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Can Accessibility Liberate The "Lost Ark" of Scholarly Work?: University Library Institutional Repositories Are "Places of Public Accommodation", 52 UIC J. Marshall L. Rev. 327 (2019)

Raizel Liebler UIC John Marshall Law School, rliebler@uic.edu

Gregory Cunningham
UIC John Marshall Law School

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CAN ACCESSIBILITY LIBERATE THE "LOST ARK" OF SCHOLARLY WORK?: UNIVERSITY LIBRARY INSTITUTIONAL REPOSITORIES ARE "PLACES OF PUBLIC ACCOMMODATION"

RAIZEL LIEBLER AND GREGORY CUNNINGHAM*

I.	INTRODUCTION
II.	UNIVERSITY LIBRARIES, OPEN ACCESS,
	INSTITUTIONAL REPOSITORIES, AND POLICY 330
	A. Accessibility and the Role of University Libraries.330
	B. Open Access
	C. Institutional Repositories333
	D. University Policy, Mandates, and Statutes334
III.	ACCESSIBILITY STANDARDS AND UNIVERSAL
	DESIGN FOR WEBSITES
	A. Thinking About Accessibility and Websites336
	B. Standards and Principles338
	C. Getting to Accessibility for Institutional Repositories
	338
IV.	ADA BACKGROUND
	A. Americans with Disabilities Act, 42 U.S.C. § 12101
	General History340
	B. Public Accommodation341
	C. Applicability to Universities and Libraries342
V.	TITLE III DISCRIMINATION STANDARDS APPLYING TO
	WEBSITE ACCESSIBILITY
	A. Caselaw
	1. First Circuit343
	2. Seventh Circuit
	3. Second Circuit
	4. Ninth Circuit
	5. Eleventh Circuit347
	6. Other Circuits
	B. University-based ADA claims
VI.	INSTITUTIONAL REPOSITORIES ARE PUBLIC
	ACCOMMODATIONS AND NEED TO BE ACCESSIBLE
	350
	A. Practical Problems
	B. How to Ensure that University Institutional
	Repositories are Accessible Through Policy and
3777	Procedure
VII.	CONCLUSION353

Abstract

For any body of knowledge – an ark of power or a corpus of scholarship – to be studied and used by people, it needs to be accessible to those seeking information. Universities, through their libraries, now aim to make more of the scholarship produced available for free to all through institutional repositories. However, the goal of being truly open for an institutional repository is more

than the traditional definition of open access. It also means openness in a more general sense. Creating a scholarship-based online space also needs to take into consideration potential barriers for people with disabilities.

This article addresses the interaction between the Americans with Disabilities Act (ADA) and university academic library based institutional repositories. This article concludes that institutional repositories have an obligation to comply with the ADA to make scholarly works available to potential users with disabilities.

For managers of institutional repositories, following the law is an opportunity to make scholarship even more widely available. University open access institutional repositories need to be accessible to existing and potential disabled users. However, there are no specific rules that university institutional repositories must follow to be compliant with the ADA's "public accommodation" standard. Accessibility is a changeable, moveable wall, consistently and constantly needing to be additionally inclusive of more – more technology and more users, regardless of disability or limitations.

Institutional repositories should not become the crated Ark of the Covenant with their secrets locked inside; instead, they should be as open as possible to all, sharing the scholarship inside.

I. INTRODUCTION

For any body of knowledge – an ark of power or a corpus of scholarship – to be studied and used by people, it needs to be accessible to those seeking information. In the film *Raiders of the Lost Ark*, a priceless Biblical artifact, the Ark of the Covenant, is discovered – and promised to be displayed publicly. However, the promise of making this cultural heritage publicly available to the world is betrayed, with all of the potential knowledge locked away in an archive. Instead of being an archive that makes information

^{*} Raizel Liebler, Instructor of Law & Faculty Scholarship Librarian, UIC John Marshall Law School, University of Illinois at Chicago (ORCID: https://orcid.org/0000-0002-4876-8006); Gregory Cunningham, Instructor of Law & Associate Director for Access & Organization, UIC John Marshall Law School, University of Illinois at Chicago. We thank Darrin Grelle and Keidra Chaney for their continual encouragement. A special thanks to Sandi Tanoue who has been an excellent editor to this article.

^{1.} RAIDERS OF THE LOST ARK (Lucasfilm 1981); "A deal is struck between Indiana Jones and the U.S. military establishment that if Indiana Jones can stop the Nazis from acquiring the Ark, it will go on display in the museum of the University where Indiana Jones works." Lucas Lixinski, Moral, Legal and Archaeological Relics of the Past: Portrayals of International Cultural Heritage Law in Cinema, 4 LONDON REV. INT'L L. 421, 429 (2016).

^{2.} Zambito v. Paramount Pictures Corp., 613 F. Supp. 1107, 1110 (E.D.N.Y.), aff'd, 788 F.2d 2 (2d Cir. 1985) ("As the film closes, we see the crated Ark being transported to an army warehouse where, among thousands of other identical crates, it will lie forever forgotten.").

available, the Ark sits deliberately forgotten, with its secrets locked inside.³ In a less fictionalized way, universities, through their libraries, now aim to make more of the scholarship produced available for free to all through institutional repositories.

An institutional repository is an online digital library that "captur[es] and preserv[es] the intellectual output of a single or multi-university community." To be an institutional repository, this archive of the intellectual output of an institution must be "accessible to end users both within and outside of the institution, with few if any barriers to access. In other words, the content of an institutional repository is: Institutionally defined; Scholarly; Cumulative and perpetual; and Open and interoperable." Open in this context frequently means "open access", defined as "the *free, immediate, online availability* of research articles, coupled with the *rights to use these articles fully* in the digital environment." 6

However, the goal of being truly open for an institutional repository is more than open access. It also means openness in a more general sense. Creating a scholarship-based online space also needs to take into consideration potential barriers for people with disabilities. As Meryl Alper stated, "Efforts to better include individuals with disabilities within society [] rarely take into account all the other ways in which culture, law, policy, and even technology itself can also marginalize and exclude."

For managers of institutional repositories, following the law is an opportunity to make scholarship even more widely available. As Sarah Horton and Whitney Quensenbery stated, instead of viewing

^{3.} Carla Scherr, You Better Watch Out, You Better Not Frown, New Video Surveillance Techniques Are Already in Town (and Other Public Spaces), 3 I/S: J.L. & POL'Y FOR INFO. SOC'Y 499, 506 (2008) ("The Ark of the Covenant is crated in a wooden box and its lid is solidly nailed shut. Its stenciled label contains a long inventory number for identification: TOP SECRET, ARMY INTEL 9906753 DO NOT OPEN! A warehouseman pushes the crated Ark down a long aisle formed by huge stacks of similar crates in an enormous government warehouse, where it will again be hidden away-presumably by bureaucratic inefficiency.").

^{4.} Raym Crow, *The Case for Institutional Repositories: A SPARC Position Paper*, ARL BIMONTHLY REPORT 223 (Aug. 2002), www.sparc.arl.org/sites/default/files/media files/instrepo.pdf [perma.cc/GPZ3-GUVK].

^{5.} *Id*.

^{6.} Open Access to Scholarly and Scientific Research Articles, SPARC (Apr. 2017), www.sparcopen.org/wp-content/uploads/2017/04/Open-Access-Factsheet _SPARC.11.10-3.pdf [perma.cc/9GCP-BKVK] (last visited Apr. 7, 2019).

^{7.} The importance of viewing barriers for people with disabilities as an inadequate design and implementation problem, rather than a problem presented to institutions cannot be overstated. Roger W. Andersen, Architectural Barriers Legislation and the Range of Human Ability: Of Civil Rights, Missed Opportunities, and Building Codes, 28 WILLAMETTE L. REV. 525, 526 (1992) (critiquing the view that "people either 'fit' or do not fit, rather than recognizing that human abilities fall along a continuum. It leads us to think that barrier-free design standards benefit only disabled persons").

^{8.} MERYL ALPER, GIVING VOICE: MOBILE COMMUNICATION, DISABILITY, AND INEQUALITY 3 (2017).

compliance as a burden and "instead of limiting creativity, accessibility opens up new avenues for exploration and results in even more awesome products." Institutional repositories should not become the crated Ark of the Covenant with their secrets locked inside; instead, they should be as open as possible to all, sharing the scholarship inside.

This article will address the interaction between the Americans with Disabilities Act (ADA)¹⁰ and university academic library based institutional repositories. This article concludes that institutional repositories have an obligation to comply with the ADA to make scholarly works available to potential users with disabilities.

II. UNIVERSITY LIBRARIES, OPEN ACCESS, INSTITUTIONAL REPOSITORIES, AND POLICY

A. Accessibility and the Role of University Libraries

While not directly implicated by the ADA, libraries, including university libraries have promoted accessibility through provisions in the Copyright Act.¹¹ Libraries have created and distributed accessible materials to users with print disabilities, under both the Chafee Amendment,¹² the specific exception governing creation of accessible format works,¹³ and fair use.¹⁴ The Chafee Amendment is

^{9.} SARAH HORTON & WHITNEY QUESENBERY, A WEB FOR EVERYONE: DESIGNING ACCESSIBLE USER EXPERIENCES 10 (2013).

