 196, 202 (D. Mass. 2012) (describing Netflix’s arguments that it could not be compelled to caption its videos under the ADA because of copyright law). See discussion supra Part III.E (discussing the invocation of copyright by video distributors to avoid captioning responsibilities).

\textsuperscript{352} Ncube, et al., supra note 29.

\textsuperscript{353} The Marrakesh Treaty requires only specific provisions but can also been implemented with general provisions and hybrid statutory schemes that include both general and specific provisions. See id.

\textsuperscript{354} See 17 U.S.C. § 121(a) (authorizing reproduction and distribution “of a previously published literary work or of a previously published musical work that has been fixed in the form of text or notation”); Marrakesh Treaty, supra note 26, art. 2(a) (defining covered works as “literary and artistic works . . . in the form of text, notation and/or related illustrations, whether published or otherwise made publicly available in any media . . . includ[ing] such works in audio form, such as audiobooks”). Prior to the enactment of the Marrakesh Implementation Act, the Chafee Amendment governed only \textit{nondramatic} literary works—i.e., nonfiction. Marrakesh Treaty Implementation Act, Pub. L. No. 115-261, § 2(a)(1)(A)(ii), 132 Stat. 3667, 3667 (2018).

\textsuperscript{355} See 17 U.S.C. § 121(a), (d)(3).

\textsuperscript{356} See Ncube, et al., supra note 29.
Finally, it is critical to note that the discourse on copyright and disability often conceptualizes people with disabilities as consumers and users of copyrighted works, not creators and authors. There is a critical through line from authors such as Helen Keller to contemporary activists such as Alice Wong, who have actively pressed to highlight disabled authors, and creators such as actor Marlee Matlin, who speaks out about the underrepresentation of actors with disabilities—an issue that still persists nearly a century after deaf actors were initially cast out of “talkie” movies. And there remains insufficient scholarship on the accessibility of creative tools, such as word processing, movie editing software, software development tools, and more. Though a full-fledged account of these dynamics is beyond the scope of this Article, a disability-centric frame of copyright must contend with the copyright industries’ historic marginalization of creators with disabilities.

This Article has demonstrated through case studies of accessible books and video that copyright’s role in the facilitation of accessibility is more nuanced than the prevailing narrative in the copyright literature. Approaching the accessibility of copyrighted works requires contextualizing copyright in the broader tangle of disability law and policy and recognizing its historically ableist tradition of subordinating the rights of people with disabilities to those of rightsholders. Efforts that bear these nuances in mind will help ensure that copyrighted works are ultimately created and distributed in accessible formats that vindicate the civil and human rights of people with disabilities.

357. See Disability Visibility: First-Person Stories from the Twenty-First Century (Alice Wong ed., 2020).
359. See discussion supra Part III.A.