ARTICLE

A HATER'S GUIDE TO GEOBLOCKING

PETER K. YU^{*}

CONTENTS

INTRODUCTION	
I. AGAINST GEOBLOCKING	
II. TOWARD GLOBAL ACCESS	
III. FIVE MODEST PROPOSALS	
A. Tailored Blocking	
B. Geocircumvention Exception	
C. Geographic Redirects	
D. Access Portability	
E. Voluntary Geoblocking	
CONCLUSION	

^{*} Copyright © 2019 Peter K. Yu. Professor of Law, Professor of Communication, and Director, Center for Law and Intellectual Property, Texas A&M University. Earlier versions of this Article were presented at the Symposium on "Intellectual Property in a Globalized Economy: United States Extraterritoriality in International Business" at Boston University School of Law, organized by the *Boston University Journal of Science & Technology Law* and the *Boston University International Law Journal*, and at the 9th Annual Internet Law Works-in-Progress Conference at Santa Clara University School of Law. The Author is grateful to the participants of these events for their valuable comments and suggestions.

B.U.J. SCI. & TECH.L.

[Vol. 25:2

INTRODUCTION

Geoblocking restricts access to online content based on the user's geographical location.¹ Territorially based access control is strongly disliked, if not passionately hated, by those who frequently travel abroad as well as those who consume a considerable amount of foreign content.² While geoblocking appears to be primarily a first-world issue, affecting only a small number of rich or well-educated individuals in Europe, the United States, and other developed countries,³ it has serious ramifications for access to information and knowledge in both developed and developing countries.⁴ Geoblocking also harms the poor,

Geoblocking enables rights holders and intermediaries to segment the Internet into different markets and charge different prices (or offer different services) to consumers based on their location. This facilitates geography based price discrimination. While the original purpose of copyright was to prevent copying, geoblocking allows rights holders to control copying and the distribution of copyright material. Copyright, exclusive licensing and geoblocking can work together to further strengthen the ability of rights holders and their intermediaries to control distribution and thereby price discriminate.

PRODUCTIVITY COMM'N, INTELLECTUAL PROPERTY ARRANGEMENTS: PRODUCTIVITY COMMISSION INQUIRY REPORT 142 (2016) (Austl.) (citation omitted).

² See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: "A Digital Single Market Strategy for Europe," at 6, COM(2015) 192 final (May 6, 2015) [hereinafter A Digital Single Market Strategy for Europe] ("By limiting consumer opportunities and choice, geo-blocking is a significant cause of consumer dissatisfaction and of fragmentation of the Internal Market."); see also Peter K. Yu, Anticircumvention and Anti-anticircumvention, 84 DENV. U. L. REV. 13, 75 (2006) ("From the standpoint of consumers, . . . region codes can be annoying, especially to frequent travelers or foreign film or anime aficionados, whose interests have yet to generate a big enough market to facilitate domestic distribution.").

³ See Tal Kra-Oz, Geoblocking and the Legality of Circumvention, 57 IDEA 385, 416 n.91 (2017) ("While . . . significant expat communities resort to circumvention in order to access content from back home, it seems that the routes of most 'cybertravellers', similar to real-world immigration patterns, travel in the direction of first world countries where services such as Netflix are most readily available.").

⁴ See STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, HOUSE OF REPRESENTATIVES, AT WHAT COST? IT PRICING AND THE AUSTRALIA TAX 34–36 (2013) (Austl.) (discussing the negative impact of the so-called "Australia tax" in the information technology area — or the higher prices resulting from geoblocking, regional pricing strategies, and other factors — on Australian consumers with low incomes); Saïd Aghrib et al., *Morocco, in* ACCESS TO KNOWLEDGE IN AFRICA: THE ROLE OF COPYRIGHT 126, 156 (Chris Armstrong et al. eds., 2010) ("[E]xceptions and limitations relating to parallel importation should be introduced to allow for the free importation of works that are already distributed abroad by the rights-holder at a lower price than in Morocco."); *see also* STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, *supra* note 4, at 15 ("The practical effect of geoblocking from the Australian

¹ As the Australian Productivity Commission defined:

Geoblocking is the practice of restricting a consumer's access to websites and digital goods and services within their "home market". Geoblocking can be implemented via a range of technologies including Internet addresses, credit card numbers and other means of electronic identification.