^{10.} See infra Section II (discussing the application of the Americans with Disabilities Act to websites).

^{11.} Moving outward from the Americans With Disabilities and the Copyright Act, there are additional ways that universities and libraries may be implicated in legally making materials available for those who are disabled. However, this article does not include discussion or analysis of those additional means of providing accessible content. See generally Shae Fitzpatrick, Setting Its Sights on the Marrakesh Treaty: The U.S. Role in Alleviating the Book Famine for Persons with Print Disabilities, 37 B. C. INT'L & COMP. L. REV. 139 (2014) (discussing additional international solutions for those with disabilities that can limit their access to print materials, such as the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled).

^{12.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 455 n.40 (1984) ("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, with no suggestion that anything more than a purpose to entertain or to inform need motivate the copying."); H. R. REP. NO. 94-1476, at 73 (1976).

^{13. 17} U.S.C. § 121 (2018); Krista L. Cox, Research Libraries and New Technologies, Promoting Access to Information, Learning, and Innovation for Today and the Future, 13 I/S: J OF L & POLY INFO. SOC. 261, 263 (2016) ("Fair use has accommodated new technologies and the ways in which individuals access information today [including] . . . greater availability of accessible formats for those with print disabilities. . .")

^{14. 17} U.S.C. § 107 (2017). This was also the impetus behind the HathiTrust

specifically stated as essential in Congressional testimony as an accessibility means for "people who have print disabilities, such as blindness or low-vision, [to have] works [converted] in some manner so that they would be usable." Additionally, "[t]echnological advancements have transformed the role of libraries and their capacity to provide greater inclusion for persons with disabilities." 16

Specifically, universities exist to share knowledge in various ways: "Institutions of higher education foster the development, circulation, and exchange of knowledge." ¹⁷ Separately, it is the role of libraries to facilitate access to the corpus of information available. ¹⁸ When these two elements are combined into university libraries, they serve an important role as part of their role as the universities' knowledge sharers. Therefore, "[a]cademic libraries

case. Authors Guild v. HathiTrust, 755 F.3d 87 (2d Cir. 2014). HathiTrust at U-M, NFB to Make 14M+ Books Accessible to Blind and Print-disabled Users, HATHITRUST (June 29, 2016), www.hathitrust.org/hathitrust_NFB_ announcement [perma.cc/5U6B-US78] ("Supporting print-disabled users has been a focus of HathiTrust since the very beginning, and we have long provided students at HathiTrust member schools with access to our collection . . . we are now striving to help non-academic print-disabled users for the first time."). See also, Accessibility, HATHITRUST, www.hathitrust.org/accessibility [perma.cc/G3HW-DBW6] (last visited Apr. 7, 2019).

15

The Chafee exemption was designed to ensure that there was no unnecessary delay in obtaining permission from the copyright owner of the particular work in order for certain authorized entities who knew how to do those conversions to be able to go ahead and create accessible versions of those works. Later on, digital technology has allowed for great strides to be made in making works inherently accessible; hopefully in the marketplace, so that you have only one version of a product that can be purchased by people with print disabilities, as well as consumers who don't have those print disabilities. But the Chafee amendment has been very useful. It helped establish Bookshare, which is the largest online digital library of accessible works available for people with print disabilities.

Copyright Issues in Education and for the Visually Impaired: Hearing Before the Subcomm. on Courts, Intellectual Prop., and the Internet of the Comm. on the Judiciary, 113th Cong. 61 (2014) (testimony of Allan Robert Adler, General Counsel, Association of American Publishers).

- 16. Paul Harpur & Michael Ashley Stein, *Universities as Disability Rights Change Agents*, 10 NE. U.L. REV. 542, 561–62 (2018) ("Mass 'digitization facilitates the conversion of books to audio and tactile formats, increasing access for individuals with disabilities.").
- 17. D. R. Jones, Locked Collections: Copyright and the Future of Research Support, 105 LAW LIBR. J. 425, 427 (2013).
- 18. "The role of libraries in American society is varied: libraries act as curators and repositories of American culture's recorded knowledge, as places to communicate with others, and as sources where one can gain information from books, magazines and other printed materials, as well as audio-video materials and the Internet." Raizel Liebler, *Institutions of Learning or Havens for Illegal Activities: How the Supreme Court Views Libraries*, 25 N. ILL. U. L. REV. 1, 1 (2004).

facilitate access for scholars to existing research and also preserve the record of scholarship." ¹⁹ Providing information to scholars is not limited to users within that specific academic community, but to the larger academic world.

Some commenters have specifically addressed the role of university libraries in providing access to information for individuals with disabilities, regardless of whether these individuals are connected to the university: "University libraries across the globe have been exceptionally active in digitizing their collections to enhance access to works. University libraries are taking a leading role in creating networks to maximize students with print disabilities access to the written word." ²⁰

B. Open Access

Open access and institutional repositories are linked in their interest in making information freely available to the public. Open access is the philosophical framework: "Proponents of open access seek to make the results of all scholarly communication available to the public on the Internet without charge."21 There have been "growing efforts to create wider availability of scholarship through policies that promote public or open access. Proponents argue that these policies will improve access to knowledge by both citizens and other researchers, thus increasing the state of knowledge and the return on investment for publicly funded research." 22 For advocates of open access, the goal is "to ensure that all peer-reviewed scholarship is publicly accessible at no cost to the user."23 However, without those actually implementing open access, through making works available, the promise of open access remains only a great idea. Academic libraries and their affiliated institutions have "increasingly [taken the lead on] developing and implementing open access policies."24

Implementation of open access philosophy takes both the efforts of individual authors and larger institutional movers, especially through academia. Specifically, universities exist to share knowledge in various ways: "Institutions of higher education foster the development, circulation, and exchange of knowledge." Separately, it is the role of libraries to facilitate access to the corpus

^{19.} Jones, *supra* note 17, at 427.

^{20.} Harpur & Stein, supra note 16, at 562.

^{21.} Carol A. Parker, Institutional Repositories and the Principle of Open Access: Changing the Way We Think About Legal Scholarship, 37 N.M. L. REV. 431, 435 (2007).

^{22.} Brianna L. Schofield & Jennifer M. Urban, *Takedown and Today's Academic Digital Library*, 13 I/S: J.L. & POL'Y FOR INFO. SOC'Y 125, 127 (2016).

^{23.} Eric Priest, Copyright and the Harvard Open Access Mandate, 10 Nw. J. Tech. & Intell. Prop. 377, 383 (2012).

^{24.} Schofield & Urban, supra note 22, at 127–28.

^{25.} Jones, *supra* note 17, at 427.

of information available.²⁶ When these two elements are combined into university libraries, they serve an important role as part of their role as universities' knowledge sharers. Therefore, the mission and purpose of academic libraries is dual: the present activity of promoting knowledge creation and to provide for the future by preserving information. Because open access serves both of these roles, university libraries are at the heart of the open access movement: "Academic libraries have emerged as key players in this move to open access as they rapidly develop platforms that provide digital access to scholarship."²⁷

In their roles as knowledge promoters and preservers, academic libraries are the leaders in setting standards for open access implementation. University libraries not only "facilitate access for scholars to existing research" but also "preserve the record of scholarship . . ."²⁸ Providing information to scholars is not limited to users within that specific academic community, but to the larger academic world. For libraries, especially academic libraries, "the placement of articles into public online spaces such as repositories may well serve at least three key functions: providing access to the work; providing metadata about the work; and preserving the work, at least for some period of time."²⁹

C. Institutional Repositories

One of the premier means for academic libraries to promote the wide diffusion of works produced at the institution is through the creation of new platforms, such as institutional repositories. Institutional repositories are usually "designed to promote open access [and] can ensure that articles and manuscripts deposited are preserved and provide access to these materials." ³⁰

An Institutional Repository "preserves the output of the intellectual life of the school, enables anyone with internet access to enjoy the benefits of the new knowledge, and promotes the institution and scholar by bringing to the foreground their intellectual achievements." ³¹

The promise of an institutional repository is a barrier-free

^{26. &}quot;The role of libraries in American society is varied: libraries act as curators and repositories of American culture's recorded knowledge, as places to communicate with others, and as sources where one can gain information from books, magazines and other printed materials, as well as audio-video materials and the Internet." Liebler, *supra* note 18, at 1.

^{27.} Schofield & Urban, supra note 22, at 129.

^{28.} Jones, *supra* note 17, at 427.

^{29.} John Palfrey, Cornerstones of Law Libraries for an Era of Digital-Plus, 102 LAW LIBR. J. 171, 173 n.7 (2010).

^{30.} Cox, *supra* note 13, at 291.

^{31.} James M. Donovan & Carol A. Watson, Will an Institutional Repository Hurt my SSRN Ranking: Calming the Faculty Fear, 16 AALL SPECTRUM 12, 12 (2012).

means for everyone in the world to be able to see the intellectual output of University X. Through an open access repository, general "readership" is possible "by lowering costs for the readers and can increase visibility of materials both inside and outside of the academy."³² While many – if not most – of the materials deposited in many institutional repositories are word-based, the possibility of institutional repositories containing materials beyond the written word are increasingly possible, including large datasets and auditory and visual materials.

