

Australian Human Rights Commission

Human Rights and Technology Project.

Wednesday 29 August 2018.

Submission by:

Dr Paul Harpur

Senior Lecturer with the TC Beirne School of Law, the University of Queensland.

International Distinguished Fellow, the Burton Blatt Institute, Syracuse University, New York.

████████████████████

Public submission

Table of Contents

Australian Human Rights Commission	1
Human Rights and Technology Project.....	1
Dr Paul Harpur	1
Introduction to the submission.....	4
Proposed reforms	4
Recommendation 1: What, if any, changes to Australian law are needed to ensure new technology is accessible?: Reasonable to consider disability inclusion.....	4
Recommendation 2: What, if any, changes to Australian law are needed to ensure new technology is accessible?: Designers and manufacturers publish on disability inclusion	4
Recommendation 3: What, if any, policy and other changes are needed in Australia to promote accessibility for new technology?	5
How can the private sector be encouraged or incentivised to develop and use accessible and inclusive technology, for example, through the use of universal design.	5
Consultation Question 1. What types of technology raise particular human rights concerns? Which human rights are particularly implicated?.....	8
Introducing the right to read in the Convention on the Rights of Persons with Disabilities	8
The right to access using information communication technologies prior to the <i>Convention on the Rights of Persons with Disabilities</i>	8
The <i>Convention on the Rights of Persons with Disabilities</i> enshrines the right to access using information communication technologies	10
Universal design.....	10
Right to reasonable accommodation/adjustments	11
Analysing how the right to read impacts on rights in the <i>Convention on the Rights of Persons with Disabilities</i>	12
Operationalising the right to access in promoting inclusive education.....	12
Operationalising the right to access in promoting inclusive workplaces	15
Operationalising the right of access by creating a right to information for freedom of expression	19
Operationalising the right to access cultural materials over intellectual property interests: a paradigm shifting development.....	20
Consultation Question 2. Noting that particular groups within the Australian community can experience new technology differently, what are the key issues regarding new technologies for persons with disabilities?.....	24
How do the print disabled consume digital content?.....	24

Improved but limited access: E-Libraries with E-Books in disability specific formats	25
Delays and difficulties: educators and charities providing accessible E-Books under an exception to copyright	26
The potential for equal access: E-Books enter the mainstream market	27
No longer just a digital representation of a print book: E-Books as a multi-media experience...	28
When is an E-Book accessible and usable by the print disabled?	29
Equal access not realised: E-Books in the mainstream market	30
Consultation Question 3. How should Australian law protect human rights in the development, use and application of new technologies? Consultation Question 3. How should Australian law protect human rights in the development, use and application of new technologies?	32
Anti-discrimination laws in Australia	32
The relationships selected for regulation: The adoption of a limited social model approach	32
Relationships regulated by anti-discrimination laws	33
E-Book libraries as on-line relationships that attract anti-discrimination duties in Australia and the United Kingdom	34
Regulating digital spaces and E-Libraries in Australia.....	35
Introducing the disparate impact doctrine	36
The retrofitting focus of anti-discrimination laws	39
Persons with disabilities have limited resources to combat digital disablement.....	40
Introducing the concept of positive duties	43

Introduction to the submission

This submission concerns all disabling technologies, however has a particular focus upon access to digitized books, more commonly referred too as E-Books.

This submission draws heavily from my monograph, Paul Harpur, *Discrimination, Copyright and Equality: Opening the E-Book for the Print Disabled*, published in 2017 by Cambridge University Press.

Proposed reforms

Recommendation 1: What, if any, changes to Australian law are needed to ensure new technology is accessible?: Reasonable to consider disability inclusion

It is recommended that the following two paragraphs are added to section 11(1) of the *Discrimination Act 1992* (Cth) to provide:

11 Unjustifiable hardship

(1) For the purposes of this Act, in determining whether a hardship that would be imposed on a person (the first person) would be an unjustifiable hardship, all relevant circumstances of the particular case must be taken into account, including the following:

...

(f) The availability and cost of adopting universal design in the design and implementation phases;

(g) Whether universal design was considered or adopted by the first person;

Recommendation 2: What, if any, changes to Australian law are needed to ensure new technology is accessible?: Designers and manufacturers publish on disability inclusion

While anti-discrimination laws do not impose duties upon those who design or manufacture products or systems, the model Work Health and Safety laws do impose such duties. Sections 22 and 23 of the model *Work Health and Safety Act* requires designers and manufacturers to, inter alia,

“carry out, or arrange the carrying out of, any calculations, analysis, testing or examination that may be necessary for safe use and must “give adequate information to each person who is provided with the design for the purpose of giving effect to it or to whom the manufacturer provides the plant, substance or structure.”

The regulations and codes of practices expands on designers and manufacturers duties.

It is recommended that a new section 24A be introduced into the *Disability Discrimination Act 1992* (Cth) that requires designers and manufacturers to consider how universal design could be adopted in the design or manufacturing process and further require that such data is made available to the public. This would enable the public to make informed choices.

If a designer or manufacturer made false or misleading statements on universal design, then this should be actionable under existing consumer protection laws.

Recommendation 3: What, if any, policy and other changes are needed in Australia to promote accessibility for new technology?

How can the private sector be encouraged or incentivised to develop and use accessible and inclusive technology, for example, through the use of universal design.

New enforcement options are required that more fairly balance the interests of rights-holders with the human rights of persons with print disabilities. Research demonstrates that many parties fail to comply with their regulatory obligations due to inattention or miscalculation, and not because key actors have actively decided not to comply with the law.¹ Enabling persons with disabilities to consume digital content and use technologies is a technical process, which harried line managers may devote inadequate resources to in order to ensure compliance.²

¹ R A Kagan and J Scholz, ‘The “Criminology of the Corporation” and Regulatory Enforcement Styles’ in K Hawkins and J Thomas (eds), *Enforcing Regulation* (1984) Kluwer Nijhoff Publishing, 67-69; D Spence and T Malloy, ‘Regulation, Compliance and the Firm’ (2003) 76 *Temple Law Review* 451.

² Paul Harpur, Thomas Palmer and Pam Schindler, ‘Practical steps to enhance student experiences accessing digital content: Law, libraries and equality’ (Equity Practitioners in the Higher Education Australasia (EPHEA) conference, 21-23 November 2017, Brisbane).

There are, however, situations where parties intentionally deny access. The analysis of the Amazon Kindle reader in chapter 1 of *Discrimination, Copyright and Equality* is an example of a rational and lawful decision to deny access to persons with print disabilities. In contrast, chapter 1 also identified that a significant number of publishers are actively seeking to reduce the book famine by working with Bookshare to provide books to print disabled readers. There is no doubt that sanctions remain a vital tool in the regulatory framework; however, moving forward regulators should continue to seek additional strategies to achieve desired targets.

There is arguably great scope for regulators to engage further with regulatory theory to craft new vehicles to promote equality. Professors Robert Baldwin, Martin Cave and Martin Lodge have identified the key regulatory models which can be used to craft interventions.³ These options include:

- To command—where legal authority and the command of law is used to pursue policy objectives.
- To deploy wealth—where contracts, grants, loans, subsidies or other incentives are used to influence conduct.
 - To harness markets—where governments channel competitive forces to particular ends (for example, by using franchise auctions to achieve benefits for consumers).
 - To inform—where information is deployed strategically (e.g. so as to empower consumers).
 - To act directly—where the state takes physical action itself (e.g. to contain a hazard or nuisance).
 - To confer protected rights—where rights and liability rules are structured and allocated so as to create desired incentives and constraints (e.g. rights to clean water are created in order to deter polluters).⁴

As analysed in chapter 12 of *Discrimination, Copyright and Equality*, a large number of interventions rely upon a variant of the command and control model. Enforcement often relies upon a survivor of ableism to carry the burden of enforcing the laws. State support and enforcement will help combat the worst forms of ableism; however commands and sanctions are only one regulatory option. Civil rights laws continue to play a vital role in promoting equality, although more regulatory options need to be explored.

A theme throughout this submission is that the parties who attract legal obligations are not always the parties in the best position to remedy the inequality. Rather than imposing anti-discrimination duties on every party in the product life cycle who can impact upon disablement, perhaps incentivising equality activities may be an option which could operate along side anti-discrimination laws.

³ Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation: Theory, Strategy, and Practice*, 2nd Edition (2011) Oxford University Press, 106.

⁴ Ibid.

There are already incentive schemes surrounding disability employment in the form of tax credits.⁵ Tax credits could foreseeably be granted for the research, development and adoption of disability inclusive digital spaces.⁶ Where there is a disabling digital environment persons with disabilities currently experience harm in their cultural, educational, economic, employment and general lives. Rather than requiring persons with disabilities to carry the cost of disabling spaces, incentives would shift part of the burden onto the state and encourage equality activities from parties who can make digital spaces disability inclusive.

⁵ Lennard J Davis, 'Bending Over Backwards: Disability, Narcissism, and the Law' (2000) 21(1) *Berkeley Journal of Employment and Labor Law* 193, 203.

⁶ Delia Ferri, 'Does Accessible Technology need an "Entrepreneurial State"?: The Creation of an EU Market of Universally Designed and Assistive Technology through State Aid' (2015) 29(2-3) *International Review of Law Computers and Technology* 137.

Consultation Question 1. What types of technology raise particular human rights concerns? Which human rights are particularly implicated?

Introducing the right to read in the Convention on the Rights of Persons with Disabilities

The paradigm shifting nature of the *CRPD* can be illustrated by considering how this Convention has shifted the debate around persons with disabilities' right to read. Persons with disabilities have enjoyed a limited right to read prior to the *CRPD*. The continuation of the book famine suggests that, to the extent this right exists, it has failed to provide meaningful access. The framers of the *CRPD* arguably recognised the need to protect persons with disabilities' right to access and consume information and accordingly have facilitated the right to read in the Convention. While the *CRPD* has been said to restate rights and not create new rights,⁷ the introduction of a right to access information communication technologies and a right to access cultural materials in the *CRPD* arguably represents a significant paradigm shift under international human rights law.

The right to read can be divided into rights pertaining to how people read and rights that pertain to what people read. In other words, one group of rights focus on the medium by which information is transferred and the other group focuses on creating rights to what information should be available. Where information is already in a digital format, then reading equality will be achieved where the E-Book, E-Library and E-Reader are accessible to persons with print disabilities.

The right to access using information communication technologies prior to the Convention on the Rights of Persons with Disabilities

One of the benefits of the *CRPD* is that it has taken existing human rights and restated them in a way that is more relevant for persons with disabilities. While this is the general position, the *CRPD* plays a more significant role in promoting the right to accessible information communication technologies.⁸ The *CRPD* has not simply restated an existing human right in a way relevant to persons with disabilities. Rather the *CRPD* has also clarified the existence of the underlying human right: the right to information communication technologies.

⁷ Paul Harpur and Richard Bales, 'ADA Amendments Issue: The Positive Impact of the *Convention on the Rights of Persons with Disabilities*: A Case Study on the South Pacific and Lessons from the U.S. Experience' (2010) 37 *Northern Kentucky Law Review* 363; Gerard Quinn, 'The United Nations *Convention on the Rights of Persons with Disabilities*: Toward a New International Politics of Disability' (2009) 15 *Texas Journal on Civil Liberties and Civil Rights* 33.

⁸ Paul Harpur, 'From Universal Exclusion to Universal Equality: Regulating Ableism in a Digital Age' (2013) 40 *Northern Kentucky Law Review* 3, 529.

There was no right to disability accessible information communication technologies prior to the *CRPD*. Scholars had argued that information rights should entitle all people to the free and unfettered right to access internet content.⁹

There is uncertainty how the right to information communication technologies might operate outside the jurisdiction created by the *CRPD*. The strongest indication that there is a right pertaining to access different forms of media is sourced in the *Universal Declaration of Human Rights*. Article 19 of the *Universal Declaration of Human Rights* provides

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

The *International Covenant on Civil and Political Rights* also reflects the right to receive information where it states

Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.¹⁰

Scholars have contended that there is a ‘reasonable case’ that the right to media creates a right to access the internet.¹¹ There seems, however, to be insufficient certainty to say that the right to the internet, or more broadly a right to access information communication technologies, exists at the global level outside limited situations.

The use of information communication technologies enhances the flow of information and thus individuals’ capacity to exercise their human rights.¹² Access to information communication technologies is recognised as enabling people with disabilities to exercise a range of human rights, including education, work and freedom of expression. This right is also associated with enabling people without disabilities to exercise their human rights. People in isolated locations or people who have their freedom of movement reduced can utilise information communication technologies to identify and exercise their rights.¹³ Access to the internet also operates as a vehicle to access new markets and ideas, and is associated with economic development. Indeed, the digital divide between information haves and have nots is associated with a large range of civil, economic and social disparities.¹⁴

Some jurisdictions have recognised the role of the internet in promoting human rights and have introduced restrictions limiting interference with users’ access.¹⁵ Recognising the importance

⁹ J Britz et al, ‘On Considering the Application of Amartya Sen’s Capability Approach to an Information-Based Rights Framework’ (2013) 29(2) *Information Development* 106.

¹⁰ Opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) art 19(2).

¹¹ Ivar A Hartmann, ‘A Right to Free Internet? On Internet Access and Social Rights’ (2013) 13 *Journal of High Technology Law* 297, 302.

¹² Frank La Rue, *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression*, UN GAOR, 17th sess, Agenda Item 3, UN Doc A/HRC/17/27 (16 May 2011) [67] and [78].

¹³ Geoffrey A Hoffman, ‘In Search of an International Human Right to Receive Information’ (2003) 25 *Loyola of Los Angeles International and Comparative Law Review* 165, 165.

¹⁴ Lennard G Kruger and Angele A Gilroy, ‘Broadband Internet Access and the Digital Divide: Federal Assistance Programs’ (CRS Report, Congressional Research Service, 17 July 2013).

¹⁵ Brooke Menschel, ‘One Web to Unite Us All: Bridging the Digital Divide’ (2011) 29 *Cardozo Arts and Entertainment Law Journal* 143, 147.

of communication technologies, article 1(3)(a) of the European Union's new Framework Directive Article explains that:

[m]easures taken by Member States regarding end-users' access to or use of services and applications through electronic communications networks shall respect the fundamental rights and freedoms of natural persons... Any of these measures regarding end-users' access to or use of services and applications through electronic communications networks liable to restrict those fundamental rights or freedoms may only be imposed if they are appropriate, proportionate and necessary within a democratic society, and their implementation shall be subject to adequate procedural safeguards ... including effective judicial protection and due process.¹⁶

Accordingly, even though the right to access information communication technologies does not have universal support by states, there is certainly growing recognition of the importance of this right.