505

including immigrant families, in countries with some of the world's highest incomes.⁵

In the past two decades, the arrival of the Internet, social media, and other new communications technologies has made geographical copyright restrictions highly ineffective.⁶ Although disruptive technologies have broken many traditional access barriers — such as geographical, temporal, economic, linguistic, legal, and technological⁷ — the copyright industries and their supportive governments have worked hard to "reterritorialize" access control by retrofitting national boundaries to the borderless digital environment.⁸ While the past has seen the use of geoblocking as technological self-help,⁹ this form of geographical access control has growing support from policymakers and judges.¹⁰

Part I of this Article briefly recounts five sets of arguments against geoblocking, highlighting the many shortcomings of territorially based access restrictions. While governments with high information control policies have used blocking and filtering techniques, including geoblocking, to prevent citizens and foreign residents from accessing subversive, politically sensitive, or

⁷ See generally Peter K. Yu, A Seamless Global Digital Marketplace of Media and Entertainment Content, in RESEARCH HANDBOOK ON INTELLECTUAL PROPERTY IN MEDIA AND ENTERTAINMENT 265, 266–76 (Megan Richardson & Sam Ricketson eds., 2017) [hereinafter Yu, Seamless Digital Marketplace] (discussing six types of access barrier that the Internet and new communications technologies have broken in the digital environment).

⁸ See DAVID DELANEY, TERRITORY: A SHORT INTRODUCTION 2, 15 (2008) (advancing the concepts of "reterritorialization" and "deterritorialization").

⁹ See discussion infra Part III.E.

¹⁰ See, e.g., Spanski Enters., Inc. v. Telewizja Polska, S.A., 883 F.3d 904, 918 (D.C. Cir. 2018) (finding infringement based on the defendant's failure to prevent U.S. viewers from accessing over fifty episodes of Polish-language TV programming according to the licensing agreement).

consumer's perspective is to restrict access to a cheaper global marketplace."); FREDERICK M. ABBOTT, PARALLEL IMPORTATION: ECONOMIC AND SOCIAL WELFARE DIMENSIONS 6 (2007), https://www.iisd.org/pdf/2007/parallel_importation.pdf [https://perma.cc/C9SK-E85N] ("Retail sellers seeking to provide consumers with goods at low prices favour open parallel importation because this enables them to purchase supplies at the lowest prices available on the world market.").

⁵ See Peter K. Yu, *Region Codes and the Territorial Mess*, 30 CARDOZO ARTS & ENT. L.J. 187, 227 (2012) [hereinafter Yu, *Region Codes*] (discussing how DVD region codes have affected immigrant families).

⁶ See Justice [Robin] Jacob, International Intellectual Property Litigation in the Next Millennium, 32 CASE W. RES. J. INT'L L. 507, 516 (2000) ("[A]s time goes on, . . . the world will realize that at least for intellectual property the days of the nation-state are over."); Peter K. Yu, A Spatial Critique of Intellectual Property Law and Policy, 74 WASH. & LEE L. REV. 2045, 2111 (2017) [hereinafter Yu, Spatial Critique] ("The introduction of the Internet and other new communications technologies has greatly eroded — or 'deterritorialized' — the traditional boundaries used to protect intellectual property rights." (footnote omitted)).

B.U.J. SCI. & TECH. L.

[Vol. 25:2

otherwise unauthorized content,¹¹ this Article focuses primarily on the geoblocking of copyrighted content. Part II draws on the latest developments in Europe and at the World Intellectual Property Organization (WIPO), reiterating the need for copyright holders to adopt strategies to disseminate copyrighted content at the global level. Part III responds to the copyright industries' increasing demands for the use of geoblocking to protect this valuable content. Although this Part recognizes their continuous preferences for geographically segmented markets, it also calls for a more appropriate balance between proprietary control and user access. Specifically, it identifies five distinct ways for policymakers, judges, and rights holders to shape geoblocking remedies.