Additionally, the considerations of making institutional repositories accessible for all users – using accessibility to refer to actual access by all users rather than as a term meaning the possibility of access to information in the repository – is a very new one and is not considered in the leading works in the field. ³³ However, the possibility of the accessibility of materials in institutional repositories needing to be available for all, including those with disabilities, is starting to be considered by the managers of institutional repositories ³⁴ and even within the open access scholarly community. ³⁵

D. University Policy, Mandates, and Statutes

University institutional open access policies frequently "require that faculty grant their university a non-exclusive license before assigning any further rights to publishers — or reserve sufficient rights — to make their articles freely available to the public in an open access repository." These are requirements upon faculty based on policy terms, instead of being optional, as a means to make the intellectual work of the institutional publicly available: Universities with these policies "assert [] (i.e., seizes) a license to use the faculty member's work and require [] that the faculty author provide the university with a digital copy of the published work for it to post in a publicly-accessible electronic depository."

^{32.} Cox, *supra* note 13, at 292.

^{33.} See, e.g., MAKING INSTITUTIONAL REPOSITORIES WORK (Burton Callicott, David Scherer, & Andrew Wesolek eds., 2016), www.jstor.org/stable/j.ctt1wf4drg (searching "Access" in Index refers to control and preservation, not accessibility for disabled users, and there is no mention of disabled users in the book).

^{34.} Duke Digital Repository Policy for Accessibility, DUKE UNIV. LIBR., www.library.duke.edu/using/policies/ddr-accessibility [perma.cc/4DZB-AJZ2] (last visited Apr. 8, 2019).

^{35.} Colleen Lyon, Accessibility of Repository Content: Successes and Failures (Poster presented at FORCE2018, Montreal, Canada, Oct. 11-12, 2018), www.zenodo.org/record/1447216#.XKuPDutKjGI [perma.cc/KK7L-35J5] (follow "FORCE2018_poster.pptx" hyperlink).

^{36.} Schofield & Urban, supra note 22, at 140.

^{37.} Jason Mazzone, Copyright Easements, 50 AKRON L. REV. 725, 744 (2016).

Frequently, but not always, the policies with mandates³⁸ to place works in an open access repository are at public universities³⁹ and other Carnegie Research I universities.⁴⁰

In addition to university-driven open access mandates for open access, the health and science fields, which frequently but do not always overlap with university open access policies, have separate requirements. Starting in 2009, there have been federal agency directives regarding open access. In 2009, the National Institutes of Health, with the goal of protecting the public interest in access to publicly funded scientific research, requires funded Principal Investigators to deposit published copies of research in PubMed, an Open Access repository.⁴¹ There have been other efforts to make all scientific research available to the public.⁴²

Most of the efforts to place materials in open access repositories are from funders – the university or the funding grantor that has paid for the creation of the research.⁴³ Many of these cases affect circuitously either federal or state taxpayers – through individually passed state university open access mandates or by agency-driven federal funding.⁴⁴ However, in at least one case, a different type of funder is directly considered – the state taxpayer. In 2013, the Open Access to Research Articles Act, became effective in Illinois.⁴⁵ This

^{38.} See OA Policies at Other Universities, MIT LIBR., libraries.mit.edu/scholarly/mit-open-access/oa-policies-at-other-universities/ [perma.cc/2QN6-AVRB] (last visited Apr. 8, 2019) (listing "U.S. and Canadian colleges and universities who have passed open access policies.").

^{39.} Mazzone, *supra* note 37, at 744 (discussing University of California system's open access policy); *see also Id.* at nn. 33-35 (discussing policies at elite non-public universities).

^{40.} Jorge L. Contreras, Confronting the Crisis in Scientific Publishing: Latency, Licensing, and Access, 53 SANTA CLARA L. REV. 491, 534 (2013) (Open access mandates "have generally been limited to large and influential research institutions whose faculty may be less vulnerable to retaliation (or the fear of retaliation) by journals.").

^{41.} Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research, NAT'L INSTS. OF HEALTH, www.grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html [perma.cc/ 59YY-428D]; Enhanced Public Access to NIH Research Information, Notice Number: NOT-OD-04-064, NAT'L INSTS. OF HEALTH (Sept. 3, 2004), www.grants.nih.gov/grants/guide/notice-files/NOT-OD-04-064.html [perma.cc/ M23B-RLZX]; Policy on Enhancing Public Access to Archived Publications Resulting from the NIH-Funded Research, Notice Number: NOT-OD-05-022, Nat'l Insts. OF HEALTH (Feb. 3, 2005), www.grants.nih.gov/ grants/guide/notice-files/NOT-OD-05-022.html [perma.cc/ESR6-6VTP].

^{42.} Browse Data Sharing Requirements by Federal Agency, SPARC, datasharing.sparcopen.org/data [perma.cc/QC63-7CCR] (last visited Apr. 8, 2019).

^{43.} Open Access, SPARC, sparcopen.org/open-access/ [perma.cc/Y43S-A56X] (last visited Apr. 8, 2019).

^{44.} See supra notes 38 & 39 (listing public state university open access policies. See also supra note 41 & Section II(D) (discussing the NIH policy herein).

^{45. 110} ILL. COMP. STAT. ANN. 61/15 (2019) (discussing the importance and

law was enacted addressing the value of open access institutional repositories. 46 Open access institutional repositories are appreciated within the legislation as a means

to maximize the social and economic benefits of research to the public[.] [T]he published research articles produced by faculty at public universities should be made as widely available as possible, wide availability referring both to the depth of availability of a given research article (including immediate availability where practicable, long-term preservation and free public access, and broad accessibility for reuse and further research) and the breadth of research articles made available[.]⁴⁷

III. ACCESSIBILITY STANDARDS AND UNIVERSAL DESIGN FOR WEBSITES

A. Thinking About Accessibility and Websites

People with disabilities frequently face challenges when using or attempting to use websites. People typically excluded from being able to fully use websites include those within three major categories of disability: perceptual disabilities (visual disabilities⁴⁸

cost of creating open access repositories).

46. 110 ILL. COMP. STAT. 61/5 (2013).

47. 110 ILL. COMP. STAT. 61/5(1); 110 ILL. COMP. STAT. 61/5(3) (stating "many public universities have developed, or are developing, the capacity to provide free access over the Internet to such research through institutional repositories."); 110 ILL. COMP. STAT. ANN. 61/15 (discussing the importance and cost of creating open access repositories).

48. The term "blind" is frequently used based on a medical or legal definition; however, visual disability includes both blind people and those not defined as blind that nevertheless have a disability. Vision-based disabilities are a complicated issue due to both social issues regarding how a large percentage of those in modern industrial countries, such as the United States, have some type of correction to their vision, and how the United States' focus on visual limitations is specifically focused on blindness, with nothing less than complete vision loss seemingly qualifying as disabled status. However, a vision-based impairment is usually a loss of visual acuity or loss of visual field, and in both cases the degree of vision loss varies. However, in the United States, the term "legally blind" has been defined in federal statutes (and by incorporation into state laws) as visual acuity of 20/200 or worse, or a visual field of 20 degrees or less. See 42 U.S.C. § 1382c(a)(2) (2004) (stating "an individual shall be considered to be blind ..." if they meet a specific criteria for social security purposes); 42 U.S.C. § 416 (2004) (stating "the term 'blindness' means ..." a specific criteria for social security purposes). However, "legally blind" is not the standard in the Americans With Disabilities Act definition of a "substantial limitation" of a major life activity. Therefore, a person who is not blind, but nevertheless has a visual impairment, may still qualify as a person with a disability under the ADA. See 42 U.S.C. § 12102 (2009) (defining disability section of the ADA, including defining when a disability "substantially limits" a major life activity). But compare the seemingly contradictory definitions in 42 U.S.C. § 12102(E)(IV)(ii) ("The ameliorative effects of the mitigating measures

and hearing/auditory disabilities⁴⁹), motor/physical disabilities, and cognitive disabilities.⁵⁰ However, "[g]ood accessibility is designed for the full range of capabilities. .."⁵¹ While making websites, such as institutional repositories, accessible to those with disabilities seems to be a daunting challenge, according to experts, "digital accessibility generally means applying existing solutions, not creating new solutions."⁵²

One of the most frequently used term to conceptualize accessibility is universal design, though there are several other terms that are similar in use. Universal design is defined as "the design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." More expansively, "The terms universal design, inclusive design, barrier-free design, human-centered design, and design-for-all are all concepts that strive toward a common goal: to make the user experience the first concern in making design decisions and to expand the description of users to include a wide range of human ability." 54

The problems regarding websites and their designs affecting the use by people with disabilities place a burden on users with disabilities, rather than on the designers, maintainers, and owners of the website. As Horton and Quesenbery conceptualize this issue:

When websites [] are badly designed, they create barriers that exclude people from using the web as it was intended. Poor accessibility creates a disabling environment where the design does not consider the wide variation in human ability and experience. In other words, *disability* is a conflict between someone's *functional* capability and the world we have contracted. In this social view of disability, it is the *product*

of ordinary eyeglasses or contact lenses shall be considered in determining whether an impairment substantially limits a major life activity."), with 42 U.S.C. § 12102(E)(IV)(iii)(I) ("The term 'ordinary eyeglasses or contact lenses' means lenses that are intended to fully correct visual acuity or eliminate refractive error."), and 42 U.S.C. § 12102(E)(IV)(iii)(II) ("The term 'low-vision devices' means devices that magnify, enhance, or otherwise augment a visual image.").