The *Convention on the Rights of Persons with Disabilities* enshrines the right to access using information communication technologies

Whether or not a right to information communication technologies exists within the broader international human rights regime, the *CRPD* has clarified the situation. Article 9 of the *CRPD* posits access to information communication technologies as a human right, and details state obligations to enable persons with disabilities to exercise this right.¹⁷ The *CRPD* recognises that the right to access is critical for persons with disabilities to exercise their fundamental rights, including rights to social, economic and cultural equality, health, education, information and communication.¹⁸ The right to access also requires state signatories to 'ensure' persons with disabilities equal access 'to the physical environment, to transportation, to information and communications, including information and communications technologies and systems...'¹⁹

Universal design

To protect the right to access the *CRPD* adopts a two pronged regulatory approach. The first prong focuses on rendering communication systems accessible at the design and manufacturing stage through the concept of 'universal design'.²⁰ Universal design is defined in the *CRPD* to mean:

¹⁶ European Union, Directive 2009/140/EC, Article 1.3a.

¹⁷ *CRPD*, art 9. This right of access impacts on various other rights. For example, the right to participate in political public life and the right to vote found in *CRPD*, art 29. See for discussion: Ron McCallum, 'Participating in Political and Public Life: A Challenge for We Persons with Sensory Disabilities' (2011) 36(2) *Alternative Law Journal* 80.

¹⁸ *CRPD*, (v).

¹⁹ *Ibid* art 9(1).

²⁰ *Ibid* art 9(2)(h).

The design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. ‘Universal design’ shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.²¹

The importance of universal design/inclusive design can be evinced by how widely it is referred to in the *CRPD*. The focus on inclusive design also appears with reference to ‘inclusive education’,²² workplaces that are ‘open, inclusive and accessible’ to persons with disabilities²³ and ensuring that international development programs are ‘inclusive ... and accessible’.²⁴

A key concept behind universal design is the notion of universal application.²⁵ Universal application does not seek to satisfy every person’s individual preference for consuming information. Achieving universal preference can make design and commercial sense, however this is not a target that is promoted by the *CRPD*. Universal design focuses on the capacity to use by the majority people with the majority of abilities. Universal preference focuses on individual preferences (which can alter), whereas universal design focuses on impairments which should be required to be altered as a requirement for using a product.

Universally designed products should be usable for disabled people.²⁶ Universal design seeks to ensure that products are usable by the entire community with as little adjustment as possible.²⁷ Where universal design is adopted, many access barriers are not created in the first place and thus the need to engage in retrofitting is reduced or eliminated. Universal design, however, does not mean universal access. The definition of ‘universal design’ in the *CRPD* acknowledges that inclusive access cannot always be provided. Under universal design access should be provided ‘.... to the greatest extent possible’.²⁸ Where universal design cannot be achieved, then the second prong becomes relevant.

Right to reasonable accommodation/adjustments

The second prong to protect the right to access in the *CRPD* requires states to ensure that ‘reasonable accommodations’ are made to enable persons with disabilities to obtain access.²⁹ Reflecting approaches in other international conventions, the *CRPD* does not provide specifics on what is required to achieve access, but instead explains what parties need to do to enable

²¹ Ibid art 2.

²² Ibid art 24(1).

²³ Ibid art 27(1).

²⁴ Ibid art 32(1)(a).

²⁵ Lisa Schur, Douglas Kruse and Peter Blanck, *People with Disabilities: Sidelined or Mainstreamed?* (2013) Cambridge University Press, 13.

²⁶ Richard M Jackson, *Nat'l Ctr. on Accessing the Gen. Curriculum, Curriculum Access for Students with Low-Incidence Disabilities: The Promise of Universal Design for Learning 2* (2011) <http://www.aim.cast.org/sites/aim.cast.org/files/lowincidencereport_101305.pdf>.

²⁷ Jason Scott Palmer, ‘The *Convention on the Rights of Persons with Disabilities*: Will Ratification Lead to a Holistic Approach to Postsecondary Education for Persons with Disabilities’ (2013) 43 *Seton Hall Law Review* 551, 583.

²⁸ *CRPD*, art 2.

²⁹ Reasonable Accommodation is used in the definition of disability discrimination in *CRPD*, art 2; to promote equality and non-discrimination in *CRPD*, art 5(3); to ensure the liberty and security of the person in *CRPD*, art 14(2); to ensure the right to education in *CRPD* art 24(2) and (5); to exercise their right to work in *CRPD* art 27(1)(i).

access.³⁰ In addition to imposing obligations directly upon the state,³¹ the right to receive reasonable accommodations requires non-state actors, such as telecommunication providers, employers, educators and the like, to engage in positive conduct to enable persons with disabilities to obtain access.³²

In addition to requiring certain groups in society to make reasonable accommodations and adjustments, state actors are required to provide funding for and facilitate the development of assistive technologies.³³ Funding research and development is aimed at increasing the range of technologies that can be utilised to promote equality. Ideally this funding targets the development of universally designed products as well as disability adaptive technologies. Overall the duty to accommodate persons with disabilities requires states to strive for substantive equality for persons with disabilities.³⁴

Analysing how the right to read impacts on rights in the *Convention on the Rights of Persons with Disabilities*

To clarify how the right to read is operationalised, this submission will now analyse how the right to read will alter the legal regulation of information flows in education, work and public affairs. Prior to the *CRPD* there was no clear statement that persons with disabilities were entitled to inclusive educational and work environments.³⁵ When these rights to inclusive environments are combined with the right of access this arguably creates a new paradigm that promotes access to information and reading equality.

Operationalising the right to access in promoting inclusive education

While states have duties to provide access to instructional materials under anti-discrimination laws, as well as under novel legal regimes,³⁶ and possibly under state constitutions,³⁷ prior to

³⁰ Nadina Foggetti, 'E-Accessibility Standards Definition in the UN *Convention on the Rights of Persons with Disabilities*: Current Issues and Future Perspectives' (2012) 18(2) *Computer and Telecommunications Law Review* 56.

³¹ Anna Lawson, 'Disability Equality, Reasonable Accommodation and the Avoidance of Ill-Treatment in Places of Detention: The Role of Supranational Monitoring and Inspection Bodies' (2012) 16(6) *International Journal of Human Rights* 845.

³² Arlene S Kanter, *The Development of Disability Rights Under International Law: From Charity to Human Rights* (2015) Routledge, 47.

³³ Johan Borga, Stig Larssona and Per-Olof Östergrena, 'The Right to Assistive Technology: For Whom, For What, and By Whom?' (2011) 26(2) *Disability and Society* 151.

³⁴ Rebecca Brown and Janet Lord, 'The Role of Reasonable Accommodation in Securing Substantive Equality for Persons with Disabilities: The UN *Convention on the Rights of Persons with Disabilities*' in Marcia H Rioux, Lee Ann Bassar and Melinda Jones (eds), *Critical Perspectives on Human Rights and Disability Law* (2011) Martinus Nijhoff Publishers, ch 10.

³⁵ Arlene Kanter, Michelle Damiani and Beth Ferri, 'The Right to Inclusive Education Under International Law: Following Italy's Lead' (2014) 17(1) *Journal of International Special Needs Education* 21.

³⁶ See especially discussion in chapters 8 and 11.

³⁷ See for example the Supreme Court of Africa held in *Minister of Basic Education v Basic Education for All* (20793/2014) [2015] ZASCA 198 (2 December 2015) that the right to education in article 29 of the South African Constitution that creates a requirement that each learner must be provided with a textbook for each subject before commencement of the academic year.

the *CRPD* there was no specific international human rights law that persons with disabilities could rely upon. The lack of clear guidance on what the right to education required from states encouraged some to question the extent of state responsibility in educating people with disabilities.³⁸

The *International Covenant on Economic, Social and Cultural Rights* and the *Universal Declaration on Human Rights* recognised that people have a right to education, but did not consider the right of people with disabilities to exercise this right.³⁹ Indeed, it is telling that people with disabilities did not even feature as a target category worthy of special attention in the *International Covenant on Economic, Social and Cultural Rights*. Article 13 of the *International Covenant on Economic, Social and Cultural Rights* grants everyone a right ‘to education’ that promotes ‘understanding, tolerance and friendship among all nations and all racial, ethnic or religious groups, and further the activities of the United Nations for the maintenance of peace.’

The United Nations specifically considered the rights of young people with disabilities by adopting the *Convention on the Rights of the Child*.⁴⁰ The *Convention on the Rights of the Child* recognizes the right of all children to an education.⁴¹ This has been interpreted to apply to children with disabilities.⁴² More relevantly for this discussion, the *Convention on the Rights of the Child* requires states to provide assistance, whenever possible, to disabled children and their families.⁴³ This assistance should ‘ensure that the disabled child has effective access to and receives education ... in a manner conducive to the child's achieving the fullest possible social integration and individual development.’⁴⁴

Subsequent to the *Convention on the Rights of the Child*, the Salamanca Statement and Framework for Action on Special Needs Education proclaimed the right of every child to an education in ‘regular schools.’⁴⁵ Similarly, the Standard Rules on the Equalization of Opportunities for Persons with Disabilities encouraged states to educate children with disabilities in mainstream schools.⁴⁶

³⁸ John-Stewart Gordon, ‘Is Inclusive Education a Human Right?’ (2013) 41 *Journal of Law, Medicine and Ethics* 754.

³⁹ *Universal Declaration of Human Rights*, GA Res 217A (III), UN GAOR, 3rd sess, 183 plen mtg, UN Doc A/810 (10 December 1948) art 26; *International Covenant on Economic, Social and Cultural Rights*, opened for signature 19 December 1966, 993 UNTS 3 (entered into force 3 January 1976) art 23.

⁴⁰ Vanessa Torres Hernandez, ‘Making Good on the Promise of International Law: The *Convention on the Rights of Persons with Disabilities* and Inclusive Education in China and India’ (2008) 17 *Pacific Rim Law and Policy Journal* 497, 502.

⁴¹ *Convention on the Rights of the Child*, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990) art 28.

⁴² Gerard Quinn and Theresia Degener, ‘Building Bridges From “Soft Law” to “Hard Law”’: The Relevance of the United Nations Human Rights Instruments to Disability, in Human Rights and Disability’ in Gerard Quinn and Theresia Degener (eds), *Human Rights and Disability: The Current Use and Future Potential of United Nations Human Rights Instruments in the Context of Disability* (2002) United Nations, 47.

⁴³ *Convention on the Rights of the Child*, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990).

⁴⁴ *Ibid.*

⁴⁵ UNESCO and The Ministry of Education and Science Spain, *The Salamanca Statement and Framework for Action on Special Needs Education* (1994) UNESCO, iii-iv.

⁴⁶ *Standard Rules on the Equalization of Opportunities for Persons with Disabilities*, GA Res 48/96, UN GAOR, 48th sess, Agenda Item 109, UN Doc A/RES/48/96 (20 December 1993) Rule 6.

The *CRPD* specifically recognises the rights of persons with disabilities to inclusive K-12⁴⁷ and lifelong education.⁴⁸ This requires States, and those who receive State funding, such as universities, to comply with the standards posited in the *CRPD*.⁴⁹ At a minimum, the right of inclusive education includes the right not to be segregated and to enjoy the same educational opportunities and support as students without disabilities.⁵⁰ The *CRPD* goes further than this notion of equality. The *CRPD* explains that this inclusive education system must be ‘without discrimination and on the basis of equal opportunity.’⁵¹ Simply providing an inclusive educational experience is not enough. The *CRPD* explains that the educational experience must be a ‘quality’ educational experience, with quality being judged against the experiences of students without disabilities.⁵²

The notion of what constitutes an inclusive educational environment reflects the principles discussed above on the right to access. Persons with disabilities are granted the right to demand that their education is delivered through ‘alternative modes, means and formats of communication.’⁵³ The right to education in the *CRPD* is accordingly a powerful right as it entitles persons with disabilities to be educated, and specifies that educational materials must be delivered through accessible modes of communication.

To comply with the right to education in the *CRPD* states should first seek to remove all barriers to full and equal education through adopting universal design.⁵⁴ In relation to promoting universal design in education, the *CRPD* explains that where possible the education system should not create any environmental barriers to full inclusion.⁵⁵ Where barriers to full inclusion are created, the *CRPD* requires states to ensure that reasonable accommodations are made so that people with disabilities can exercise their right to education.⁵⁶ This includes providing the ‘support required, within the general education system, to facilitate ... effective education.’⁵⁷ Relevantly for the book famine it is impossible to study without access to instructional materials and, accordingly, article 24 of the *CRPD* requires that states facilitate access to such materials for students with disabilities.

Article 24 of the *CRPD* represents a paradigm shift in how states and educators approach students with disabilities. Under existing anti-discrimination laws, analysed primarily in chapters 6, 7 and 8 of *Discrimination, Copyright and Equality*, duties on educators are

⁴⁷ Paul Harpur and Michael Ashley Stein, ‘Children with Disabilities, Human Rights, and Sustainable Development’ in Claire Fenton-Glynn (Ed.), *Children’s Rights and Sustainable Development: Implementing the UNCRC for Future Generations* (2018) Cambridge University Press.

⁴⁸ Ravi Malhotra and Robin F Hansen, ‘United Nations Convention of the Rights of Persons with Disabilities and its Implications for the Equality Rights of Canadians with Disabilities: The Case of Education’ (2011) 29 *Windsor Yearbook of Access to Justice* 73.

⁴⁹ Paul Harpur & Michael Ashley Stein, ‘Universities as Disability Rights Change Agents’ (2018) 10 *Northeastern University Law Review* 2, 79-120; Paul Harpur and Michael Ashley Stein, ‘University Students with Disabilities’ (symposium honoring the memory and contributions of Professor Hope Lewis, Northeastern University, Boston, 17 November 2017).

⁵⁰ Victor Munoz, *Report of the Special Rapporteur on the Right to Education*, UN GAOR, 4th sess, Agenda Item 2, UN Doc A/HCR/4/29 (19 February 2007) 6.

⁵¹ *CRPD*, art 24(1).

⁵² *Ibid* art 24(2)(b).

⁵³ *Ibid* art 24(3)(a).

⁵⁴ Jason Scott Palmer, ‘The *Convention on the Rights of Persons with Disabilities*: Will Ratification Lead to a Holistic Approach to Postsecondary Education for Persons with Disabilities’ (2013) 43 *Seton Hall Law Review* 551, 556.

⁵⁵ *CRPD* art 24(2)(d).

⁵⁶ *Ibid* art 24(2)(c).