I. AGAINST GEOBLOCKING

Geoblocking is generally supported by two widely cited arguments. First, the territorial nature of intellectual property rights¹² gives rights holders the ability to control how copyrighted content is accessed, including whether such content will be available in the user's geographical location. Second, geoblocking supports local industries by shielding them from foreign competition, especially from Hollywood and other major content producers in developed countries.¹³ In the Australian geoblocking debate, for instance, the local cultural industries expressed deep concern about the influx of foreign copyrighted content and its drastic negative impact on local creative production.¹⁴

¹¹ See generally ACCESS DENIED: THE PRACTICE AND POLICY OF GLOBAL INTERNET FILTERING (Ronald Deibert et al. eds., 2008) (documenting Internet blocking and filtering practices in different parts of the world).

¹² See generally Peter K. Yu, Towards the Seamless Global Distribution of Cloud Content, in PRIVACY AND LEGAL ISSUES IN CLOUD COMPUTING 180, 181–86 (Anne S.Y. Cheung & Rolf H. Weber eds., 2015) [hereinafter Yu, *Cloud Content*] (discussing territorially based rights in the context of cloud computing); Graeme B. Dinwoodie, *Trademarks and Territory: Detaching Trademark Law from the Nation-State*, 41 HOUS. L. REV. 885, 887–88 (2004) (discussing the principle of territoriality in the trademark context); Yu, *Spatial Critique, supra* note 6, at 2064–67 (discussing the principle of territoriality).

¹³ See Batia M. Zareh, Dr. Strange Geo-Blocking Love or: How the E.U. Learned to Stop Worrying About Cultural Integration and Love the TV Trade Barrier, 41 COLUM. J.L. & ARTS 225, 225–26 (2018) ("[T]he decades-old practice of regional contractual restrictions and geoblocking is both consistent with and a direct result of the E.U.'s protectionist and paternalistic efforts to shield its individual member states' local production entities from competition and its populations from a perceived and decidedly unwelcomed Svengali-like juggernaut of American cultural influence.").

¹⁴ The Australian Productivity Commission highlighted the following views in its final report:

The Australian domestic market will be completely undercut by local consumers accessing content offshore. The long term effects will be the weakening of Australian business models. This will have an adverse impact on investment and innovation as investors and content creators will not have an incentive to produce and invest in Australian content and business models. This will damage the competitiveness of Australia in the digital economy. (The Australian Recording Industry Association . . .)

Notwithstanding these two primary justifications, five arguments militate against the introduction of geoblocking. First, geoblocking hurts consumers by preventing those who travel abroad — for work, study, or other reasons — from accessing content they have paid for or have already obtained access to at home. A case in point is the struggle experienced by European commuters or vacationers when they have to juggle copyright access restrictions while traveling across national boundaries.¹⁵ In addition, geoblocking prevents users from accessing foreign copyrighted content that is of interest or importance to them. Oftentimes, content providers, such as movie producers and TV studios, make product release decisions based on the overall market size. In some small markets, the existence of a small group of customers is simply insufficient to entice these copyright holders to enter the market. Without foreign access, individuals in these markets will have no access to the protected content even when they are willing to pay for it. Should the content arrive locally, consumers may also be charged excessive prices¹⁶ due to a lack of competition from parallel

PRODUCTIVITY COMM'N, supra note 1, at 143-44.

¹⁵ The European Commission noted the following benefits of the new EU regulation on cross-border portability of online content services:

the Committee concluded that many [information technology] products are more expensive in Australia because of regional pricing strategies implemented by major vendors and

[[]I]t is unlikely that Australian content businesses will have the resources to acquire global distribution rights to international content, as Australia is a relatively small player in the international market and there are significantly larger distribution companies internationally that operate on either a global or a multi-territory basis. This may lead to the elimination of local services and in turn, a dramatic reduction in the production of local Australian television content, given that such content is unlikely to be commissioned on a regular basis by international distributors. (Foxtel . . .)

Australia's free to air networks rely on, and pay for Australian rights for the major US TV shows to generate 25 viewers and advertising. This, in turn, places a requirement on the network to invest in local productions under government licence models. If Australians access all their content offshore, then the local networks will surely wither and die. (The Australian Home Entertainment Distributors Association . . .)

Th[is] regulation will enable consumers to access their online content services when they travel in the EU the same way they access them at home. For instance, when a French consumer subscribes to Canal+ film and series online services, the user will be able to access films and series available in France when he or she goes on holidays to Croatia or for a business trip to Denmark.