- 49. "[Deaf] refers to cultural and linguistic identification, while [deaf] refers to the medical condition of deafness." ALPER, *supra* note 8, at 198 n.118 (defining why both Deaf and deaf are useful terms with different definitions).
- 50. Diverse Abilities and Barriers, W3C WEB ACCESSIBILITY INITIATIVE, www.w3.org/WAI/people-use-web/abilities-barriers/ [perma.cc/8LQ4-XZ4R] (last updated May 17, 2017).
 - 51. HORTON & QUESENBERY, supra note 9, at 3.
- 52. Jonathan Lazar, Daniel Goldstein, & Anne Taylor, Ensuring Digital Accessibility Through Process and Policy 6 (2015).
- 53. Harpur & Stein, *supra* note 16, at 553 (quoting Convention on the Rights of Persons with Disabilities, opened for signature Mar. 30, 2007, 2515 U.N.T.S 3 at art. 2, available at www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-2-definitions.html [perma.cc/5SKW-MJNR]).
 - 54. HORTON & QUESENBERY, supra note 9, at 4.

that creates the barrier, not the *person*, just as design is at fault when a site has poor usability.⁵⁵

However, websites can be inclusive of a wide array of users. When there is "a web for everyone, people with diverse abilities and contexts can use the web successfully and enjoyably." ⁵⁶ And that is what the potential of accessibility allows, that "[d]igital information [] offers the promise of mainstream access: the same information to all, at the same time through the same modality." ⁵⁷ Taking this another step further, "A universal web is designed for all, inclusive of geography, language, and culture. It is a place that is available for people of all abilities, aptitudes, and attitudes . . . [D]esign has the power to not only remove barriers but also note to create them in the first place." ⁵⁸

B. Standards and Principles

Accessibility is a changeable, moveable wall, consistently and constantly needing to be modified to be additionally inclusive of more – more technology and more users, regardless of disability or limitations.

The starting point for accessibility is principles of accessibility. The Web Content Accessibility Guidelines (WCAG) are a set of principles to make content accessible to a wide range of people with disabilities and are written as guiding values. ⁵⁹ IT departments, University libraries, and others that make institutional repositories available do need to consider any official Web Content Accessibility Guidelines (WCAG), but the technical standards for today are different than they have been in the past – and will be in the future. ⁶⁰

C. Getting to Accessibility for Institutional Repositories

Instead of thinking about accessibility from the granular coding aspect, which places accessibility as something else on a checklist for compliance, accessibility here, as in so many areas, needs to consider the end user – someone unknown using the

^{55.} Id. at 3.

^{56.} Id. at 2.

^{57.} LAZAR, GOLDSTEIN, & TAYLOR, supra note 52, at 83.

^{58.} HORTON & QUESENBERY, supra note 9, at 4.

^{59.} History: W3C Recommendation May 1999, the previous version, WCAG 1.0, the W3C recommends that Web accessibility policies reference latest version; *Web Content Accessibility Guidelines (WCAG)* 2.0, W3C (Dec. 11, 2008), www.w3.org/TR/WCAG20/ [perma.cc/V9EM-QCMN].

^{60.} Web Content Accessibility Guidelines (WCAG) Overview, W3C WEB ACCESSIBILITY INITIATIVE, www.w3.org/WAI/standards-guidelines/wcag/ [perma.cc/F9AU-AUBC] (last updated June 22, 2018) ("W3C encourages you to use the most recent version of WCAG when developing or updating content or accessibility policies.").

university institutional repository for the purpose it was intended for, to review some piece of scholarly work created in connection to that institution. How can this user access this knowledge without any barriers?

Therefore, the starting place for university institutional repositories' accessibility needs to be from the four accessibility principles: Perceivable; Operable; Understandable; and Robust. 61 Another viewpoint on the ways that institutional repositories can become accessible starts with the Web Accessibility Toolkit: Making Digital Resources Usable & Accessible in Research Libraries: Standards and Practices by the Association of Research Libraries, using the principles for an accessible institution of Coordination and Harmonization; Monitoring and Enforcement; Guidance and Leadership; Access Considerations; Technical Dimensions; Research and Education; and Social Inclusion. 62

- 61. Introduction to Understanding WCAG 2.0, W3C WEB ACCESSIBILITY INITIATIVE, www.w3.org/TR/UNDERSTANDING-WCAG20/intro.html#introduction-fourprincs-head [perma.cc/XSD9-MLLH] (last updated June 22, 2018).
 - 62. The seven principals of an accessible institution include:
 - 1. Coordination and Harmonization: Harmonize all of the activities across your institution necessary to guarantee Internet justice. Empower your community to produce guidance and regulations, to draft and monitor accessibility requirements, to conduct accessibility research, to support innovation in accessibility, and to enforce accessibility requirements across and within organizations.
 - 2. Monitoring and Enforcement: Set up an enforcement body on campus that can hold people and departments accountable for inaccessible materials. Do not place the burden on people with disabilities to bring complaints against the institution and enforce their own rights.
 - 3. Guidance and Leadership: Bring accessibility issues to the attention of the leaders at your library. Create mechanisms for champions of accessibility to lead from all levels. Create a cross-departmental governing body to lead, create, and enforce accessibility initiatives across your institution.
 - 4. Access Considerations: Develop access requirements with direct input from people with disabilities and disability rights organizations that represent the spectrum of different disabilities. Standards and policies should focus on the information and communication needs of users with disabilities rather than on specific technological or performance issues.
 - 5. Technical Dimensions: Create clear technical standards that articulate who will benefit from the requirements, provide specific guidance and instructions for website developers and webmasters, and set up a system for iterative accessibility and usability testing of technologies. If a new Internet-related technology is available to research library users, it needs to be equally available to all users. This encompass all elements of online information, communication, and interaction."
 - 6. Research and Education: To promote innovation and new designs in accessibility, the institution will foster opportunities funding to support research for technology accessibility. It should also support accessibility

Additionally, discussions of how to ensure accessibility for institutional repositories is discussed in section IV *infra*.

IV. ADA BACKGROUND

A. Americans with Disabilities Act, 42 U.S.C. § 12101 General History

Signed into law on July 26, 1990, the Americans with Disabilities Act of 1990 (ADA)⁶³ is a sweeping piece of legislation designed to "establish a clear and comprehensive prohibition of discrimination on the basis of disability."⁶⁴ The ADA was extremely popular and received bipartisan support.⁶⁵ Congress found that individuals with disabilities had historically been isolated and segregated in all aspects of society.⁶⁶ In order to remedy this injustice, Congress passed the ADA⁶⁷ "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."⁶⁸ When

development by providing best practice guides, developer handbooks, and other instructional materials for including accessibility in the design, development, and implementation processes. The organization will try provide meaningful education about the social importance of Internet accessibility and the benefits to society as a whole.

7. Social Inclusion: Truly guaranteeing people with disabilities an equal place online could greatly alter the ways in which people with disabilities are perceived, treated, and included in society, in both the physical world and the online world.

Web Accessibility Toolkit, ASS'N OF RES. LIBRS., accessibility.arl.org/standards-best-practices/[perma.cc/498R-HQ8B] (last accessed Apr. 8, 2019).

- 63. Americans with Disabilities Act of 1990, 42 U.S.C. 126 § 12101 (2009). 64. 42 U.S.C. 126 §12101.
- 65. 403 of the 423 members of the House of Representatives voting voted for the ADA (twelve did not vote), with almost half the House cosponsoring the bill. Equality of Opportunity: The Making of the Americans with Disabilities Act, Nat'l COUNCIL ON DISABILITY 26 1997), (July www.ncd.gov/publications/2010/equality_of_Opportunity_The_Making_ of_the_Americans_with_Disabilities_Act [perma.cc/5P3D-LDHX] [hereinafter Equality of Opportunity]. The ADA passed with similar support in the Senate, with 91 Senators voting in favor. Steven A. Holmes, Rights Bill for Disabled Is Sent to Bush, N.Y. TIMES (July 14, 1990), www.nytimes.com/ 1990/07/14/us/rights-bill-for-disabled-is-sent-to-bush.html [perma.cc/4MUL-
- 66. 42 U.S.C. § 12101; See also Equality of Opportunity, supra note 65, at 14 (describing the history of disability discrimination in the United States beginning in the colonial era).
 - 67. 42 U.S.C. § 12101(b)(1).
- 68. Some have argued that Congress may not have operated only out of altruism. Many of the key legislators involved in the formation of the ADA had family members with disabilities or were of an age where diagnosis with a disability was a real possibility on their minds. See Miranda Oshige Mcgowan, Reconsidering the Americans with Disabilities Act, 35 GA. L. REV. 27, 33–34

signing the ADA, President George H.W. Bush expressed the intension that the ADA should bring about the end of discrimination against individuals with disability.⁶⁹

B. Public Accommodation

Title III of the ADA prohibits discrimination against individuals on the basis of disability. Such discrimination is prohibited "in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of

(2000) (stating:

[A]lmost everyone involved in the ADA had a close family member or friend who was disabled. Then-Attorney General Richard Thornburgh had a son who suffered from a developmental disability. One of President Bush's sons had a learning disability, and one of President Bush's uncles was quadriplegic. Senator Tom Harkin's brother was deaf. Representative Tony Coehlo himself had epilepsy, which had prevented him from becoming a priest. Representative Steny Hoyer, who became the ADA's House Sponsor after Tony Coehlo resigned from office, also had a personal connection to disability: his wife had epilepsy. Senator Orrin Hatch's brother-in-law was a paraplegic as a result of polio. Senator Edward Kennedy's son lost a leg to cancer, and his sister had a developmental disability. Every member of Congress had colleagues who were disabled. The Senate Minority Leader, Bob Dole, had lost most of the use of his right arm in World War II. Senator Daniel Inouye had lost his arm in the same war. And the memory of President Roosevelt certainly was present in the minds of many members of Congress. Senators and representatives were also well aware of their own vulnerabilities. As a group, the elderly are far more likely to be disabled. and Congress is crammed with men in their fifties and sixties. It certainly did not escape congressional notice that the ADA would likely protect members from discrimination should disability visit them in their not-so-distant old age.)