⁵⁷ *Ibid* art 24(2)(d).

generally enlivened once a person with a disability has approached the institution, demonstrated they have a disability and explained the accommodation they require. Article 24 of the *CRPD* adopts a significantly different approach. Under article 24 states and educators are required to proactively seek out and remove environmental barriers by universally designing the educational experience. At a minimum this would include taking steps to ensure procurement processes do not result in the acquisition of instructional materials that do not embrace inclusive design principles.

Operationalising the right to access in promoting inclusive workplaces

The capacity to access and consume digital content is equally important to persons with disabilities when they complete their education and enter the workforce. Prior to the *CRPD*, international human rights laws failed to provide persons with disabilities any meaningful protection at work. The capacity to exercise the right to work is connected with the capacity to exercise social and economic rights. Simply put, a person without work is unable to participate in the economy.⁵⁸ More broadly, Professor Philip Alston claims that if economic rights are not realised, people will be denied many of the rights in the *Universal Declaration of Human Rights*.⁵⁹

The right to work has wide acceptance by states,⁶⁰ and under international human rights laws notionally includes persons with disabilities. Despite this formal protection, this right has often not translated into substantive enjoyment of the right to work.⁶¹ The right to work in the *Universal Declaration of Human Rights* provides:

Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.⁶²

⁵⁸ Rhoda E Howard and Jack Donnelly, 'Human Dignity, Human Rights, and Political Regimes' (1986) 40(3) *American Political Science Review* 817.

⁵⁹ Philip Alston, 'Making Economic and Social Rights Count: A Strategy for the Future' (1997) 68(2) *Political Quarterly* 188.

⁶⁰ Aleah Borghard, 'Free Trade, Economic Rights, and Displaced Workers: It Works If You Work' (2006) 32 *Brooklyn Journal of International Law* 161, 183.

⁶¹ Jody Hemann, Michael Ashley Stein and Gonzalo Morena, 'Disability, Employment and Inclusion Worldwide' in Jody Hemann, Michael Ashley Stein and Gonzalo Morena (eds), *Disability and Equity at Work* (2014) Oxford University Press, ch 1; Samuel R Bagenstos, 'Has the Americans with Disabilities Act Reduced Employment for People with Disabilities? The Decline in Employment of People With Disabilities: A Policy Puzzle' (2004) 25 *Berkeley Journal of Employment and Labor Law* 527; D A Goodley, G Norouzi, 'People with Learning Difficulties and Work' in C Barnes and A Roulstone (eds), *Working Futures* (2005) Policy Press; Nicole B Porter, 'Reasonable Burdens: Resolving the Conflict between Disabled Employees and their 'Coworkers'' (2007) 34 *Florida State University Law Review* 313.

⁶² Despite being a declaration, the *Universal Declaration of Human Rights* has such a wide acceptance by nations that it has been contended that most rights in the *Universal Declaration of Human Rights* constitute customary law. See Scott L Porter, 'The *Universal Declaration of Human Rights*: Does it Have Enough Force of Law to Hold "States" Party to the War in Bosnia-Herzegovina Legally Accountable in the International Court of Justice?' (1995) 3 *Tulsa Journal of Comparative and International Law* 141; Penelope Mathew, 'Human rights' in Sam Blay, Ryszard Piotrowicz and Martin Tsamenyi (eds), *Public International Law: An Australian Perspective*, 2nd Edition (2005) Oxford University Press, 268-269.

Article 6(1) of the *International Covenant on Economic, Social and Cultural Rights* provides clear support for article 23 of the *Universal Declaration of Human Rights* through the following provision:

The States Parties to the present covenant recognize the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right.

The difficulty for persons with disabilities with the rights to work posited in the *Universal Declaration of Human Rights* and *International Covenant on Economic, Social and Cultural Rights* is that it is unclear precisely what states need to do to discharge these rights. The phrase ‘just and favourable conditions of work’ could include the right to fair pay,⁶³ the right to not be unemployed,⁶⁴ the right to use work to alleviate poverty,⁶⁵ the right to employment for immigrants,⁶⁶ and the right to decent work for people with disabilities.⁶⁷ The right to work therefore could be said to contain a number of sub-rights. The challenge under the pre-CRPD human rights regime was defining precisely what sub-rights applied and how all these rights were to be implemented. In the absence of certainty it was arguably possible to adopt an approach that maximised or minimised persons with disabilities’ capacity to exercise their right to work.

Prior to the CRPD states could construe a worker with a disability through various understandings, including as defective and in need of cure (medical model), disabled by society generally (social model), or as a full person disabled by internal and external causes (critical disability studies). International instruments provided very little guidance on how to realise this right. Considering the *Universal Declaration of Human Rights* and the *International Covenant on Economic, Social and Cultural Rights* were posited in the 1940s when the medical model was the governing paradigm, it is not surprising that it took most of the twentieth century to implement workplace disability discrimination laws. It was not until the social model gained traction that states began to take concrete steps to provide workplace protections. In the United States, for example, the *Rehabilitation Act of 1973*⁶⁸ and the *Americans with Disabilities Act of 1990*⁶⁹ were not enacted until well after the adoption of the international bill of rights.

The uncertainty about what the right to work means for persons with disabilities has been substantially redressed by the CRPD.⁷⁰ Unlike the earlier human rights conventions, the CRPD is a human rights convention that specifically deals with the issues concerning persons with

⁶³ Sally Cowling, William F Mitchell and Martin J Watts, ‘The Right to Work versus the Right to Income’ (2006) 2(1) *International Journal of Environment, Workplace and Employment* 89; Philip Harvey, ‘The Right to Work and Basic Income Guarantees: Competing or Complementary Goals?’ (2004) 2 *Rutgers Journal of Law and Urban Policy* 4.

⁶⁴ John Burgess and William Mitchell, ‘Unemployment, Human Rights and a Full Employment Policy in Australia’ (1998) 2 *Australian Journal of Human Rights* 76.

⁶⁵ Nsongurua J Udombana ‘Social Rights are Human Rights: Actualizing the Rights to Work and Social Security in Africa’ (2006) 39 *Cornell International Law Journal* 181.

⁶⁶ Aleah Borghard, ‘Free Trade, Economic Rights, and Displaced Workers: It Works If You Work It’ (2006) 32 *Brooklyn Journal of International Law* 161, 183.

⁶⁷ Arthur O’Reilly, ‘The Right to Decent Work of Persons with Disabilities’ (Working Paper No 14, ILO, 2003).

⁶⁸ 29 USC § 701-794.

⁶⁹ 42 USC §§12101-12117.

⁷⁰ Paul Harpur, ‘Embracing the New Disability Rights Paradigm: The importance of the Convention on the Rights of Persons with Disabilities’ (2012) 27 *Disability and Society* 1, 1; Paul Harpur, ‘Time to be Heard: How Advocates can use the Convention on the Rights of Persons with Disabilities to Drive Change’ (2011) 45 *Valparaiso University Law Review* 3, 1271.

disabilities. Accordingly, article 27 of the *CRPD* provides significant detail on what states must do to ensure persons with disabilities can enjoy their right to work. Article 27(1) provides that:

1. States Parties recognize the right of persons with disabilities to work, on an equal basis with others; this includes the right to the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities. States Parties shall safeguard and promote the realization of the right to work, including for those who acquire a disability during the course of employment, by taking appropriate steps, including through legislation, to, inter alia:

(a) Prohibit discrimination on the basis of disability with regard to all matters concerning all forms of employment, including conditions of recruitment, hiring and employment, continuance of employment, career advancement and safe and healthy working conditions;

(b) Protect the rights of persons with disabilities, on an equal basis with others, to just and favourable conditions of work, including equal opportunities and equal remuneration for work of equal value, safe and healthy working conditions, including protection from harassment, and the redress of grievances;

(c) Ensure that persons with disabilities are able to exercise their labour and trade union rights on an equal basis with others;

(d) Enable persons with disabilities to have effective access to general technical and vocational guidance programmes, placement services and vocational and continuing training;

(e) Promote employment opportunities and career advancement for persons with disabilities in the labour market, as well as assistance in finding, obtaining, maintaining and returning to employment;

(f) Promote opportunities for self-employment, entrepreneurship, the development of cooperatives and starting one's own business;

(g) Employ persons with disabilities in the public sector;

(h) Promote the employment of persons with disabilities in the private sector through appropriate policies and measures, which may include affirmative action programmes, incentives and other measures;

(i) Ensure that reasonable accommodation is provided to persons with disabilities in the workplace;

(j) Promote the acquisition by persons with disabilities of work experience in the open labour market;

(k) Promote vocational and professional rehabilitation, job retention and return-to-work programmes for persons with disabilities.

Article 27 expressly provides that states have positive and negative obligations to ensure persons with disabilities' right to work.⁷¹ Article 27, however, does not create a right to access information communication technologies at work. There is an obligation to create work environments that are 'open, inclusive and accessible to persons with disabilities', but this right does not go as far as the right to education in the *CRPD*. The right to education guarantees people with disabilities that they will be able to access education, and that this will be provided in modes of communication that are accessible. The right to work, in contrast, provides that people with disabilities will be free to seek work and, but for employment in the public service, the *CRPD* does not guarantee employment.

Many industries, such as the gig economy, are almost entirely digital, and failing to promote universal design will exclude persons with disabilities from this industry.⁷² Rebecca Brown and Janet Lord note that 'affirmative steps must be taken beyond the guarantee of formal legal equality to move toward equality in fact.'⁷³ The assessment of reasonable accommodations under the *CRPD* differs substantially from the assessment of reasonable accommodations and adjustments under anti-discrimination laws (discussed in chapter 8 of *Discrimination, Copyright and Equality*). The assessment of reasonable accommodations under anti-discrimination laws focuses on what is reasonable to expect of an employer to help a worker with a disability. The reasonable accommodation assessment under the *CRPD* does not ask what it is reasonable to expect from an individual employer. The *CRPD* imposes the duty on the state to ensure reasonable accommodations are made for all workers with disabilities in that state. To achieve this end *CRPD* article 27(1) explains that 'States Parties shall safeguard and promote the realization of the right to work.' Accordingly, when considering what reasonable accommodations are under article 27, the question is whether it is reasonable to expect the state to ensure that a particular accommodation is made in workplaces. Whereas it might be unreasonable to require some employers to use information communication technologies that are accessible to persons with disabilities, it is far more reasonable to expect the state to mandate that, where possible, all information communication technologies used in workplaces adopt universal design principles. While this would be reasonable to expect from states the Committee on the Rights of Persons with Disabilities has not made a ruling to this effect. Nevertheless the Committee has noted that in other areas (such as banking) there is a high expectation that services will be fully accessible.⁷⁴

The Committee has ruled that anti-discrimination laws that qualify the employers' duty with a reasonableness test are compliant with the *CRPD*.⁷⁵ In *Jungelin v Sweden* a worker was precluded from employment as their employer's computer system was not accessible to persons with disabilities. The Swedish courts held that in the circumstances the employer's refusal to

⁷¹ Paul Harpur 'Collective versus Individual Rights: The Able Worker and the Promotion of Precarious Work for Persons with Disabilities Under Conflicting International Law Regimes' (2017) 41 *Loyola Law School Los Angeles International & Comparative Law Review* 1, 51.

⁷² Paul Harpur, 'Protection of Minorities in the Global Gig Economy: Persons with Disabilities as a Case Study' (14th Asian Law Institute Conference, Jointly organised by the Asian Law Institute and the University of Philippines, College of Law, 18 & 19 May 2017, Manila).

⁷³ Rebecca Brown and Janet Lord, 'The Role of Reasonable Accommodation in Securing Substantive Equality for Persons with Disabilities: The UN *Convention on the Rights of Persons with Disabilities*' in Marcia H Rioux, Lee Ann Basser and Melinda Jones (eds), *Critical Perspectives on Human Rights and Disability Law* (2011) Martinus Nijhoff Publishers, ch 10.

⁷⁴ *Nyusti and Takács v Hungary*, Communication 1/2010, views adopted by the Committee on the Rights of Persons with Disabilities at its 9th Session, UN Doc CRPD/C/9/D/1/2010 (21 June 2013).

⁷⁵ *Jungelin v Sweden*, Communication No 5/2011, views adopted by the Committee on the Rights of Persons with Disabilities at its 12th Session, UN Doc CRPD/C/12/D/5/2011 (14 November 2014).

make accommodations was reasonable. The Committee on the Rights of Persons with Disabilities held that the Swedish laws were not in violation of article 27 of the *CRPD*.⁷⁶

Operationalising the right of access by creating a right to information for freedom of expression

The right to obtain information on public interest matters and impart this information is regarded as a cornerstone of democracy.⁷⁷ Publicity and transparency is a means to promote democracy and to combat corruption.⁷⁸ People cannot hold political representatives accountable unless citizens are informed and can freely debate public issues.⁷⁹ The right of expression can be observed through the rights associated with free speech,⁸⁰ to obtain information on public affairs,⁸¹ and to be protected for making public interest disclosures.⁸² Accordingly the right of freedom of expression can be regarded as a core civil and political right.⁸³

The right to freedom of expression strongly correlates with the right to information. The right to access information has been linked with the right to express public opinions in many human rights instruments. This link can be observed from the above discussion on the right to access information communication technologies, where article 19 in both the *Universal Declaration of Human Rights* and the *International Covenant on Civil and Political Rights* includes the right to impart and receive information in the same clause. The right to access information related to expression of opinion in accessible formats is an area where the *CRPD* imposes significant obligations on states.

The *CRPD* requires states to ensure that political discourse is accessible to persons with disabilities. Article 21 of the *CRPD* requires that member states

shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive

⁷⁶ Ibid.

⁷⁷ James Madison in 1822 explained: ‘A popular Government, without popular information, or the means of acquiring it, is but a Prologue to a Farce or a Tragedy; or, perhaps both. Knowledge will forever govern ignorance: and a people who mean to be their own Governors, must arm themselves with the power which knowledge gives’. See Gaillard Hunt (ed), *The Writings of James Madison* (1910) Putnam's Sons, 103.

⁷⁸ Louis Brandeis, *Other People's Money and How the Bankers Use It* (1913) 92.

⁷⁹ Paul Finn, ‘Public Trust and Public Accountability’ (1994) 3 *Griffith Law Review* 224.

⁸⁰ See for discussion Michael Curtis, *Free speech, “The People’s Darling Privilege”*: *Struggles for Freedom of Expression in American History* (2000) Duke University Press.

⁸¹ For a discussion of how the right to information/freedom of information has become a recognised right see Roy Peled and Yoram Rabin, ‘The Constitutional Right to Information’ (2011) 42 *Columbia Human Rights Law Review* 357.

⁸² AJ Brown and M Donkin, ‘Introduction’ in A J Brown (ed), *Whistleblowing in the Australian Public Sector* (2008) Australian National University E-Press, 11; Paul Latimer and AJ Brown, ‘Whistleblower Laws: International Best Practice’ (2008) 31 *University of New South Wales Law Journal* 766; Sarah Wood Borak, ‘The Legacy of “Deep Throat”’: The Disclosure Process of the Whistleblower Protection Act Amendments of 1994 and the No Fear Act of 2002’ (2005) 59 *University of Miami Law Review* 617.

⁸³ Kerstin Braun, ‘“Nothing About Us Without Us”’: The Legal Disenfranchisement of Voters with Disabilities in Germany and its Compliance with International Human Rights Standards on Disabilities’ (2015) 30 *American University International Law Review* 315, 319.

and impart information and ideas on an equal basis with others and through all forms of communication of their choice.

Article 21(1) expressly references the definition of ‘communication’ in article 2 of the *CRPD*. Article 2 defines communication widely to include

languages, display of text, Braille, tactile communication, large print, accessible multimedia as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible information and communication technology.

To enable persons with disabilities to exercise their right to freedom of expression and opinion requires:

- (a) Providing information intended for the general public to persons with disabilities in accessible formats and technologies appropriate to different kinds of disabilities in a timely manner and without additional cost;
- (b) Accepting and facilitating the use of sign languages, Braille, augmentative and alternative communication, and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official interactions;
- (c) Urging private entities that provide services to the general public, including through the Internet, to provide information and services in accessible and usable formats for persons with disabilities;
- (d) Encouraging the mass media, including providers of information through the Internet, to make their services accessible to persons with disabilities; ...

The considerable impact of article 21 of the *CRPD* is somewhat diluted by its requirement to only ‘[urge] private entities’⁸⁴ and ‘[encourage] the mass media’⁸⁵ to make information and services available in accessible formats. Regardless of these qualifications, article 21 arguably reflects the vital role that accessible public discourse plays in maintaining democracy and highlights the detrimental effect the book famine is having upon persons with disabilities, including their capacity to exercise their right to freedom of expression and opinion.

Operationalising the right to access cultural materials over intellectual property interests: a paradigm shifting development

The paradigm shift introduced by the *CRPD* is most apparent when analysing persons with disabilities’ right to exercise their right to participate in cultural life, recreation, leisure and sport. Generally, international human rights laws have strongly supported intellectual property interests such as copyright.⁸⁶ The *International Covenant on Economic, Social and Cultural Rights*, for example, recognises that all people have a right to take part in cultural life and to

⁸⁴ *CRPD*, art 21(c).

⁸⁵ *CRPD*, art 21(d).

⁸⁶ Paul Harpur, *Discrimination, Copyright and Equality: Opening the E-Book for the Print Disabled* (2017) Cambridge University Press, Chapter 3.

enjoy the benefits of scientific progress and its applications.⁸⁷ Under this Convention the right of people to access scientific, literary or artistic production is limited by a right of individuals ‘to benefit from the protection of the moral and material interests resulting from’ creating such works. Arguably, article 15 of the *International Covenant on Economic, Social and Cultural Rights* creates a tension between access to artistic, cultural and scientific works and the right of people to restrict access for exploitative purposes. Article 15 illustrates how human rights laws accepted the notion that rightsholders should be entitled to set the terms on which people could exercise their right to access cultural materials.

The *CRPD* adopts a transformational approach to the interaction between intellectual property and the human rights of persons with disabilities. Article 30 of the *CRPD* directly addresses the right to participate in culture, recreation and leisure. Article 30(1) entitles persons with disabilities to ‘take part on an equal basis with others in cultural life’, and requires that member states ‘shall take all appropriate measures to ensure that persons with disabilities ... [e]njoy access to cultural materials in accessible formats.’⁸⁸ ‘Cultural material’ is defined widely in *CRPD* article 30(1) to include literature, artefacts, radio, screen and television productions, performance and visual arts.⁸⁹ The wide concept of ‘culture’ can be illustrated by analysing scholarship on this right in other conventions. The 2009 General Comment on ‘the right to take part in cultural life’, issued by the United Nations Committee on Economic, Social and Cultural Rights, provided a very wide definition of ‘culture’:

[Culture] encompasses, inter alia ways of life, language, oral and written literature, music and song, non-verbal communication, religion or belief systems, rites and ceremonies, sport and games, methods of production or technology, natural and man-made environment, food, clothing and shelter, the arts, customs and traditions, through which individuals, groups of individuals and communities express their humanity and the meaning they give to their existence, and build their world view representing their encounter with the external forces affecting their lives.⁹⁰

Culture is not static and develops as society and technology changes.⁹¹ Anthropologists and cultural studies scholars explain that a society’s culture is made up of all human endeavours, including art, music, scholarship, education, work, philosophies, religion, family and social structures.⁹² Even if cultural materials are read narrowly, the obligation on states to provide persons with disabilities access to cultural materials will require significant efforts to achieve the substantive equality envisaged by the *CRPD*.

⁸⁷ *International Covenant on Economic, Social and Cultural Rights*, opened for signature 19 December 1966, 993 UNTS 3 (entered into force 3 January 1976) art 15(1)(a) and (b).

⁸⁸ *CRPD*, art 30(1).

⁸⁹ The concept of cultural material is broadly defined in a range of international agreements. For example: *Convention for the Safeguarding of Intangible Cultural Heritage*, opened for signature 17 October 2003, 2368 UNTS 3 (entered into force 20 April 2006); *Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict*, opened for signature 14 May 1954, 249 UNTS 3511 (entered into force 7 August 1956).

⁹⁰ UN Economic and Social Council, Committee on Economic, Social and Cultural Rights, *General Comment No 21: Right of Everyone to Take Part in Cultural Life (art 15, para. 1 (a), of the International Covenant on Economic, Social and Cultural Rights)*, UN Doc E/C.12/G (21 December 2009) 13.

⁹¹ Lea Shaver and Caterina Sganga, ‘The Right to Take Part in Cultural Life: On Copyright and Human Rights (2010) 27 *Wisconsin International Law Journal* 637, 644.

⁹² Clifford Geertz was a key figure in establishing the interpretivist approach to culture. See Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (1973) Basic books.

The duty in the *CRPD* to provide persons with disabilities access to cultural material can create the situation where copyright interests may be impacted. Providing persons with disabilities access to artistic works, film, science and books will almost certainly require dealing with copyright protected materials in ways that the copyright owner may resist. Article 30(3) specifically considers how the potential conflicts between access to culture and intellectual property should be resolved. The article addresses the manner in which member states balance the potential conflict with intellectual property:

States Parties shall take all appropriate steps, in accordance with international law, to ensure that laws protecting intellectual property rights do not constitute an unreasonable or discriminatory barrier to access by persons with disabilities to cultural materials.

In this way the *CRPD* continues and further entrenches access to cultural materials as a human right in international law, as first codified in article 15 of the *International Covenant on Economic, Social and Cultural Rights*.

The term ‘intellectual property’ incorporates a range of laws which restrict the use of information and ideas. These intellectual property laws include copyright, trademarks, patents, industrial design rights, trade dress, and trade secrets.⁹³ The primary legal doctrine that is relevant for this submission is the law of copyright. Copyright entitles rightsholders, often creators, to restrict the use of information they own the rights in, such as books or computer software programs. Other intellectual property doctrines include patent law, which protects inventions and certain discoveries, trademark law, which protects words and symbols used for identification, trade-secret law, which protects commercially valuable information, and the right of publicity, which protects the profile of certain people in society. Each of these informational goods has their own market and unique characteristics.⁹⁴

During the sessions of the Ad Hoc Committee on a Comprehensive and Integral International Convention on Protection and Promotion of the Rights and Dignity of Persons with Disabilities the wording of article 30(3) was discussed. During the sixth session a proposal to replace ‘intellectual property rights’ with ‘copyright’ received strong support, but there was no general agreement.⁹⁵ Accordingly the scope of *CRPD* article 30(3) includes the interaction between disability and copyright, but the use of the term ‘intellectual property’ means that this provision has much wider application.

⁹³ William Fisher, ‘Theories of Intellectual Property’ in Stephen R Munzer, *New Essays in the Legal and Political Theory of Property* (2001) Cambridge University Press, 168; Brad Sherman and Alain Pottage, ‘On the Prehistory of Intellectual Property’ in Helena Howe (ed), *Concepts of Property in Intellectual Property Law* (2013) Cambridge University Press, 11.

⁹⁴ Niva Elkin-Koren and Eli M Salzberger, *The Law and Economics of Intellectual Property in the Digital Age* (2013) Routledge, 41.

⁹⁵ UN General Assembly, Ad Hoc Committee on a Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities, *Report of the Ad Hoc Committee on a Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities on its Sixth Session*, 60th sess, UN Doc A/60/266 (17 August 2005) 139.

Article 30 of the *CRPD* imposes a strong positive obligation on member states to ensure that persons with disabilities enjoy access to culture and knowledge on an equal basis, including to material protected by copyright.⁹⁶ Article 30 in particular is an extremely important provision that provides for a potential paradigm shift in the balance between intellectual property and disability rights. For many years the *Berne Convention* and other related agreements (discussed in chapter 3), have marked the minimum standard of copyright protection. Copyright industry groups have vehemently opposed suggestions that international treaties should require a maximum limit to the strength of copyright. But this is exactly what the *CRPD* requires. The *CRPD* provides that copyright can exist up to the point at which it creates a conflict with persons with disabilities' access to cultural material. In effect, this creates a 'ceiling' on international intellectual property law in the context of disability access rights.⁹⁷

⁹⁶ Archbishop Silvano Tomasi, the Vatican's permanent observer to UN agencies has cited both the *CRPD* and Blessed John Paul II's encyclical *Laborem Exercens* to support calls for copyright reforms to address the book famine. See Clare Myers, 'Blind People are Suffering from "book famine", says Vatican official', *Catholic Herald* (online), 21 June 2013 <<http://www.catholicherald.co.uk/news/2013/06/21/blind-people-are-suffering-from-book-famine-says-vatican-un-envoy/>>.

⁹⁷ Henning Grosse Ruse-Khan, 'Time for a Paradigm Shift - Exploring Maximum Standards in International Intellectual Property Protection' (2009) 1 *Trade, Law and Development* 56, 62.

Consultation Question 2. Noting that particular groups within the Australian community can experience new technology differently, what are the key issues regarding new technologies for persons with disabilities?

How do the print disabled consume digital content?

As a group, persons with print disabilities consume information differently from those without any impairments. In addition, persons with print disabilities may consume content differently from each other depending on their attributes. Technology can be used to enable persons with various disabilities to communicate and consume content to enable them to exercise their rights.⁹⁸ To enhance social inclusion hardware and software are increasingly including universal design features so that disability specific technology is not required. In addition to universally designed products, persons with print disabilities may utilise adaptive technology to consume content. Examples include:

- For the vision impaired and the blind – screen readers that provide an audio description of the text content (but not images or complex graphs) of computer screens, and screen magnification which enables people with low vision to read content;⁹⁹
- For persons unable to physically handle books, such as people with quadriplegia or tetraplegia, robotic devices which enable movement and use of computers;¹⁰⁰
- For people with cognitive impairments, the inclusion of images and multi-media that can aid in understanding, as well as screen readers that assist users with low vision.¹⁰¹

While such technologies enable people with print disabilities to consume digital content, disability adaptive technologies can be prohibitively expensive and not work on certain devices.¹⁰² Even where persons with disabilities can utilise adaptive technologies or universally designed products, not all E-Books or E-libraries are in accessible formats and many books remain solely in standard formats printed on paper. This denial of the right to read is why there is said to be a book famine.¹⁰³

⁹⁸ Piers Gooding, Anna Arstein-Kerslake and Eilionoir Flynn, 'Assistive technology as Support for the Exercise of Legal Capacity' (2015) 29(2/3) *International Review of Law Computers & Technology* 245.

⁹⁹ Marion Hersh and Michael A Johnson (eds), *Assistive Technology for Visually Impaired and Blind People* (2010) Springer Science and Business Media.

¹⁰⁰ Michel Busnel et al, 'The Robotized Workstation "MASTER" for Users with Tetraplegia: Description and Evaluation' (1999) 36(3) *Journal of Rehabilitation Research and Development* 217; R Platts and M Fraser, 'Assistive Technology in the Rehabilitation of Patients with High Spinal Cord Lesions' (1993) 31(5) *Spinal Cord* 280.

¹⁰¹ Peter Blanck, *E-Quality: The Struggle for Web Accessibility by Persons with Cognitive Disabilities* (2014) Cambridge University Press, 173.

¹⁰² Delia Ferri, G Anthony Giannoumis and Charles Edward O'Sullivan, 'Fostering Accessible Technology and Sculpting an Inclusive Market through Regulation' (2015) 29(2/3) *International Review of Law Computers & Technology* 81; Greg Vanderheiden, Jutta Treviranus and Amrisha Chourasia, 'The Global Public Inclusive Infrastructure (GPII)' (Proceedings of the 15th International ACM SIGACCESS Conference on Computers and Accessibility, ACM, 2013).

¹⁰³ Paul Harpur, Nicolas Suzor, 'The Paradigm Shift in Realising the Right to Read: How eBook Libraries are Enabling in the University Sector' (2014) 29 *Disability and Society* 10, 1658; Paul Harpur and Nicolas Suzor, 'Copyright Protections and Disability Rights: Turning the Page to a New International Paradigm' (2013) 36 *University of New South Wales Law Journal* 3, 745.

Improved but limited access: E-Libraries with E-Books in disability specific formats

Laws and institutions recognised that persons with print disabilities could not read standard books printed on paper. This gave rise to an exemption in copyright laws that is analysed in chapter 5 of *Discrimination, Copyright and Equality*. Predominantly, charities that assist the blind have utilised these exemptions to provide persons with print disabilities a library of books in alternative or accessible formats. Charities, such as the Canadian National Institute for the Blind, the National Library Service for the Blind and Physically Handicapped, the Royal National Institute of Blind People, and Vision Australia, have impressive catalogues of books in Braille, large print and audio cassette. Most of these works have been created by volunteers reading books onto tape, as well as scanning, editing and printing books into alternative formats.