69

This act is powerful in its simplicity. It will ensure that people with disabilities are given the basic guarantees for which they have worked so long and so hard: independence, freedom of choice, control of their lives, the opportunity to blend fully and equally into the rich mosaic of the American mainstream. Legally, it will provide our disabled community with a powerful expansion of protections and then basic civil rights. It will guarantee fair and just access to the fruits of American life which we all must be able to enjoy. And then, specifically, first the ADA ensures that employers covered by the act cannot discriminate against qualified individuals with disabilities. Second, the ADA ensures access to public accommodations such as restaurants, hotels, shopping centers, and offices. Third, the ADA ensures expanded access to transportation services. And fourth, the ADA ensures equivalent telephone services for people with speech or hearing impediments.

Remarks of President George Bush at the Signing of the Americans with Disabilities Act, EQUAL EMP'T OPPORTUNITY COMM'N, www.eeoc.gov/eeoc/history/35th/videos/ada_signing_text.html [perma.cc/DU5L-AEEH] (last visited Apr. 8, 2019).

public accommodation."⁷⁰ In order to successfully demonstrate a claim of discrimination under Title III of the ADA, an individual must show that: "(1) [the plaintiff] is disabled within the meaning of the ADA; (2) the defendant is a private entity that owns, leases, or operates a place of public accommodation; and (3) the plaintiff was denied public accommodations by the defendant because of his disability."⁷¹ Whether the plaintiff has a covered disability and whether the defendant owns the accommodation in question are factual questions often not in dispute. Whether an accommodation is "public," however, is often the crux of a discrimination claim under Title III of the ADA.

C. Applicability to Universities and Libraries

The ADA leaves little doubt as to its applicability to universities or libraries as public accommodations. The ADA defines "a museum, library, gallery, or other place of public display or collection" as a public accommodation. ⁷² Courts have determined that a school or library need not be "public" in the private vs. public sense of the word in order to qualify as a public accommodation for purposes of the ADA. ⁷³

V. TITLE III DISCRIMINATION STANDARDS APPLYING TO WEBSITE ACCESSIBILITY

A. Caselaw

The circuits are split on the question of whether public accommodations are limited to physical structures or may refer to websites for purposes of the ADA. Authorities have developed two schools of thought for websites for purposes of the ADA: a website alone may be a public accommodation under the ADA⁷⁴ or it may be a *service* of a public accommodation. Authorities which view websites as a service analyze whether or not the website has a nexus with a physical structure.

^{70. 42} U.S.C. § 12182(a) (1990).

^{71.} Arizona ex rel. Goddard v. Harkins Amusement Enterprises, Inc., 603 F.3d 666, 670 (9th Cir. 2010).

^{72. 42} U.S.C. § 12181(7)(H) (1990).

^{73.} See, e.g. Ballard v. Kinkaid Sch., 147 F. Supp. 2d 603 (S.D. Tex. 2000) (regarding a private college preparatory school); Sandison v. Mich. High Sch. Athletic Ass'n, Inc., 863 F. Supp. 483 (E.D. Mich. 1994) rev'd in part, appeal dismissed in part by Sandison v. Mich. High Sch. Athletic Ass'n, Inc., 64 F.3d 1026 (E.D. Mich. 1995) (regarding a high school athletic association that was acting as place of education and thus covered); Thomas By and Through Thomas v. Davidson Acad., 846 F. Supp. 611 (M.D. Tenn. 1994) (regarding a private elementary and secondary school); Rothman v. Emory Univ., 828 F. Supp. 537, 539 (N.D. Ill. 1993) (regarding a private law school).

^{74. 42} U.S.C. § 12182 (a).

As described below, the First, Second, and Seventh circuits have determined that websites are public accommodations for civil rights claims, including the ADA. The Ninth and Eleventh Circuits have held that website alone is not a public accommodation and a physical space is required for a claim to succeed.

1. First Circuit

In Carparts Distribution Center, Inc. v. Automotive Wholesaler's Ass'n⁷⁵, the First Circuit held that public accommodations are not limited to "actual physical structures." ⁷⁶ In this case, the district court had held public accommodations as "being limited to actual physical structures with definite physical boundaries which a person physically enters for the purpose of utilizing the facilities or obtaining services therein."

The First Circuit conducted a thorough analysis of the plain language of the ADA and Congress's intent as evidenced by the legislative history of the ADA. 78 The First Circuit overruled the district court, arguing, "It would be irrational to conclude that persons who enter an office to purchase services are protected by the ADA, but persons who purchase the same services over the telephone or by mail are not. Congress could not have intended such an absurd result." 79

The Court in *Carparts* went on to conclude, in language to be echoed in subsequent cases and several other circuits, that physical structures are not required for Title III's public accommodation definition to apply, stating:

Neither Title III nor its implementing regulations make any mention of physical boundaries or physical entry. Many goods and services are sold over the telephone or by mail with customers never physically entering the premises of a commercial entity to purchase the goods or services. To exclude this broad category of businesses from the reach of Title III and limit the application of Title III to physical

^{75.} Carparts Distribution Ctr. v. Auto. Wholesaler's Ass'n, 37 F.3d 12 (1st Cir. 1994). In this case, plaintiff Ronald Senter, an individual with a covered disability (HIV) was the sole shareholder, president, chief executive director, and an employee of Carparts Distribution Center. Mr. Senter had received medical insurance through Carparts' participation in a self-funded medical reimbursement plan provided by the defendants. After Mr. Senter submitted several claims for reimbursement for treatment of serious AIDS-related illnesses, defendants amended the plan to include a lifetime cap of \$25,000 for HIV/AIDS related treatments. Non-HIV/AIDS-related treatments would continue to have a standard cap of \$1 million. When defendants stopped all reimbursement payments, plaintiffs sued under Title I and Title III of the ADA.

^{76.} Id. at 19.
77. Carparts Distribution Ctr., Inc. v. Auto. Wholesaler's Ass'n, 826 F. Supp. 583, 586 (D.N.H. 1993).

^{78.} Carparts Distribution Ctr., Inc., 37 F.3d at 19.

^{79.} *Id*.

structures which persons must enter to obtain goods and services would run afoul of the purposes of the ADA and would severely frustrate Congress's intent that individuals with disabilities fully enjoy the goods, services, privileges and advantages, available indiscriminately to other members of the general public.⁸⁰

While *Carparts* did not address websites, subsequent decisions in the First Circuit have used *Carparts*' analysis to conclude that websites are included as public accommodations for purposes of the ADA.⁸¹

2. Seventh Circuit

In Morgan v. Joint Administration Board, Seventh Circuit Court of Appeals Judge Richard Posner concluded that a physical site is not required for the definition of a public accommodation. The court asserted that "the site of the sale is irrelevant to Congress's goal of granting the disabled equal access to sellers of goods and services."82 Judge Posner concluded that "(a)n insurance company can no more refuse to sell a policy to a disabled person over the internet than a furniture store can refuse to sell furniture to a disabled person who enters the store."83 The court ruled, "What matters is that the good or service be offered to the public."84

3. Second Circuit

The Second Circuit adopted the *Carparts* reasoning in *Pallozzi* v. *Allstate Life Insurance Co.*⁸⁵ The court was persuaded by

^{80.} Id. at 20.

^{81.} See Nat'l Ass'n of the Deaf v. Netflix, Inc., 869 F. Supp. 2d 196, 200 (D. Mass. 2012) (stating that "Carparts's reasoning applies with equal force to services purchased over the Internet"). Associations for the deaf sued Netflix for not providing adequate closed captioning for its content. The court ruled that services purchased over the internet like streaming video fall under the ADA definition of "public accommodation." Id.

^{82.} Morgan v. Joint Admin. Bd., 268 F.3d 456, 459 (7th Cir. 2001). Plaintiffs were retired employees who had retired early due to disabilities which prevented them from working. *Id.* at 457. Under their employee retirement plan, "disability" retirees were not granted a cost of living increase that "normal" retirees were granted. *Id.* Plaintiffs brought suit under Titles I and III of the ADA. *Id.* at 457, 459. The district court dismissed for failure to state a claim. *Id.* at 457.

^{83.} Id. at 459.