Persons with print disabilities can consume books in digital formats using screen readers, such as Non-Visual Desktop Access ('NVDA') and Job Access With Speech ('JAWS').¹⁰⁴ The emergence of screen reading software and other adaptive technologies led to the creation of E-Books in disability specific formats, such as the Daisy format.¹⁰⁵ Disability specific formats were created in part to enable persons with print disabilities to use their adaptive technology more effectively, and in part to reduce concerns from rightsholders that there would be leakage from the special case of print disabled readers to the wider population. Formats, such as Braille Ready Format ('BRF') are only usable by people using specialised devices created for persons with print disabilities. While it is possible to convert a BRF document to a PDF or rich text format ('RTF'), the conversion will result in disability specific formatting being converted. The time taken to remove this coding and format it for a sighted person acts as a safeguard against leakage. Even if the book was successfully edited and formatted, the end product would not contain the graphics and appearance of a digital file that was ripped using a multi-feed scanner. Essentially it is quicker for a sighted person to rip a print book using a multi-feed scanner than try to convert a BRF file.

While the growth of the mainstream E-Book market is altering existing practices, currently persons with print disabilities lawfully obtain E-books through one of two means. The first example is where a charity or educational institution provides the person with a print disability a copy of the book using a copyright exemption (analysed in chapter 5 of *Discrimination, Copyright and Equality*). The second method is where E-Libraries have been developed, and which operate to provide persons with print disabilities books in accessible formats. There are substantial limitations with the interactions between copyright laws and the exemptions which regard persons with print disabilities as special cases.

¹⁰⁴ Freedom Scientific, *Blindness Solutions: Jaws, The World's Most Popular Windows Screen Reader* <<http://www.freedomscientific.com/Products/Blindness/JAWS>>; Non-Visual Access, *NVDA Features* <<http://www.nvaccess.org/about/nvda-features/>>; Paul Harpur and Nicolas Suzor, 'The Paradigm Shift in Realising the Right to Read: How Ebook Libraries are Enabling in the University Sector' (2014) 29(10) *Disability and Society* 1658.

¹⁰⁵ George Kerscher, and Jennifer Sutton, 'Daisy for all: Publishers' Collaboration Enabling Print Access' (2004) 10 *Information Technology and Disabilities*, 1.

Delays and difficulties: educators and charities providing accessible E-Books under an exception to copyright

Research demonstrates that the exemption to copyright that regards persons with print disabilities as a special case is no answer to the book famine. The limitations with the current model can be illustrated by analysing how a student with a print disability obtains access to a textbook in a format they can consume. Students with print disabilities have more support than the wider print disabled population, yet even this group are experiencing a book famine in an information rich educational environment.

The exemption to copyright analysed in chapter 5 of *Discrimination, Copyright and Equality* has resulted in a cumbersome and inefficient process for securing an accessible version of a textbook for a student with a print disability. Rather than requiring the publisher to provide a digital copy of the textbook, this exemption results in the following process:

1. The student decides what classes they will take and enrolls in those classes.
2. The student contacts the professor to obtain a final reading list. This can occur in some institutions in the first week of class.
3. The student contacts the disability support officer for help in obtaining their textbooks in accessible formats. In many situations the student must first purchase a print copy of the textbook and provide evidence of this purchase.
4. Providing the student has already provided medical evidence attesting to their disability and has a disability access plan, the disability support officer will search a range of databases to determine if the book has already been scanned into an accessible format, and will contact the publisher. If this fails he/she will start scanning the book.
5. Finally, the accessible book is edited and provided to the student.¹⁰⁶

This approach of relying on educational institutions and charities to source accessible copies or convert standard books into alternative formats is simply not achieving reading equality.¹⁰⁷

The author and Dr Rebecca Loudoun have published primary research on the experiences of university students with print disabilities in Australia.¹⁰⁸ This research involved analysing the websites of all Australian universities to ascertain how they describe their services to students and staff with print disabilities. In addition, this research involved qualitative and quantitative research with 56.4 per cent of Australia's universities. This research found that 40% of Australian universities indicated that they had no formal policy on assisting students with print disabilities. Whether or not they had a policy, all universities participating in the research

¹⁰⁶ Paul Harpur, 'Providing Students with Vision Impairment Print Material in an Accessible Electronic Format: Identifying Barriers in the Current Model' (Report, Queensland University of Technology Division of Technology, Information and Learning, QUT Library and Law School, 2010); Pat Renfranz, Sandy Taboada and Jill Weatherd, *Progress and Stalemates: The Complexities of Creating a Textbooks-on-Time System for Blind Students* (July 2008) Braille Monitor <<https://nfb.org/Images/nfb/Publications/bm/bm08/bm0807/bm080706.htm>>.

¹⁰⁷ Guy Whitehouse, James Dearnley and Ian Murray, 'Still "Destined To Be Under-Read"? Access to Books for Visually Impaired Students in UK Higher Education' (2009) 25(3) *Publishing Research Quarterly* 170; Royal National Institute of Blind People, *Where's my Book?* (2006) Royal National Institute of Blind People; Nicolas Suzor, Paul Harpur and Dylan Thampapillai, 'Digital Copyright and Disability Discrimination: From Braille Books to Bookshare' (2008) 13(1) *Media and Arts Law Review* 1.

¹⁰⁸ Paul Harpur and Rebecca Loudoun, 'The Barrier of the Written Word: Analysing Universities' Policies to Include Students with Print Disabilities and Calls for Reforms' (2011) 33(2) *Journal of Higher Education Policy and Management* 153.

indicated that they provided students with print disabilities support in obtaining textbooks in accessible formats.

The nature of support varied considerably across universities and depended on whether the book was prescribed as mandatory reading, or was only recommended by the professor to assist with enhancing understanding. All universities provided support to students to obtain their prescribed readings. If the instructional material was only recommended, then 14% of universities said they required the student to manage the process of sourcing accessible versions of that content. To assist students in obtaining recommended readings and for research purposes, 96% of universities would provide assistance in gathering textbooks from shelves of libraries, while only 74% would provide assistance in photocopying textbooks, and only 51% would provide assistance in scanning parts of textbooks into digital formats.

Where universities did provide their students access to essential or prescribed readings, students with print disabilities were overwhelmingly obtaining the readings late. Only 50% indicated that first year students with print disabilities were provided with access to prescribed textbooks before the semester started. The majority of students with print disabilities obtained the full set of their readings when 14%, or about 1.9 weeks, of a 14-week semester was over. Some students however obtained their readings much later. Two universities reported that students with print disabilities did not receive all their essential readings in accessible formats until week 5 of a 12-week semester. This means some students with print disabilities were obtaining their material after 42% or more of the semester was already over. In the worst case scenario one university reported that they provided a student the last of their essential readings in week 11 of a 13 week semester. Students with print disabilities at this university received the last of their essential readings after 85% of the teaching period was concluded.

The potential for equal access: E-Books enter the mainstream market

The digital age is transforming how people consume books. While standard books remain a feature of library and personal collections, there is an increasing trend to eschew standard books in favour of E-Books. Around the start of the 21st century universities started exploring the possibilities of purchasing limited numbers of E-books.¹⁰⁹ The popularity of E-Books is continuing to increase. In 2008 E-Book sales were about 0.6% of the US market, in 2010 about 6.4%, and in 2011 about 13.6%.¹¹⁰ Their comparative cost advantages in purchase and storage are making E-Books especially popular in the educational sector.¹¹¹ One major Australian

¹⁰⁹ W Abbott and K Kelly, 'Sooner or Later! Have E-books Turned the Page?' (Library Services and IT Services Paper, Bond University, February 2004); D Dillon, 'E-books: The University of Texas Experience, Part 1' (2001) 19(2) *Library Hi Tech* 113; Ellen Safley, 'Demand for E-books in an Academic Library' (2006) 45(3-4) *Journal of Library Administration* 445.

¹¹⁰ Wischenbart et al, *The Global E-Book Market* (2013) O'Reilly Media, 9.

¹¹¹ Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities, 'Report' (Report, Educause, 6 December 2011) 22 <<http://www.educause.edu/Resources/ReportoftheAdvisoryCommissiono/242996>>; Chris Armstrong, Louise Edwards and Ray Lonsdale, 'Virtually there? E-books in UK Academic Libraries' (2002) 36(4) *Program* 216; L Connaway and T Dickey, 'The Digital Information Seeker: Report of the Findings from Selected OCLC, RIN, and JISC User Behavior Projects' (Report, OCLC, 15 February 2010) <www.jisc.ac.uk/media/documents/publications/reports/2010/digitalinformationseekerreport.pdf>; Pauline Dewan, 'Are Books Becoming Extinct in Academic Libraries?' (2012) 113(1) *New Library World* 27; Barbara Folb, Charles B Wessel and Leslie J Czechowski, 'Clinical and Academic Use of Electronic and Print Books: The Health Sciences Library System E-Book Study at the University of Pittsburgh'

university library in a 2015 purchasing period acquired 26 times more E-Books than print books.¹¹²

Whether it is for education, work or pleasure, E-Books are cheaper than standard books, and entire E-Libraries can be contained on a smart phone or E-Reader. Whereas print books are only available from the physical library, E-books can be downloaded while a user is in their office, in a coffee shop, on the bus or while lying in bed. This makes E-Books especially attractive for people that are unable due to time restraints, geographic location or disability, to visit a bricks and mortar library to obtain a standard book.¹¹³ E-books are of course far from perfect for persons with or without disabilities. Some E-Books can be difficult to navigate or make notations on, and some people simply prefer to read paper rather than a screen.¹¹⁴

No longer just a digital representation of a print book: E-Books as a multi-media experience

Some E-Books mirror the content and publishing processes of standard paper books. Other E-books utilise the potential of the digital environment. They may contain audio, images, moving images and video multi-media content, and may alter this content on a rolling basis.¹¹⁵ This additional content alters the meaning and consumption practices of readers.¹¹⁶ Instructional materials, for example, often use multi-media in E-Books to enhance the learning experience.¹¹⁷ The inclusion of multi-media content may create challenges for some people with print disabilities.¹¹⁸ This is not to say multi-media content is inherently disabling. The inclusion of this medium creates positive educational opportunities for people with print disabilities that are associated with learning disabilities.¹¹⁹

(2011) 99(3) *Journal of the Medical Library Association* 218; M Landoni and G Hanlon, 'E-Book Reading Groups: Interacting with E-Books in Public Libraries' (2007) 25(5) *The Electronic Library* 599; Silas Marques de Oliveira, 'E-Textbooks Usage by Students at Andrews University: A Study of Attitudes, Perceptions, and Behaviors' (2012) 33(8) *Library Management* 536; Magdalini Vasileiou, Richard Hartley and Jennifer Rowley, 'An Overview of the E-Book Marketplace' (2009) 33(1) *Online Information Review* 173.

¹¹² Paul Harpur, 'E-Books and Accessibility' (Speech delivered at QUT E-Book Forum, Brisbane, 19 June 2015).

¹¹³ Ranti Junus, 'E-Books and E-Readers for Users with Print Disabilities' (2012) 48(7) *Library Technology Reports* 22; Rosa et al, 'Perceptions of Libraries, 2010: Context and Community' (Report, OCLC, 2011) <http://www.oclc.org/content/dam/oclc/reports/2010perceptions/2010perceptions_all.pdf>.

¹¹⁴ Princeton University, *The E-Reader Pilot at Princeton* (2010) <www.princeton.edu/ereaderpilot/eReaderFinalReportLong.pdf>

¹¹⁵ Michael Lesk, *Understanding Digital Libraries*, 2nd Edition (2005) Morgan Kaufmann Publishers, 95 and 107; Randal C Picker, 'Online Markets vs. Traditional Markets: The Mediated Book' (2011) 19(1) *Supreme Court Economic Review* 51, 51.

¹¹⁶ Peter Shillingsburg, *From Gutenberg to Google: Electronic Representations of Literary Texts* (2006) Cambridge University Press, 47-49.

¹¹⁷ Mal Lee and Arthur Winzenried, *Use of Instructional Technology in Schools: Lessons to Be Learned* (2013) Australian Council for Educational Research; Craig Michaels, Fran Pollock Prezant and Kent Jackson, 'Assistive and Instructional Technology for College Students with Disabilities: A National Snapshot of Postsecondary Service Providers' (2002) 17(1) *Journal of Special Education Technology* 5.

¹¹⁸ Cagatay Goncu and Kim Marriott, 'Creating E-Books with Accessible Graphics Content' (Paper presented at Proceedings of the 2015 ACM Symposium on Document Engineering, Switzerland, 8-11 September 2015).

¹¹⁹ Edward Blackhurst, 'Perspectives on Applications of Technology in the Field of Learning Disabilities' (2005) 28(2) *Learning Disability Quarterly* 175; D L Edyburn, 'Assistive Technology and Mild

When is an E-Book accessible and usable by the print disabled?

This submission argues that people with print disabilities should be able to access E-Books, E-Libraries and E-Readers on the same basis as the wider population. Equality of access exists when everyone in the community, regardless of their abilities, can consume the same information, at the same time, for the same price and at the same quality. This approach to access combines technical disability accessibility standards and a consideration of practical usability.

Further research, development and implementation of technical disability accessibility standards are critical to promoting internet and E-Book accessibility for persons with the full range of abilities within the community.¹²⁰ A number of technical disability accessibility standards have been developed to help determine whether an E-Book is accessible to persons with print disabilities or not. Some of these standards have been developed specifically for a regulatory scheme. An example of this is the National Instructional Materials Access Standard developed for digital files of books uploaded to the National Instructional Materials Access Centre as discussed in chapter 11 of *Discrimination, Copyright and Equality*. Other standards have been developed with the intention of applying across the entire industry. The most relevant technical disability accessibility standards include:

Accessibility Screening Guidelines and Checklist (developed by the DAISY Consortium in collaboration with Tech For All).¹²¹

- These disability accessibility guidelines provide clear testing and evaluating criteria to judge reading systems against.

Web Content Accessibility Guidelines (WCAG) 2.0.¹²²

- A person with a print disability can only access the E-Book if they can navigate the E-Library. This requires the E-Library platform to be accessible. Persons across a range of impairments, with vision, hearing, and cognitive conditions, have reported problems with E-Library websites.¹²³ All websites, including E-Libraries, should seek to embrace universal design principles. The leading authority on ensuring persons with

Disabilities' (2006) 8(4) *Special Education Technology Practice* 18; Michael Kennedy and Donald D Deshler, 'Literacy Instruction, Technology, and Students with Learning Disabilities: Research we have, Research we need' (2010) 33(4) *Learning Disability Quarterly* 289; Jacqueline Norman, Belva C Collins and John W Schuster, 'Using an Instructional Package Including Video Technology to Teach Self-Help Skills to Elementary Students with Mental Disabilities' (2001) 16(3) *Journal of Special Education Technology* 5.

¹²⁰ Peter Blanck, *E-Quality: The Struggle for Web Accessibility by Persons with Cognitive Disabilities* (2014) Cambridge University Press, ch 7.

¹²¹ DAISY Consortium and Tech For All, *Accessibility Screening Guidelines and Checklist* <<http://daisy.org/accessibility-screening-methodology-guidelines-and-checklist.html>>.

¹²² Web Content Accessibility Guidelines, *Web Content Accessibility Guidelines (WCAG) 2.0 W3C Recommendation 11 December 2008* (11 December 2008) <<http://www.w3.org/TR/WCAG20/>>.

¹²³ C Hitchcock, 'Digital Content for Individuals with Print Disabilities' in W Preiser and K Smith (eds), *Universal Design Handbook* (2011) McGraw-Hill; Myhill et al, 'Distance Education Initiatives and their Early 21st Century Role in the Lives of People with Disabilities' (2007) 8(17) *Focus on Distance Education Developments* 1; Alistair McNaught, Shirley Evans and Simon Ball, 'E-Books and Inclusion: Dream Come True or Nightmare Unending?' in Miesenberger et al (eds), *Computers Helping People with Special Needs* (2010) Springer Berlin Heidelberg, 74.

disabilities can access websites, and by extension E-Libraries, is the Web Content Accessibility Guidelines. The current version of this at the time of publishing is the WCAG 2.0. These guidelines provide technical details on how to design features which maximise the usability of websites for people with blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations of these.

The EPUB 3.01 Standard.¹²⁴

- The EPUB Standard provides technical guidance on how digital files, including E-Books, can maximise disability access. These standards provide technical guidance on how content should be represented, packaged and encoded. Through technical design and managing digital layouts, rich media, and interactivity and global typography features, the EPUB Standard embraces universal design.

While these technical disability accessibility standards play an important role, on a more practical level what end users desire is the capacity to consume the E-Book. There are numerous examples of digital spaces complying with accessibility guidelines but being completely unusable.¹²⁵

Equal access not realised: E-Books in the mainstream market

To test the extent to which E-Libraries subscribed to by a major university were accessible to persons with print disabilities, the author, along with Dr Nicolas Suzor, developed a practical guide of what is required for meaningful access. The guide was created by focusing on the information that a university student or academic would need to extract from an E-Book.¹²⁶ Following discussions with academics and university graduates the following criteria were developed:

(1) Is the text formatted so that it can be read using a screen reader?

(a) Can a screen reader read the content of the E-Book? Security settings on some E-Books ensure content cannot be copied, but can also prevent screen readers and other adaptive technologies from enabling persons with print disabilities to consume the content of the E-Book.¹²⁷

(b) Is line spacing correct or are paragraphs or lines not formatted with hard returns in correct positions?

(c) Are tables and graphics described in prose?

(2) Is it possible to navigate the E-Book?

¹²⁴ IDPF, *EPUB 3.1 Overview Editor's Draft* (30 January 2016) <<http://www.idpf.org/epub3/latest/overview>>.

¹²⁵ A Newell, *Design and the Digital Divide: Insights from 40 Years in Computer Support for Older and Disabled People* (2011) Morgan & Claypool Publishers.

¹²⁶ Paul Harpur and Nicolas Suzor, 'The Paradigm Shift in Realising the Right to Read: How E-Book Libraries are Enabling in the University Sector' (2014) 29(10) *Disability and Society* 1658.

¹²⁷ George H Kerscher, and Jim Fruchterman, 'The Soundproof Book: Exploration of Rights Conflict and Access to Commercial eBooks for People with Disabilities' (2002) 7 *First Monday* 6.

- (a) Are contents and index pages available? If yes, do they have links that work?
 - (b) Is it possible to search for keywords in the book?
 - (c) Is it possible to move to particular pages in the book?
- (3) Is the E-Book formatted to enable a user to cite according to leading citation styles?
- (a) Are there page numbers in the E-Book, and do the page numbers of the E-Book correspond to the print version?
 - (b) Are the references in footnotes and reference lists accessible?

The study then applied these criteria to a random selection of E-Books on 12 E-Libraries.¹²⁸ The study found that some E-Libraries were usable but some contained irritating barriers. The security settings on some sites required a user to respond to a visual or audio challenge, but these were extremely difficult to complete.

Once the E-Book was opened the most substantial barrier was caused by security settings that entirely prevented adaptive technology from reading the content of the E-Book. On these E-Libraries the E-Books were entirely inaccessible to people with print disabilities. While not preventing access, the requirement to read the E-Book online page-by-page represented an extreme usability problem. On one E-Library each page for the E-Book was under 300 words. The user was also required to navigate around approximately 1,000 words of random information to find the button to turn the page and the footnotes. On this E-Library 2/3 of the time spent reading was not related to book content.

While some E-Libraries permitted full-text downloads of E-Books, even on these E-Libraries access issues arose. Most E-Books had formatting problems relating to line spacing, paragraph spacing, referencing or issues with headings. Visual representations of information, such as graphs, tables or images, were poorly described or not described in most situations. Overall, the research concluded that the numbers and content of E-Books was helping to combat the book famine, but much more was required to achieve reading equality.

¹²⁸ The E-Libraries analysed included: ACLS Humanities E-Book collection, Brill E-Books, Cambridge Books Online, Ebrary, E-Book Library, EbscoHost, Elgar online, Oxford Scholarship Online, Palgrave Macmillan Connect, Sage Knowledge, SpringerLink E-Books and Wiley Online Library.

Consultation Question 3. How should Australian law protect human rights in the development, use and application of new technologies? Consultation Question 3. How should Australian law protect human rights in the development, use and application of new technologies?

Anti-discrimination laws in Australia

Australia has had some form of anti-discrimination statutes on the books for over 30 years, which culminated in the passage of the first federal protection in the *Disability Discrimination Act 1992 (Cth)*.¹²⁹ Similar to the ADA, Australia's *Disability Discrimination Act 1992 (Cth)* was amended in 2009 to reverse judicial hostility to equality that resulted in the statute being read down and distorted.¹³⁰ An interesting difference in the reading down of disability discrimination laws between Australia and the United States is that in Australia the definition of disability has always been read widely. Australian courts read down the operation of anti-discrimination laws through a range of other technical steps in the application of the prohibitions against discrimination analysed below.

The relationships selected for regulation: The adoption of a limited social model approach

Anti-discrimination laws are failing to regulate situations that impact on the digital disablement of persons with print impairments. In order to promote digital equality regulatory interventions must target those parties who have the capacity to significantly influence levels of digital disablement in the community. As anti-discrimination laws are one of the primary vehicles to promote an inclusive society, it is critical for these laws to impose duties on parties who have the capacity to impact on digital disablement.

Anti-discrimination laws do not create general obligations to reduce discrimination in society. Instead, anti-discrimination laws identify a range of relationships as triggers for intervention, and require parties in those relationships to reduce, subject to a range of technical exceptions, discrimination based on a person's disability. The trigger for attracting obligations not to discriminate is actual or potential contact with persons with a protected attribute; in this case a person with a disability. If a person is not in a relationship regulated by anti-discrimination laws, then that person has no duty arising from anti-discrimination laws to avoid, or even consider, when asking how their actions may have a discriminatory impact. Excluding classes

¹²⁹ Andrew Frazer, 'Anti-Discrimination Law at Mid-Life Crisis' (2011) 24(1) *Australian Journal of Labour Law* 75.

¹³⁰ Paul Harpur, 'The *Convention on the Rights of Persons with Disabilities* and Australian Anti-Discrimination Laws: What Happened to the Legal Protections for People Using Guide or Assistance Dogs?' (2010) 29(1) *University of Tasmania Law Review* 49; Belinda Smith, 'Fair and Equal in the World of Work: Two Significant Federal Developments in Discrimination Law' (2010) 23(3) *Australian Journal of Labour Law* 199.

of people from legislative equality duties creates the possibility that the law may fail to regulate parties who can have a significant impact on the causes of disablement.

Before analysing whether anti-discrimination laws adequately regulate the right to read digital content, it is first important to consider the parties who impact on the capacity of persons with print disabilities to read the digital content on E-Books, E-Libraries and E-Readers. In chapter 1 this book analysed the range of parties who impact on digital disablement related to E-Books. Broadly, the parties who can impact on the capacity of persons with print disabilities to read content-books can be segmented into groups associated with:

- Authorship of the manuscript - Whether or not the author employs graphics or visual displays in presenting text impacts on disability accessibility.
- Copyright holders – Whether or not copyright holders restrict the manuscript from being published in accessible formats impacts on disability access.
- Publishing of the manuscript – Whether or not digital rights management settings prevent adaptive technology from effectively working, or whether graphics are labelled into an E-Book, impacts on disability accessibility.
- E-book libraries – Whether or not the library interface complies with web accessibility guidelines impacts on disability accessibility.
- Design and manufacture of E-Reader hardware devices – Whether or not devices include disability accessibility features or enable adaptive technology to be installed impacts on disability accessibility.
- If the person with a disability sources the E-Book through another entity, such as an educational institution, employer or public library, the approach of that other entity to the right to read impacts on disability accessibility.

Where classes of people are exempted from anti-discrimination laws, then arguably law makers have determined that people in that class either lack the capacity to reduce the digital disablement of people with impairments, or that it is unreasonable to expect them to avoid engaging in discriminatory conduct. If laws fail to regulate people who impact on equality then essentially this is a route of no accommodation. The route of no accommodation permits parties with power to act in their own interests and disregard how their conduct might exclude some people from full and equal participation in society.¹³¹ If people who have a material impact on social inclusion are not subject to anti-discrimination laws, and if other regulatory interventions fail to achieve meaningful levels of digital inclusion, then this is arguably a regulatory position which does not advance the human rights paradigm posited in the *CRPD*.

Relationships regulated by anti-discrimination laws

Similar to the *Canadian Human Rights Act* and the *Equality Act 2010* (UK), the Australian *Disability Discrimination Act 1992* (Cth), contains anti-discrimination duties which regulate a prescribed range of relationships. The relationships regulated in the Australian, Canadian

¹³¹ Madam Justice Beverley McLachlin 'Reasonable Accommodation in a Multicultural Society' (Speech delivered at Canadian Bar Association Continuing Legal Education Committee and the National Constitutional and Human Rights Section, Alberta, 7 April 1995) 1; Belinda Smith and Dominique Allen, 'Whose Fault is it? Asking the Right Question to Address Discrimination' (2012) 37(1) *Alternative Law Journal* 31.

and United Kingdom regimes, but for limited circumstances, centre on parties who may have direct contact with persons with disabilities. The relationships that attract regulation in Australia, Canada and the United Kingdom include employers for potential and actual employees,¹³² educators for students,¹³³ principles for contractors,¹³⁴ providers of goods and services for customers,¹³⁵ operators of public premises for visitors,¹³⁶ and managers of sporting activities for participants.¹³⁷

There is wide support for the fact that disability anti-discrimination laws have helped reduce overt forms of discrimination.¹³⁸ At a minimum, disability anti-discrimination laws empower aggrieved parties to seek redress against people who breach anti-discrimination duties. The problem is that many of the parties who contribute to digital disablement do not attract duties under anti-discrimination laws. While educators, employers, retailers and the like contribute to digital disablement by purchasing access to E-Book libraries with disability access barriers, in most situations the parties who have direct contact with a person with a print disability have limited power to promote universal design. As will be discussed in chapter 11 in respect of the National Instructional Access Center, it is possible to use anti-discrimination laws to motivate educators to pressure E-Book publishers to provide disability accessibility in limited situations. Beyond the limited situation where an existing duty holder has the legal duty and practical capacity to ensure universal design, anti-discrimination laws have limited application in online environments.

E-Book libraries as on-line relationships that attract anti-discrimination duties in Australia and the United Kingdom

E-Book publishers control how E-Books and library platforms are designed. A person with a print disability only has access to E-Books where they can navigate the E-Library and use the E-Books hosted on that library platform. This submission will now analyse the extent to which anti-discrimination laws extend their operation to E-Book libraries and the E-Books on those platforms. In many situations people with print disabilities will not have a direct contract with E-Book libraries. The fact educators, employers and public libraries are the paying customers of the E-Libraries impacts on persons with disabilities' legal and negotiating position, as the person with a disability often has no privity of contract with the digital platform and thus limited legal rights.

¹³² *Disability Discrimination Act 1992* (Cth) s 15; *Canadian Human Rights Act*, RSC 1985, c H-6, s 7 and 8; *Equality Act 2010* (UK) s 39.

¹³³ *Disability Discrimination Act 1992* (Cth) s 22; *Equality Act 2010* s 88.

¹³⁴ *Disability Discrimination Act 1992* (Cth) s 17; *Equality Act 2010* (UK) s 41.

¹³⁵ *Disability Discrimination Act 1992* (Cth) s 24; *Canadian Human Rights Act*, RSC 1985, c H-6, s 5; *Equality Act 2010* (UK) s 29.

¹³⁶ *Disability Discrimination Act 1992* (Cth) ss 23, 25; *Canadian Human Rights Act*, RSC 1985, c H-6, ss 5 and 6; *Equality Act 2010* (UK) ss 35-37.

¹³⁷ *Disability Discrimination Act 1992* (Cth) s 28; *Equality Act 2010* (UK) ss 29, 195.

¹³⁸ Note however that resistance to disability civil rights has reduced the impact of the ADA: Linda Hamilton Krieger, *Backlash against the ADA: Reinterpreting Disability Rights* (2003), University of Michigan Press; Samuel R Bagenstos, 'The Americans with Disabilities Act as Risk Regulation' (2001) 101(6) *Columbia Law Review* 1479.

Regulating digital spaces and E-Libraries in Australia

Australia was one of the first jurisdictions to have a judicial determination that anti-discrimination laws applied to websites. Even though s 24 of the *Disability Discrimination Act 1992* (Cth) does not mention the provision of digital goods and services, Australian law provides that goods and services applies to both physical and non-physical provision of goods and services. The allegation of discrimination in *Maguire v Sydney Organising Committee for the Olympic Games* ('*Maguire*') concerned claims that the Olympic Games ticketing system was inaccessible to persons with vision impairments that used screen readers.¹³⁹ The then Human Rights and Equal Opportunity Commission held that it did not impose an unjustifiable hardship to require the website to be rendered accessible for people with disabilities. Thus the website was deemed unlawful and was required to be altered.

The *Maguire* decision by the then Human Rights and Equal Opportunity Commission, now the Australian Human Rights Commission, is an administrative tribunal and not a judicial court, and thus the precedent value of this decision is limited. There has not been subsequent judicial acceptance of the *Maguire* judgment in Australia. Scholars have however operated on the basis that the ratio decidendi in the *Maguire* decision is settled law in Australia.¹⁴⁰ The Australian Human Rights Commission has provided guidance on how the *Disability Discrimination Act 1992* applies to internet based relationships. The Australian Human Rights Commission can release guidelines to reduce the instances of discrimination in the community.¹⁴¹ While these guidelines have no legal force, they can assist in understanding what the *Disability Discrimination Act 1992* requires of parties.