^{84.} *Id.* In this instance, the Court found that the good was not being sold to the public. The analysis found websites to be under the definition of public accommodation, but this case involved a private deal. A member of the public could not purchase the service in question, an insurance policy. Rather, "it was negotiated between the employer and the representative of its employees." *Id.*

^{85.} Pallozzi v. Allstate Life Ins. Co., 198 F.3d 28, 32 (2d Cir. 1999), opinion amended on denial of reh'g, 204 F.3d 392 (2d Cir. 2000). Plaintiffs claimed they had been denied a life insurance policy due to their mental disability.

Carparts' analysis that limiting the definition of "public accommodation" to physical spaces would frustrate Congress's intent to eliminate discrimination against individuals with disabilities by passing the ADA. 86 Much like Posner had reasoned in Morgon, 87 the court in Pallozzi was concerned with the goods or service being offered, and not the manner, physical or otherwise, in which it was being offered. The court stated, "We believe an entity covered by Title III is not only obligated by the statute to provide disabled persons with physical access, but is also prohibited from refusing to sell them its merchandise by reason of discrimination against their disability."88

Case law in the Second Circuit has gone on to explicitly include websites within the definition of public accommodation for purposes of the ADA. In *Andrews v. Blick Art Materials, LLC*, the district court followed the logic of *Pallozzi* to hold that websites are public accommodations.⁸⁹ After an exhaustive review of prior case authority and statutory interpretation analysis of the ADA, the district court ended with a reference to Congress's intent in passing the ADA, concluding:

Today, internet technology enables individuals to participate actively in their community and engage in commerce from the comfort and convenience of their home. It would be a cruel irony to adopt the interpretation of the ADA espoused by Blick, which would render the legislation intended to emancipate the disabled from the bonds of isolation and segregation obsolete when its objective is increasingly within reach. ⁹⁰

Other cases in the Second Circuit have followed similar logic to reach the same conclusion.⁹¹

Defendants argued that "Congress intended the statute to ensure that the disabled have physical access to the facilities of insurance providers, not to prohibit discrimination against the disabled in insurance underwriting." *Id.* They went on to assert, "because insurance policies are not actually used *in* places of public accommodation, they do not qualify as good and services 'of [a] public accommodation." *Id.*

- 86. Pallozzi, 198 F.3d at 32, opinion amended on denial of reh'g, 204 F.3d 392 (2d Cir. 2000).
 - 87. Morgan, 268 F.3d at 456.
- 88. *Pallozzi*, 198 F.3d at 32–33, opinion amended on denial of reh'g, 204 F.3d 392 (2d Cir. 2000).
- 89. Andrews v. Blick Art Materials, LLC, 268 F. Supp. 3d 381 (E.D.N.Y. 2017). Plaintiff, who is blind, brought action under Title III of the ADA against an art supply store for failing to make its website accessible to the blind.
 - 90. Id. at 398.
- 91. See Nat'l Fed'n of the Blind v. Scribd Inc., 97 F. Supp. 3d 565, 575 (D. Vt. 2015) (giving "some deference to [the DOJ's] conclusion that the ADA applies to websites covered by one of the categories in the statute"); Markett v. Five Guys Enterprises LLC, 1:17-cv-00788-KBF, ECF No. 33, Order on Def.'s Mot. to Dismiss (S.D.N.Y. July 21, 2017), at 4 (stating "[T]he text and purposes of the ADA, as well as the breadth of federal appellate decisions, suggest that defendant's website is covered under the ADA, either as its own place of public accommodation or as a result of its close relationship as a service of defendant's

4. Ninth Circuit

The Ninth Circuit has developed a doctrine that websites require a nexus with a physical location in order to fit into the public accommodations. ⁹² Under this doctrine, websites may be covered by Title III of the ADA when they are a service of a public accommodation. ⁹³

In 2000, the Ninth Circuit in Weyer v. Twentieth Century Fox Film Corp. used a statutory interpretation analysis of Title III of the ADA to conclude that a physical place is required to meet the definition of public accommodation. 94 The court reasoned that since the list of specific public accommodations given in the statute are all physical places, under the principle of noscitur a sociis (it is known from its associates), places of public accommodations must be physical locations. 95 The court went on to hold that public accommodations may not discriminate on the basis of disability in the provision of goods and services. 96

In *Robles v. Domino's Pizza, LLC*, the court clarified how websites are treated in the Ninth Circuit. ⁹⁷ Again, the court held that Title III of the ADA applied to the "services of a place of public accommodation, not services in a place of public accommodation." ⁹⁸ The court examined how websites fit into the *Weyer* analysis. The court held that websites "facilitate access to the goods and services

restaurants, which indisputably are public accommodation under the statute").

^{92.} Weyer v. Twentieth Century Fox Film Corp., 198 F.3d 1104, 1114 (9th Cir. 2000). ("[S]ome connection between the good or service complained of and an actual physical place is required.").

^{93.} Robles v. Domino's Pizza, LLC, 913 F.3d 898, 905 (9th Cir. 2019).

^{94.} Weyer, 198 F.3d at 1114. A former employee brought action under Title III of the ADA and others against his former employer and disability insurance administrator for providing greater benefits for physical disabilities than for mental disabilities.

^{95.} Title III provides an extensive list of "public accommodations" in 42 U.S.C. § 12181(7), including such a wide variety of things as an inn, a restaurant, a theater, an auditorium, a bakery, a laundromat, a depot, a museum, a zoo, a nursery, a day care center, and a gymnasium. All the items on this list, however, have something in common. They are actual, physical places where goods or services are open to the public, and places where the public gets those goods or services. Weyer, 198 F.3d at 1114.

^{96. &}quot;[W]hatever goods or services the place provides, it cannot discriminate on the basis of disability in providing enjoyment of those goods and services. This language does not require provision of different goods or services, just nondiscriminatory enjoyment of those that are provided." *Id. at* 1115.

^{97.} Robles, 913 F.3d at 902. A blind customer brought action against the pizza company, alleging that operator's website and mobile application for ordering pizza was not fully accessible to him in violation of Americans with Disabilities Act (ADA) and California's Unruh Civil Rights Act (UCRA).

^{98.} Robles, 913 F.3d at 905 (citing Nat'l Fed'n of the Blind v. Target Corp., 452 F. Supp. 2d 946, 953 (N.D. Cal. 2006)).

of a place of public accommodation."⁹⁹ The important element for the Ninth Circuit's analysis is the existence of a "nexus" of a physical location and the company's website. ¹⁰⁰ The court was persuaded by the reasoning many district court cases had been using that while a website may not be considered a public accommodation on its own, it can be considered a service of a public accommodation and therefore covered by Title III. ¹⁰¹ Websites with no connection to a physical location are still not covered as public accommodations under Title III in the Ninth Circuit. ¹⁰²

5. Eleventh Circuit

The Eleventh Circuit has not addressed whether websites are within the ADA definition of public accommodation. However, district courts have found guidance in the Eleventh Circuit's decision in *Rendon v. Valleycrest Productions*. ¹⁰³ The court held in *Rendon* that discriminatory practices could occur off-site when they "restrict a disabled person's ability to enjoy the defendant entity's goods, services, and privileges." ¹⁰⁴ District courts in the circuit have applied this holding to find that websites can be covered as services of physical public accommodations. In *Gil v. Winn-Dixie Stores, Inc.*, the district court held that a physical store's website was covered by Title III of the ADA when it was the vehicle for services of the store. ¹⁰⁵ The court in *Gil* held that "where a website is heavily

99. Robles, 913 F.3d at 905.

100. *Id.* "This nexus between Domino's website and app and physical restaurants—which Domino's does not contest—is critical to our analysis." *Id.* 101. *Id.* at 905 n.7.

102. See Earll v. eBay, Inc., 599 F. App'x 695, 696 (9th Cir. 2015), (citing Weyer, 198 F.3d at 1114) (stating "Because eBay's services are not connected to any 'actual, physical place[],' eBay is not subject to the ADA").

103. Rendon v. Valleycrest Prods., 294 F.3d 1279, 1280 (11th Cir. 2002). Plaintiff with a hearing and mobility impairment sued the producers of a television quiz show saying its telephone screening process was discriminatory.

104. Rendon, 294 F.3d at 1283.

105. Gil v. Winn-Dixie Stores, Inc., 257 F. Supp. 3d 1340, 1349 (S.D. Fla 2017). Plaintiff with a visual disability brought action against the owner of a grocery store chain claiming its website was inaccessible to the visually impaired. The website gave the ability to access digital coupons and find store locations. The court stated,

These services, privileges, advantages, and accommodations are especially important for visually impaired individuals since it is difficult, if not impossible, for such individuals to use paper coupons found in newspapers or in the grocery stores, to locate the physical stores by other means, and to physically go to a pharmacy location in order to fill prescriptions.