The Australian Human Rights Commission World Wide Web Access: Disability Discrimination Act Advisory Notes version 4.0 (2010) explains at clause 2.2:

The provision of information and online services through the web is a service covered by the *DDA*. Equal access for people with a disability in this area is required by the *DDA* where it can reasonably be provided. This requirement applies to any individual or organisation developing a website or other web resource in Australia, or placing or

¹³⁹ (2001) *EOC* 93; [1999] *HREOCA* 26.

¹⁴⁰ For example: Andrew Arch and Oliver K Burmeister 'Australian Experiences with Accessibility Policies Post the Sydney Olympic Games' (2003) 9(2) *Information Technology and Disabilities*; Lee Ann Bassler and Melinda Jones, 'The Disability Discrimination Act 1992 (Cth): A Three-Dimensional Approach to Operationalising Human Rights' (2002) 26 *Melbourne University Law Review* 254; Simon Darcy, 'Disability, Access, and Inclusion in the Event Industry: A Call for Inclusive Event Research' (2012) 16(3) *Event Management* 259; Catherine Easton, 'Revisiting the Law on Website Accessibility in the Light of the UK's *Equality Act 2010* and the United Nations *Convention on the Rights of Persons with Disabilities*' (2012) 20 *International Journal of Law and Information* 1; Catherine Easton, 'An Examination of the Internet's Development as a Disabling Environment in the Context of the Social Model of Disability and Anti-Discrimination Legislation' (2013) 12(1) *Universal Access in the Information Society* 105; Gerard Goggin and Christopher Newell, 'Disabled E-Nation: Telecommunications, Disability, and National Policy' (2004) 22(4) *Prometheus* 411; Andrea Slane, 'Review Article: Democracy, Social Space, and The Internet' (2007) 57 *University of Toronto Law Journal* 81; Cynthia Waddell, 'Overview of Law and Guidelines' in Thatcher et al (eds), *Constructing Accessible Web Sites* (2002) Apress, 32.

¹⁴¹ *Disability Discrimination Act 1992* (Cth) s 67(1)(k).

maintaining a web resource on an Australian server. This includes web pages and other resources developed or maintained for purposes related to employment, education, provision of services including professional services, banking, insurance or financial services, entertainment or recreation, telecommunications services, public transport services, or government services, sale or rental of real estate, sport, activities of voluntary associations, or administration of Commonwealth laws and programs. ... In addition to these specific areas, provision of any other information or other goods, services or facilities through the internet is in itself a service, and as such, discrimination in the provision of this service is covered by the *DDA*.¹⁴²

Accordingly, despite the lack of judicial attention, it appears well settled in Australia that the parties who provide goods and services via the internet, including E-Libraries, are regulated by Australian anti-discrimination laws.

Introducing the disparate impact doctrine

People with print disabilities are disabled when books are not published in digital formats, or when E-Books are published in formats that do not follow disability accessibility guidelines. The creation of facially neutral systems, which through indifference or ignorance have a discriminatory impact, are the type of inequality that the disparate impact doctrine was developed to combat.

there are four core requirements to proving a suit of indirect discrimination or disparate impact:¹⁴³

1. Equal treatment: The defendant must impose a requirement, condition, policy or practice on the plaintiff.
2. Impact of the requirement or condition: the treatment impacts on the defendant's group less favourably than people without the prescribed attribute.
3. There must be unfavourable treatment that is detrimental.
4. The disparate impact cannot be justified. The discriminatory treatment is lawful where it is reasonable or would impose an unjustifiable hardship.

The concept of what level of disadvantage should enliven anti-discrimination laws goes to the heart of the issue of the struggle for substantive equality.

To require a person with a disability to prove that they have suffered a certain level of harm to have their denial of rights labelled as discrimination operates on the premise that persons with disabilities are not entitled to exercise their rights on an equal basis as others. Essentially this legislative approach provides that it is not discrimination unless the denial of rights cannot be overcome by the person with a disability. The below analysis demonstrates that the United

¹⁴² Australian Human Rights Commission, 'World Wide Web Access: Disability Discrimination Act Advisory Notes' (2010) <http://www.humanrights.gov.au/disability_rights/standards/www_3/www_3.html>.

¹⁴³ Neil Rees, Simon Rice and Dominique Allen, *Australian Anti-Discrimination Law*, 2nd Edition (2014) Federation Press, [4.3.9.]. The Equal Employment Opportunity Commission first published the concept of disparate treatment in guidelines under the *Civil Rights Act of 1964*, Pub L No 88-352, 78 Stat 241. See Richard A Primus, 'Equal Protection and Disparate Impact: Round Three' (2003) 117 *Harvard Law Review* 494, 506.

States adopts the approach which most strongly rejects the notion that persons with disabilities should cope with disadvantage in society. The Australian and United Kingdom positions, in contrast, expect persons with disabilities to be substantially disabled by society before indirect discrimination provisions are enlivened.

Requiring a person with a disability to prove harm, and requiring them to prove they are sufficiently unable to cope with breaches of their human rights, violates the concept of equality posited in the *CRPD*. The focus here is not on what it is reasonable to expect the duty holder to do to enable access, but instead on what harm is acceptable. Put another way: the question is what denial of human rights is acceptable.

The requirement for a person with a disability to suffer a certain level of harm to qualify for protection is not reflected in the *CRPD*.¹⁴⁴ The definition of disability discrimination in Article 2 of the *CRPD* provides that any distinction based on disability that reduces a person's capacity to fully exercise their human rights constitutes discrimination:

Discrimination on the basis of disability means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field

...

There is arguably no justification for including hardship as a requirement for establishing whether or not disability discrimination has occurred.¹⁴⁵

There is a limit to the resources of the state and private actors. The *CRPD* recognises that there is a limit on what can be done to reduce disability discrimination in society. States are required to combat discrimination that reduces persons with disabilities' capacity to exercise their economic, social and cultural rights 'to the maximum of [their State's] available resources ...'¹⁴⁶ The assessment of what expenditure and steps are reasonable should consider the degree of harm experienced by persons with disabilities as one factor in determining what is reasonable to expect of duty holders. Harm in itself should not be elevated to a requirement of enlivening the disparate impact doctrine.

A legislative approach that performs the reasonableness test only where a disabling practice causes substantial harm seems to provide that it is reasonable to adopt discriminatory practices if the harm is calculated as slight or moderate. The approach in the *CRPD* does not expect states to devote substantial resources to reduce a very small barrier. The approach in the *CRPD*, however, would expect states to adopt laws which compel duty holders to remove disabling barriers that create moderate harm, where the removal of such barriers requires insignificant cost or effort. The problem with elevating harm caused by the practices to a threshold issue

¹⁴⁴ Sarah Fraser Butlin, 'The UN *Convention on the Rights of Persons with Disabilities*: Does the Equality Act 2010 Measure up to UK International Commitments?' (2011) 40(4) *Industrial Law Journal* 428.

¹⁴⁵ Anna Lawson, 'Disability and Employment in the Equality Act 2010: Opportunities Seized, Lost and Generated' (2011) 40(4) *Industrial Law Journal* 359.

¹⁴⁶ *CRPD* art 4(2).

potentially means that many disabling barriers which could easily be removed remain as a cause of inequality, as the focus is not on removing barriers but on what harm should be endured.

The Australian position arguably is the approach which least reflects the notion of equality posited in the *CRPD*. Whereas the United Kingdom position focuses on how the practices in society disadvantage and disable people with impairments, the Australian approach turns the focus onto how the person who has been disabled by the practice manages to cope with that barrier to equality. A practice will only breach Australian indirect discrimination laws where the person with a disability is sufficiently unable to cope with the denial of their human rights.

The coping test has resulted in negative outcomes for persons with disabilities in Australia. The test has reduced students with print disabilities' capacity to obtain essential readings in the formats that best promote equality. For example, in *Hinchliffe v University of Sydney* the coping test was applied to a university student with a print disability desiring to access essential course readings.¹⁴⁷ The university provided the student with the reading material in a printed format which only provided her partial access. The university remedied their error and provided the students the material in the required format after class had commenced. In assessing whether the university had breached the indirect discrimination provisions the court considered whether the student coped with the disadvantage. In this case the student scanned papers and obtained assistance from her mother and grandmother to read documents onto tape. The court held that '[g]enerally, it was possible for the applicant to comply with the university's requirement. She could make use of course material provided to her in a standard format by converting it to a different format.'¹⁴⁸ As the student had some eyesight, had a strong support network and was prepared to work exceptionally hard, the court held there was insufficient harm caused to amount to a breach of the indirect discrimination provisions.

The coping test essentially authorises any practice that causes discriminatory harm, providing that a person with a disability can find a strategy to sufficiently cope with that harm. This requires courts to decide when coping strategies are sufficiently unsuccessful to enliven protection. The Full Court of the Federal Court of Australia performed such an analysis in *Hurst v State of Queensland*.¹⁴⁹ In this case a student was fluent in one form of sign language, but was required to receive education in another form of sign language that she was less familiar with. Even though the student received reasonable grades she was not able to function to her full potential. The court held that '[a] hearing impaired child may well be able to keep up with the rest of the class, or 'cope', without Auslan. However, that child may still be seriously disadvantaged if deprived of the opportunity to reach his or her full potential and, perhaps, to excel.'¹⁵⁰

Courts accept that students with disabilities will experience disablement, but that this often does not constitute sufficient harm to justify intervention. In *Clarke v Catholic Education Office* the court held an inability to comply was held to require a 'serious disadvantage' with the result that the student could not 'meaningfully participate in classroom instruction' without

¹⁴⁷ [2004] FMCA 85.

¹⁴⁸ [2004] FMCA 85, [115].

¹⁴⁹ *Hurst v State of Queensland* [2006] FCAFC 100.

¹⁵⁰ [2006] FCAFC 100, [125].

the accommodation.¹⁵¹ On appeal the Full Court adopted a similar approach through holding that the question of whether or not a student could comply should be decided by asking whether the student was ‘able to receive the full benefit of [their] education.’¹⁵² The Full Court of the Federal Court of Australia has accepted that persons with disabilities have a right to access education but no equivalent right to access employment.¹⁵³ Accordingly, the level of disadvantage that a person with a disability is expected to cope with outside the educational sector is significantly higher.

There are arguably many situations where persons with print disabilities can cope with reading disablement through the support of friends and family and expenditure of resources. There is a substantial gap between coping with reading disablement and the equality envisaged by the *CRPD*. In the United States case of *Enyart v National Conference of Bar Examiners* the capacity to cope was not addressed. If *Enyart v National Conference of Bar Examiners* was brought in Australia under the *Disability Discrimination Act 1992* (Cth) then it is possible the court would have determined that Enyart could have sufficiently coped with the disadvantage such that she had no remedy. The coping test means that discrimination in society is deemed not to amount to disability discrimination simply because persons who are disabled by barriers find mechanisms to cope with inequalities. Coping with disadvantage is a long way from the capacity to exercise rights on an equal basis as others as envisaged by the *CRPD*.

The retrofitting focus of anti-discrimination laws

One of the primary limitations with the disparate impact doctrine in Australia, the United Kingdom and the United States is the capacity of duty holders to pay scant attention to equality issues when adopting practices.¹⁵⁴ Once a practice has been created it may be difficult to make the environment accessible, thus enabling the duty holder to justify the existence of the inequality. Even if macro issues were considered, the reasonable accommodation model responds after systems are created. The exceptionalist approach does not challenge the imbalances of power or discourse of dominance. Under this paradigm the underlying disabling structures in society which lead to exclusion remain in place. Discussing the United States regime, Dr Beth Ribet has criticised how anti-discrimination laws ignore employers’ conduct in creating barriers to employment: ‘[t]he culpability of the employer or entity in the production of the disability itself is not conceived within the terrain of the law, when considering or weighing what its burden should be.’¹⁵⁵ Similarly, Professor Sandra Fredman observes that

¹⁵¹ *Clarke v Catholic Education Office and Anor* (2003) 202 ALR 340, 340. This decision was affirmed on appeal in *Catholic Education Office v Clarke* (2004) 81 ALD 66. Tamberlin J concurred with the joint judgment of Sackville and Stone JJ.

¹⁵² *Catholic Education Office v Clarke* (2004) 81 ALD 66, 69.

¹⁵³ *Devers v Kindilan Society* (2010) 116 ALD 239.

¹⁵⁴ Anna Lawson, ‘Challenging Disabling Barriers to Information and Communication Technology in the Information Society: A United Kingdom Perspective’ (2010) 2 *European Yearbook of Disability Law* 131, 138-139.

¹⁵⁵ Beth Ribet, ‘Emergent Disability and the Limits of Equality: A Critical Reading of the UN *Convention on the Rights of Persons with Disabilities*’ (2011) 14(4) *Yale Human Rights and Development Law Journal* 155, 169.

[t]his calls into question the dominance of the ‘merit’ principle. The latter ‘assumes that the individual should fit the job, rather than that the job should be adjusted to fit the worker’.¹⁵⁶ The retrofitting focus of anti-discrimination laws means many barriers to inclusion are created which anti-discrimination laws do not require removed.

It is often difficult or impossible to retrofit systems to render them accessible. Arguably, a system which focuses on retrofitting will not create an accessible society. The *CRPD* calls upon states to promote universal design where possible. Under this approach reasonable adjustments and accommodations operate where it is difficult or expensive to implement universal design. This paper argues that relying on systems that permit barriers to be created and then seek to retrofit access can reduce many barriers to inclusion, but it is a considerable distance from creating equality. Equality can only be achieved where states do more to promote universal design, and embrace reasonable accommodations and adjustments where inclusive design is impractical.

Persons with disabilities have limited resources to combat digital disablement

Most of the population has limited emotional, financial and time resources to pursue every grievance they experience. People who are categorised as disabled have additional limitations as they are disabled by society. People with disabilities are often impoverished,¹⁵⁷ discriminated against in employment¹⁵⁸ and rely upon welfare.¹⁵⁹ Accordingly, people with disabilities are in the unfortunate position of having fewer resources to pursue grievances, while having more grievances that they need to pursue simply to have equal treatment.

The emotional strain on people with disabilities to continually fight for their rights has been described as advocacy fatigue. Dr Carrie Basas defines advocacy fatigue to mean ‘the increased strain on emotional, physical, material, social, and wellness resources that comes from continued exposure to system inequities and inequalities and the need to advocate for the preservation and advancement of one’s rights and autonomy.’¹⁶⁰ The intersection of limited resources, experiencing disablement and the traumas that come from reliving discrimination creates significant pressures on the decision to self-advocate for one’s rights. Accordingly, persons with disabilities need to carefully consider what grievance they will devote their limited resources to pursuing.