Id. at 1349. The court held that the website was a service of a public accommodation and thus covered by Title III. It went on to order the owners of the store to modify their website to make it accessible to visually impaired customers.

integrated with physical store locations and operates as a gateway to the physical store locations, . . ." the website is covered by the ADA. 106 The Eleventh Circuit has indicated it agrees with the logic of this holding. 107

6. Other Circuits

The remaining circuits have not reached the question of websites as public accommodations. District courts often followed the two schools of argument that websites are either public accommodations in their own right or are services of a public accommodation. 108

Often the cases that contest this issue do not make it to the appellate level because parties often settle. As Lazar, Goldstein, and Taylor explain, "entities who might argue the degree to which they are subject to Title III have chosen instead to reach settlement agreements to make their web sites and services accessible, rather than having a court decide the issue." 109 Companies would rather pay to make their websites accessible than go through the public relations nightmare of a long court battle. 110 Additionally, defendants may find adding accessibility to be both less expensive than a court battle and increase their market. 111 By settling and adding accessibility to their websites, companies increase their number of potential customers.

B. University-based ADA claims

There have been well-publicized claims of disability discrimination against universities in recent years. Specifically, individuals with disabilities have brought claims concerning online content made available by universities for free to the public. 112

^{106.} Gil v. Winn-Dixie Stores, Inc., 257 F. Supp. 3d 1340, 1348 (S.D. Fla. 2017).

^{107.} See Haynes v. Dunkin' Donuts LLC, 741 F. App'x 752, 754 (11th Cir. 2018) (reversing and remanding a motion to dismiss a claim).

^{108.} See Nat'l Fed'n of the Blind, 97 F. Supp. 3d at 568 (indicating a digital library was a public accommodation). A national association of blind persons brought action claiming an online library was inaccessible to the blind. The district court held that the digital library, Scribd, was a public accommodation for purposes of the ADA.

^{109.} LAZAR, GOLDSTEIN, & TAYLOR, supra note 52, at 91.

^{110.} *Id*.

^{111.} *Id*.

^{112.} University of California at Berkeley notoriously avoided litigation by cutting off all public access to over 20,000 video and audio files on its website. The Department of Justice had responded to complaints about the inaccessibility of publicly available Berkeley website content by employees at Gallaudet University. Carl Straumsheim, *Berkeley Will Delete Online Content*, INSIDE HIGHER ED (March 6, 2017), www.insidehighered.com/news/2017/03/06/u-california-berkeley-delete-publicly-available-educational-content

In 2016, the National Association of the Deaf (NAD) brought identical suits against Harvard University Massachusetts Institute of Technology (MIT) when the two institutions refused to close caption their publicly available digital video content to make it accessible to individuals with hearing disabilities. 113 Harvard and MIT had made thousands of audio and video recordings available to the public. 114 Plaintiffs asserted that they were being denied access to a wide range of educational opportunities by two of the country's most prestigious institutions of higher learning. 115 NAD sought injunctive relief under the ADA demanding closed captioning for all publicly available content. 116 Harvard and MIT moved to stay or dismiss asserting, in part, that their web content did not qualify as public accommodations under Title III of the ADA.117 The court in the Harvard case used a Carparts and Netflix analysis to find that the content did fall under the public accommodation definition. 118 The court in the MIT case found the complaint to be substantially similar and adopted the Harvard reasoning, memorandum, and order in full. 119

[perma.cc/3DU5-BB2Q]. Rather than adding subtitles and other accessibility measures, Berkeley removed all of the content in question from public view. Cathoy Koshland, *Campus Message on Course Capture Video, Podcast Changes*, Press Release of Berkeley News, UC BERKELEY. (Mar. 1, 2017), news.berkeley.edu/2017/03/01/course-capture/ [perma.cc/3LU8-ERAQ].

113. Nat'l Ass'n of the Deaf v. Harvard Univ., No. CV 15-30023-MGM, 2016 WL 6540446 (D. Mass. Nov. 3, 2016); Nat'l Ass'n of the Deaf v. Mass. Inst. of Tech., No. 3:15-CV-30024-MGM, 2016 WL 3561631 (D. Mass. Feb. 9, 2016) report and recommendation adopted, No. CV 15-30024-MGM, 2016 WL 6652471 (D. Mass. Nov. 4, 2016).

 $114.\ Nat'l\ Ass'n$ of the Deaf v. Harvard Univ., No. CV 15-30023-MGM, 2016 WL 6540446, at *2.

115. NAD Sues Harvard and MIT for Discrimination in Public Online Content, NAT'L ASSOC. OF THE DEAF (Feb. 12, 2015), www.nad.org/2015/02/17/nad-sues-harvard-and-mit-for-discrimination-in-public-online-content/[perma.cc/53RF-Q98Y].

Arlene Mayerson, Directing Attorney for the Disability Rights Education and Defense Fund who was intimately involved in drafting the ADA and a lawyer for plaintiffs in the MIT case, said, "If you are a hearing person, you are welcomed into a world of lifelong learning through access to a community offering videos on virtually any topic imaginable, from climate change to world history or the arts. No captions is like no ramp for people in wheelchairs or signs stating 'people with disabilities are not welcome."

Id. 116. Id. 117. Id.

118. Nat'l Ass'n of the Deaf v. Harvard Univ., No. CV 15-30023-MGM, 2016 WL 6540446, at 20. See Carparts Distribution Ctr., Inc., 37 F.3d at 19 (finding that public accommodation is not "limited to actual physical structures"). See also Nat'l Ass'n of the Deaf v. Netflix, Inc., 869 F. Supp. 2d at 201 (stating that "while the home is not itself a place of public accommodation, entities that provide services in the home may qualify as places of public accommodation").

119. Nat'l Ass'n of the Deaf v. Mass. Inst. of Tech., No. 3:15-CV-30024-MGM,

The parties in both the Harvard and MIT cases spent over a year trying to reach a settlement out of court. ¹²⁰ When the attempt at settlement failed, Harvard and MIT again brought motions to dismiss. ¹²¹ The universities again moved to dismiss NAD's claims under Title III of the ADA, section 504 of DOE's implementing regulations. ¹²² Harvard and MIT also argued they were entitled to immunity under the Communications Decency Act (CDA) of 1996 ¹²³ for any third party content not hosted on their servers. ¹²⁴

While the cases have not been formally consolidated, the reasoning is the same in both, and the court adopted the Harvard reasoning in the MIT case and has denied the motions to dismiss in both cases for their Title III of the ADA claims. ¹²⁵ The court granted the motions to dismiss for third party content covered by the CDA in both cases. ¹²⁶ Therefore, as of April 2019, the Harvard and MIT accessibility litigation continues.

VI. INSTITUTIONAL REPOSITORIES ARE PUBLIC ACCOMMODATIONS AND NEED TO BE ACCESSIBLE

A. Practical Problems

While the goal for academic institutional repositories is to provide open access, individual and as a whole university repositories have not placed accessibility at the forefront of how they make all information available to users. Therefore, "as technology continues to evolve and digital resources are more easily

2016 WL 3561631 (D. Mass. Feb. 9, 2016), report and recommendation adopted, No. CV 15-30024-MGM, 2016 WL 6652471 (D. Mass. Nov. 4, 2016) (noting that the "court adopts Judge Robertson's recommendation in full for the reasons set forth in the Memorandum and Order on Defendants' Motion to Stay or Dismiss in National Association for the Deaf v. Harvard University").

120. Lindsay McKenzie, *Legal Battle Over Captioning Continues*, INSIDE HIGHER ED, April 9, 2019, www.insidehighered.com/news/2019/04/08/mit-and-harvard-fail-get-out-video-captioning-court-case [perma.cc/SAK5-9PAH].

121. Nat'l Ass'n of the Deaf v. Harvard Univ., No. 3:15-CV-30023-KAR, 2019 WL 1409302 (D. Mass. Mar. 28, 2019); Nat'l Ass'n of the Deaf v. Mass. Inst. of Tech., No. 3:15-CV-30024-KAR, 2019 WL 1409301 (D. Mass. Mar. 28, 2019).

122. Nat'l Ass'n of the Deaf v. Harvard Univ., No. 3:15-CV-30023-KAR, 2019 WL 1409302, at *7 (citing 34 C.F.R. § 104.4(b)(1)(i) by stating that "federal fund recipients may not deny qualified handicapped individuals, "directly or through contractual, licensing, or other arrangements," the opportunity to participate in or benefit from aids, benefits, and services provided by a federal funds recipient").

123. 47 U.S.C. § 230 (2011).

 $124.\ Nat'l\ Ass'n$ of the Deaf v. Harvard Univ., No. 3:15-CV-30023-KAR, 2019 WL 1409302, at *9.

 $125.\ Id.;$ Nat'l Ass'n of the Deaf v. Mass. Inst. of Tech., No. 3:15-CV-30024-KAR, 2019 WL 1409301.

126. *Id.* According to plaintiff's counsel, Arlene Mayerson, "the third-party content represents 'a tiny amount of the material that we have been looking to have captioned." McKenzie, supra note 120.

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shared than hard copy resources, libraries can and should work together to [] promot[e] full accessibility to their patrons." 127

This does not mean that libraries are not concerned about disabled users of library services, under the umbrella of all interpretations of accessibility. As one expert states, "Even beyond access for those with print disabilities, libraries view achieving better accessibility across the spectrum of disabilities as a priority. 128 Libraries want to have their materials used by those with disabilities by being "heavily invested in promoting accessibility of their collections to those with disabilities. The ability to digitize materials has revolutionized the ability to provide access to works for persons who are blind, visually impaired or otherwise print disabled."129 For example, additionally "libraries work to ensure that those with hearing impairments have the accessible formats that they need, such as appropriately captioned video materials."130 Libraries are interested in helping users who are disabled, but too often, this is completed on an individual or ad-hoc basis, rather than considering universal design, though this is also beginning to change, at least within the librarian academic literature¹³¹ though not yet in discussions regarding institutional repositories.

It is much better to think about accessibility before setup or allowing deposit of certain types of materials in an academic repository, rather than having to deal with the need to make materials newly accessible later. For example, two of the surprisingly few university institutional repositories that have proactively considered accessibility, 132 including making the backfile of the repository accessible, have not completed this task, but are moving forward with considerable efforts. 133 Considerations

^{127.} Cox, supra note 13, at 288.

^{128.} Id.

^{129.} Id. at 285.

^{130.} Id. at 288.

^{131.} See generally Kyunghye Yoon, Rachel Dols & Laura Hulscher, Applying Inclusive Principles in Web Design to Enhance Accessibility for Disabled Users, in Applying Library Values to Emerging Technology Decision-Making In the Age of Open Access, Maker Spaces, and the Ever-Changing Library 373-400 (Peter D. Fernandez & Kelly Tilton eds., 2018) (discussing accessibility for library website and library catalog); Kyunghye Yoon, L. Hulscher, & R. Dols, Accessibility and Diversity in LIS: Inclusive Information Architecture for Library Websites, 86 (2) Libra. Q. 213 (2016), (referencing accessibility for library websites, not repositories); see also Jessica Schomberg, Libraries + Disabilities (Apr. 2018), catassessmentresearch.blogspot.com/2018/04/libraries-disabilities.html [perma.cc/H29B-WL6F] (containing bibliography of academic articles about disabilities and libraries).

^{132.} Michael Barera, SAA 2018 Session Recap: 504: Equal Opportunities: Physical and Digital Accessibility of Archival Collections, SOC'Y OF AM. ARCHIVISTS (Sept. 4, 2018), www.snaproundtable.wordpress.com/2018/09/04/saa-session-recap-equal-opportunities-physical-and-digital-accessibility-of-archival-collections/ [perma.cc/75VA-VEVB].

^{133.} Lyon, supra note 35.

are the uncertainty regarding whether the files are possibly already accessible and the additional cost to make materials accessible. ¹³⁴ If accessibility is built into the starting budget, including staffing needs for transcription and file conversion, then it does not become an unexpected cost later on.

Therefore, the starting place for university institutional repositories' accessibility needs to start from the four accessibility principles: Perceivable; Operable; Understandable; and Robust. 135 Therefore, these are some of the issues with accessibility with present institutional repositories according to these principles:

- Principle One: Perceivable: "users must be able to perceive the information being presented (it can't be invisible to all of their senses)" 136
 - Problem: PDFs without Optical Character Recognition (OCR)
 - Problem: Videos without captions
- Principle Two: Operable: "users must be able to operate the interface (the interface cannot require interaction that a user cannot perform)" 137
- Principle Three: Understandable: "users must be able to understand the information as well as the operation of the user interface (the content or operation cannot be beyond their understanding)" 138
- Principle Four: Robust: "users must be able to access the content as technologies advance (as technologies and user agents evolve, the content should remain accessible)" 139

Institutional repositories need to make the effort to ensure content is accessible to all users, including people with disabilities,

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Duke Digital Repository Policy for Accessibility, supra note 34.

134. Lyon, supra note 35 (cost of transcription: $\$20,\!000$ for about 900 hours of content).

135. Introduction to Understanding WCAG 2.0, supra note 61.

136. Id.

137. *Id*.

138. Id.

139. *Id*.

by implementing best practices in universal web design. Above are only the major issues that these authors are aware of, based on current academic institutional repository standards and trends. However, considering the framework of institutional repositories is to provide scholarship access to the public, it is likely that there will be additional avenues of potential problems with universal access to the information in academic institutional repositories.

B. How to Ensure that University Institutional Repositories are Accessible Through Policy and Procedure

It is essential that university libraries create appropriate policies and procedures. Having appropriate policies and procedures helps to ensure the fourth principle of accessibility: Robustness. In addition to the ways that all possible providers of online information can make their websites accessible, universities, and therefore academic institutional repositories, have means to ensure accessibility in other ways. For example, Lazar, Goldstein, and Taylor suggest several ways that can be easily adopted by universities regarding accessibility, including as ways to make institutional repositories more accessible. 140 The first measure is to adopt a policy of compliance monitoring. 141 Compliance monitoring involves "proactively investigating, monitoring, and ensuring accessibility . . . "142 Considering that universities and libraries frequently have policy reviews, this should be no different from any other annual or similar continual policy review. Therefore, "by continually monitoring processes, universities can identify when upgrades and existing processes can create barriers to disability inclusion. Once barriers are identified, then fixes should be mainstreamed to reduce the risk of disabling barriers occurring."143 The second measure involves embracing disability inclusive procurement practices.¹⁴⁴ By placing "obligations in procurement contracts that suppliers demonstrate they have embraced universal design, [they] place a duty on the supplier to remedy disabling barriers where such barriers arise. This process reduces the burden on universities and increases the probability that suppliers will factor in universal design in products,"145 such as institutional repository platforms.

VII. CONCLUSION

University open access institutional repositories need to be

^{140.} LAZAR, GOLDSTEIN, & TAYLOR, supra note 52, at 161.

^{141.} *Id*.

^{142.} *Id*.

^{143.} Harpur & Stein, supra note 16, at 560-61.

^{144.} Lyon, supra note 35.

^{145.} Harpur & Stein, supra note 16, at 561.

made accessible to existing and potential disabled users. However, there are no specific rules that university institutional repositories must follow to be compliant with the ADA's "public accommodation" standard. Accessibility is a changeable, moveable wall, consistently and constantly needing to be modified to be additionally inclusive of more — more technology and more users, regardless of disability or limitations. IT departments, university libraries, and others that make institutional repositories available need to consider any official Web Content Accessibility Guidelines (WCAG), but the technical standards for today are different than they have been in the past — and will be in the future.

Instead of thinking about accessibility from the granular coding aspect, which places accessibility as something else on a checklist for compliance, accessibility here, as in so many areas, needs to consider the end user — someone unknown using the university institutional repository for the purpose it was intended for, to review some piece of scholarly work created in connection to that institution. How can this user access this knowledge barrier-free?

The starting place for reconsidering university institutional repositories' accessibility needs to be from the four accessibility principles: Perceivable; Operable; Understandable; and Robust. 148 In addition, there are other ways of thinking about these issues, from a library's perspective – and from less of a technologist perspective. One early critic of the lack of accessibility in university open access institutional repositories views the following areas to be of the greatest importance. We have modified the four areas, by adding the varied likely responsible parties for these roles:

- Creation and use of metadata standards to ensure universal discoverability (standards created/implemented by library, repository manager; specific metadata added by authors of scholarly works);
- Use of web development standards to ensure access to users with disabilities (mandate for use of standards from university, possibly as part of overall IT, accessibility, or library policy; using guidelines set outside of institution, implementation by IT, library,

^{146.} Contra Elizabeth Sheerin, Inaccessible Websites Are Discriminating Against the Blind: Why Courts, Websites, and the Blind Are Looking to the Department of Justice for Guidance, 92 St. John's L. Rev. 573, 576 (2018) (arguing that all websites should need to follow the Web Content Accessibility Guidelines 2.1, and "should have to comply with A, AA, or AAA standards depending on the number of services offered at their virtual locations").

^{147.} Web Content Accessibility Guidelines (WCAG) Overview, supra note 60. ("W3C encourages you to use the most recent version of WCAG when developing or updating content or accessibility policies.").

^{148.} Cox, *supra* note 13, at 288.

repository platform);

- Development and implementation of policy to provide transparency regarding accessibility for open access repository (mandate for policy from university, possibly as part of overall accessibility, library, or IT policy; created by library, repository manager; available on repository site); and
- Development and implementation of preservation standards to ensure that research is maintained for future generations (mandate for policy from university, possibly as part of overall library, accessibility, or IT policy; policy created by library, repository manager; implementation by IT, library, repository manager, repository platform).¹⁴⁹

Institutional Repositories are dependent upon frequently changing technologies. Incorporating concerns about accessibility for disabled users and for future users over the long-term should be part of the strategic plan for all university institutional repositories. After all, thinking about how the way in which information is provided in an institutional repository today and how it can be provided in the future is exciting!

Getting to full accessibility requires "not only continued legal advocacy, but the inclusion of accessibility in the curricula for [IT-related fields], in company policies requiring usability testing and affirmative determinations of accessibility before release, and in employee accountability and visibility."¹⁵⁰

Institutional repositories should not become the crated Ark of the Covenant with their secrets locked inside; instead, they should be as open as possible to all, sharing the scholarship inside.

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Duke Digital Repository Policy for Accessibility, supra note 34.

^{149.} Modified by and added to by authors Raizel Liebler & Gregory Cunningham. Caitlin Carter, *Accessibility in Open Access Institutional Repositories*, Presentation from the Conference on Inclusion and Diversity in Library and Information Science (CIDLIS) at the University of Maryland on October 21, 2016. www.hdl.handle.net/1903/18917 [perma.cc/U9YC-8NXV]. (last visited Apr. 8, 2019).

^{150.}Lyon, supra note 35.