The premise of the social model is that impairment is turned into disability by barriers in society. While other models have recognised that the causes of disablement are more complex,

¹⁵⁶ Sandra Fredman, ‘Disability Equality: A Challenge to the Existing Anti-Discrimination Paradigm?’ in Anna Lawson and Caroline Gooding (eds), *Disability Rights in Europe: From Theory to Practice* (2005) Hart Publishing, 199, 204.

¹⁵⁷ Jeanine Braithwaite and Daniel Mont, ‘Disability and Poverty: A Survey of World Bank Poverty Assessments and Implications’ (Discussion Paper 5, World Bank, 2008).

¹⁵⁸ Paul Harpur, ‘Combating Prejudice in the Workplace with Contact Theory: The Lived Experiences of Professionals with Disabilities’ (2014) 34(1) *Disability Studies Quarterly* 1; Paul Harpur and Ben French, ‘Is it Safer Without You? Analysing the Intersection between Work Health and Safety and Anti-Discrimination Laws’ (2014) 30(1) *Journal of Health, Safety and Environment* 167; Anna Lawson, ‘Disability and Employment in the *Equality Act 2010*: Opportunities Seized, Lost and Generated’ (2011) 40(4) *Industrial Law Journal* 359, 363.

¹⁵⁹ Mark C Weber, ‘Disability Rights, Welfare Law’ (2011) 32 *Cardozo Law Review* 2483.

¹⁶⁰ Carrie Griffin Basas, ‘Advocacy Fatigue: Self-Care, Disability Discrimination, and Legal Attrition’ (2015) 33(2) *Windsor Yearbook of Access* (forthcoming).

the notion that society has a significant disabling impact on persons with different abilities remains an unfortunate reality. Some barriers by themselves will have a significant impact on the person with an impairment, and in other situations the collective impact of many small barriers to equality, which while individually are more irritating than disabling, when experienced together can have a significant disabling impact.

As discussed in chapters 1 and 7 of *Discrimination, Copyright and Equality*, there are a range of parties who may contribute to the existence of digital content that is not usable by persons with disabilities. These parties include authors, publishers, libraries, designers and manufacturers of hardware, amongst others. The difficulty in determining who should be held legally responsible is illustrated by analysing the range of parties who contribute to the barriers represented by multi-media content in an E-Book which does not include disability accessibility features. The creation of such an E-Book could occur where an author utilises information technology support at their university to assist them in designing the multi-media content. The author's publisher, who receives the E-Book, may decide not to embrace inclusive design as it might impact on the copyright of the author and others. This E-Book is then published and E-Libraries host the E-Book with multi-media content that is not accessible for persons with print disabilities. Finally, educational institutions purchase access to the E-Book and their students, including those with print disabilities, consume the E-Book on university hardware. Some hardware devices can have software settings that reduce levels of disability accessibility. With so many parties contributing to their digital disablement, how does the person with a print disability decide who to request assistance from or who may have breached anti-discrimination duties? If a person with a disability does identify the main cause of their digital disablement, has there been a legal breach where there is sufficient evidence to put before a court?

The limitations with relying on victim enforcement to combat digital disablement can be demonstrated by analysing the application of anti-discrimination laws to the above hypothetical example of an E-book with multi-media content. It is reasonable to assume that a student with a print disability would be aware that students without a disability can utilise all the features of E-Books, while such content is not accessible to persons with print disabilities. As this digital disablement can negatively impact on their education, it is probable that most students with print disabilities would identify that they have experienced an injury.

While a student (or their parents) with a print disability may name their treatment as an injury, accurately attributing blame and advocating for this injury is far more complex.¹⁶¹ The blame attribution process requires a full understanding of the actual causes of the accessibility barrier. Most persons with print disabilities are not information technology experts and could not readily understand how different pieces of hardware and software interact to reduce disability access. Even if a person identified the access problem, then they would need to attribute blame to a particular party who attracts a legal duty.¹⁶² Establishing that technology has caused discrimination can be especially challenging.¹⁶³ An additional complication in the above example is that the author, copyright holder, publisher, E-Library and educational institution

¹⁶¹ Erin Phillips, 'When Parents Aren't Enough: External Advocacy in Special Education' (2008) 117(8) *Yale Law Journal* 1802; Eloise Pasachoff, 'Special Education, Poverty, and the Limits of Private Enforcement' (2011) 86(4) *Notre Dame Law Review* 1413.

¹⁶² Belinda Smith and Dominique Allen, 'Whose Fault is it? Asking the Right Question to Address Discrimination' (2012) 37(1) *Alternative Law Journal* 31.

¹⁶³ Solon Barocas and Andrew Selbst, 'Big Data's Disparate Impact' (2016) 104 *California Law Review* (forthcoming); Mark Burdon and Paul Harpur, 'Re-Conceptualising Privacy and Discrimination in an Age of Talent Analytics' (2014) 37(2) *University of New South Wales Law Journal* 679.

could all be in different jurisdictions or even countries and be difficult or impossible to contact (if the work is an orphan work).¹⁶⁴

In addition to complicated evidential and legal issues, persons with disabilities are often vulnerable and may even require support to lodge a grievance.¹⁶⁵ Where a grievance is lodged, then power relations can result in authorities discounting the voice of the person with a disability.¹⁶⁶ To effectively agitate for their rights, persons with disabilities often require support from an advocate with disability law expertise. It can, however, be difficult to obtain the assistance of a disability rights advocate.

Furthermore, the disability rights movement has been comparatively less effective in developing strategic litigation to agitate for rights. For example, professors Michael Waterstone, Michael Ashley Stein and David Wilkins have identified the limited role of disability cause lawyers in taking key precedents to the United States Supreme Court.¹⁶⁷

Disability rights advocacy is expensive. Lawyers are expensive and there is limited funding for individuals pursuing disability discrimination public interest law suits.¹⁶⁸ One avenue to reduce costs for individuals is to pursue a class action. It is, however, increasingly difficult to have class actions certified, which reduces the potential of this option for persons with disabilities.¹⁶⁹ Disability person organisations have a history of assisting in public interest litigation.¹⁷⁰ Public interest litigation is also expensive and there is a trend to reduce public funding to support such litigation. Indeed, the seven year battle against Canada's national passenger rail provider VIA Rail nearly bankrupted the national organisation representing Canadians with disabilities.¹⁷¹ Following this litigation the level of support for disability person organisations was reduced which meant similar litigation would not be possible in the future.¹⁷² Another option would be for the state anti-discrimination commissions to be provided increased funding and to become more active. Such calls have been made before, though an increase in state enforcement has not materialised.¹⁷³

¹⁶⁴ See chapter 4 of this monograph for a discussion of orphan works.

¹⁶⁵ Eilionoir Flynn and Anna Arstein-Kerslake, 'The Support Model of Legal Capacity: Fact, Fiction, or Fantasy?' (2014) 32(1) *Berkeley Journal of International Law* 134, 135; Leslie Salzman, 'Guardianship for Persons with Mental Illness - A Legal and Appropriate Alternative?' (2011) 4 *Saint Louis University Journal of Health Law and Policy* 279, 284; Committee on the Rights of Persons with Disabilities, *General Comment No 1: Article 12: Equal Recognition before the Law*, 11th sess, UN Doc CRPD/C/GC/1 (19 May 2014) [28].

¹⁶⁶ Paul Harpur and Heather Douglas, 'Disability and Domestic Violence: Protecting Survivors' Human Rights' (2014) 23(3) *Griffith Law Review* 405.

¹⁶⁷ Michael Waterstone, Michael Ashley Stein and David Wilkins, 'Disability Cause Lawyers: Relentless Pragmatism in the Shadow of the Supreme Court' (2012) 53(4) *William and Mary Law Review* 1287; Michael Ashley Stein, Michael E Waterstone, and David B Wilkins, 'Book Review: Cause Lawyering for People with Disabilities' (2010) 123 *Harvard Law Review* 1658.

¹⁶⁸ Gary Blasi, 'Framing Access to Justice: Beyond Perceived Justice for Individuals' (2009) 42 *Loyola of Los Angeles Law Review* 913.

¹⁶⁹ Michael Ashley Stein and Michael E Waterstone, 'Disability, Disparate Impact, and Class Actions' (2006) 56(3) *Duke Law Journal* 861.

¹⁷⁰ Michael Waterstone, 'A New Vision of Public Enforcement' (2007) 92 *Minnesota Law Review* 434.

¹⁷¹ David Baker and Sarah Godwin, 'All Aboard!: The Supreme Court of Canada Confirms That Canadians with Disabilities have Substantive Equality Rights' (2008) 71(1) *Saskatchewan Law Review* 39.

¹⁷² *Ibid* 72.

¹⁷³ Dominique Allen, 'Strategic Enforcement of Anti-Discrimination Law: A New Role for Australia's Equality Commissions' (2010) 36(3) *Monash University Law Review* 103; Paul Harpur, Ben French and

Introducing the concept of positive duties

The realisation that a new approach was required to advance the struggle for equality resulted in calls for new regulatory approaches. Where the traditional anti-discrimination model largely required duty holders to refrain from conduct, positive duties focus on duty holders taking proactive action to reduce the creation of inequalities in society. Positive duties do not focus on attributing blame, but on identifying what parties in society can help reduce inequalities and requiring them to take action.¹⁷⁴ Positive duties embrace a significantly different regulatory approach than that reflected in traditional negative duties. This different approach has arguably resulted in improved equality outcomes.¹⁷⁵

The resilience of inequalities has led to a body of scholarship which argues that positive duties are required to enable everyone in society to fully exercise their human rights.¹⁷⁶ How these positive duties should be operationalised has attracted a rich body of scholarship. Professor Susan Sturm has argued that a structural approach is required to reduce more subtle forms of discrimination.¹⁷⁷ Sturm argues that the structuralism approach requires a regulatory ‘approach that encourages the development of institutions and processes to enact general norms in particular contexts.’¹⁷⁸ Professor Sandra Fredman has argued that equality laws should focus on all parties who impact on inclusion rather than focusing on defined relationships.¹⁷⁹ The concept of positive duties reflects a market-based management response to addressing inequalities in society.

Arguably one of the most effective processes to achieve continuous change is through management systems. In their seminal work, Professors Cary Coglianese and David Lazer explained the regulatory criteria for effective systems-based regulation.¹⁸⁰ An effective management-based process will contain processes to identify hazards, processes to mitigate the hazards identified, procedures for monitoring and correcting problems, training policies for

Richard Bales, ‘Australia’s *Fair Work Act* and the Transformation of Workplace Disability Discrimination Law’ (2012) 30 *Wisconsin International Law Journal* 190; Paul Harpur, Ben French and Richard Bales, ‘Australia’s Solution to Disability Discrimination Enforcement’ (2011) 31 *Cornell HR Review* 1; Pauline T Kim, ‘Panel V: Proving Discrimination: Addressing Systemic Discrimination: Public Enforcement and the Role of the EEOC’ (2015) 95(3) *Boston University Law Review* 1133; Margo Schlanger, ‘The Equal Employment Opportunity Commission and Structural Reform of the American Workplace’ (2014) 91 *Washington University Law Review* 1519; Belinda Smith, ‘Not the Baby and the Bathwater: Regulatory Reform for Equality Laws to Address Work-Family Conflict’ (2006) 28(4) *Sydney Law Review* 689.

¹⁷⁴ Sandra Fredman, ‘Evolutions in Antidiscrimination Law in Europe and North America: Breaking the Mold: Equality as a Proactive Duty’ (2012) 60 *The American Journal of Comparative Law* 265, 266.

¹⁷⁵ See chapters 9 and 10 of Paul Harpur, *Discrimination, Copyright and Equality: Opening the E-Book for the Print Disabled* (2017) Cambridge University Press.

¹⁷⁶ Frank Dobbin and Alexandra Kalev, ‘Multi-Disciplinary Responses to Susan Sturm’s the Architecture Of Inclusion: The Architecture of Inclusion: Evidence from Corporate Diversity Programs’ (2007) 30 *Harvard Journal of Law and Gender* 279; Sandra Fredman, ‘Breaking the Mold: Equality as a Proactive Duty’ (2012) 1 *American Journal of Comparative Law* 265; Samuel R Bagenstos, ‘The Structural Turn and the Limits of Antidiscrimination Law’ (2006) 94 *California Law Review* 1.

¹⁷⁷ Susan Sturm, ‘Second Generation Employment Discrimination: A Structural Approach’ (2001) 101 *Columbia Law Review* 458.

¹⁷⁸ *Ibid* 463.

¹⁷⁹ Sandra Fredman, ‘Combating Racism with Human Rights’ in Sandra Fredman (ed), *Discrimination and Human Rights: the Case of Racism* (2001) Oxford University Press, 27.

¹⁸⁰ Cary Coglianese and David Lazer, ‘Management-Based Regulation: Prescribing Private Management to Achieve Public Goals’ (2003) 37 *Law and Society Review* 691, 694.

implementation and measures for evaluating and refining the system.¹⁸¹ Legislative reforms and scholarship that embraces positive duties to combat inequalities in society embrace the concept that the regulatory focus should move away from the state prohibiting conduct, and instead turn to finding vehicles to empower and motivate parties to find strategies to achieve equality outcomes.

An effective equality intervention should find strategies to motivate regulated parties to be actively involved with increasing levels of compliance.¹⁸² Once the cause of disablement is identified, then the question should be who has the capacity, directly or indirectly, to help reduce that barrier. Traditional anti-discrimination duties prohibit parties in prescribed relationships from engaging in discrimination. While these duties required duty holders to make reasonable adjustments to enable access once systems were established, chapter 8 identified that this did not always result in equal access.

Under the management-based approach equality issues are not addressed after a system is created, but instead during the planning, implementation and operation of the system. This means duty holders are more likely to identify and manage barriers to equality throughout the process. For example, suppose there were two E-Book platforms which provided access to the same titles for the same cost, but one embraced universal design and the other was not accessible for persons with disabilities. Under the traditional anti-discrimination model a duty holder generally could purchase either system and would then need to consider disability access once the system was in place. The management-based approach, in contrast, would include disability accessibility as a factor in the decision making process when determining which E-Book platform to purchase. While this process will not guarantee equality, there is an increased probability that the E-Book platform which embraced universal design would be purchased.

¹⁸¹ Ibid.

¹⁸² Fiona Haines, *The Paradox of Regulation: What Regulation Can Achieve and What it Cannot* (2011) Edward Elgar, 10-20.