European Commission Press Release, Digital Single Market: EU Negotiators Agree on New Rules Allowing Europeans to Travel and Enjoy Online Content Services Across Borders (Feb. 7, 2017), http://europa.eu/rapid/press-release_IP-17-225_en.htm [https://perma.cc/HXC4-E5CD].

¹⁶ See INTELLECTUAL PROP. & COMPETITION REVIEW COMM., REVIEW OF INTELLECTUAL PROPERTY LEGISLATION UNDER THE COMPETITION PRINCIPLES AGREEMENT 62 (2000), https://www.ipaustralia.gov.au/sites/g/files/net856/f/ergas_report_september_2000.pdf [https://perma.cc/576F-UCYR] ("A supplier of [copyright material] with some degree of market power, and the ability to price-discriminate internationally, would likely set higher prices in the Australian market than elsewhere."); STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, *supra* note 4, at vii ("Particularly when it comes to digitally delivered content,

B.U. J. SCI. & TECH. L.

[Vol. 25:2

imports — that is, goods that are imported, usually at discount prices, from abroad without the authorization of local rights holders.¹⁷

Second, geoblocking prevents copyright holders from maximizing income and expanding markets. As noted earlier, some individuals in foreign markets have been eager to pay copyright holders for access to the protected content.¹⁸ Unable to obtain local access, some of these individuals have turned to thirdparty providers that charge subscription fees, but do not share revenue with copyright holders.¹⁹ Those disrespectful of copyright law have also turned to pirate channels, such as unauthorized websites²⁰ or streaming devices.²¹ In either situation, copyright holders lose valuable opportunities to monetize the protected content. As Pink Floyd's first manager reminded us: "The flagrant spread of 'Internet piracy' in developed countries is a reflection of the failure of the industry as a whole to develop an appropriate copyright response to the

¹⁹ See Yu, Seamless Digital Marketplace, supra note 7, at 268 ("[T]hird-party subscription-based services, such as My Expat Network, have provided foreign television programming to paying subscribers."); see also Marketa Trimble, The Future of Cybertravel: Legal Implications of the Evasion of Geolocation, 22 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 567, 603 (2012) [hereinafter Trimble, Future of Cybertravel] (discussing My Expat Network). Other third-party services include those "retransmit[ting] television programs themselves (e.g., ivi in the United States, TV CatchUP in the United Kingdom, shiftTV in Germany, and ManekiTV in Japan)... [and those] enabl[ing] users to share retransmission of television programs (e.g., Justin.tv and WorldTV)." Id. at 573–74.

²⁰ See Yu, Region Codes, supra note 5, at 235–36 ("A . . . group of viewers turn to unauthorized streaming sites on the internet, even though many of these viewers would have been willing to pay a monthly subscription fee in the first place.").

copyright holders."); *id.* at 17–20 (documenting the systemic price discrimination against Australian consumers across a range of information technology products, including professional software, hardware, music, games, and e-books).

¹⁷ See Yu, Spatial Critique, supra note 6, at 2067–73 (discussing parallel importation and the doctrine of exhaustion of rights).

¹⁸ See Paula Dootson & Nicolas Suzor, *The Game of Clones and the Australia Tax: Divergent Views About Copyright Business Models and the Willingness of Australian Consumers to Infringe*, 38 UNSW L.J. 206, 225 (2015) ("One of the most interesting themes to emerge from our research is that faced with access barriers, consumers will often seek to circumvent those barriers in order to pay for access.").

²¹ As Justice Richard Arnold observed in *The Football Association Premier League Ltd v. British Telecommunications PLC*:

[[]C]onsumers are increasingly turning to set-top boxes, media players (such as the popular Amazon Fire TV Stick) and mobile device apps to access infringing streams, rather than web browsers running on computers. . . . [These devices] are easy to connect to domestic televisions. Software to access suitable streams (in particular, software known as Kodi together with third-party add-ons) has become much easier to find and install. Indeed, it is increasingly easy to purchase set-top boxes and other devices which are already loaded with such software. Moreover, sources of infringing content often update automatically.

The Football Ass'n Premier League Ltd v. British Telecomms. PLC [2017] EWHC (Ch) 480 [11]–[12] (Eng.).

distribution and remuneration options made possible by the new technologies."²² Likewise, William Patry observed, "[s]uccessful Internet business models are based on satisfying consumer preferences, honed and targeted through information provided by consumers. Such business models offer more choices, more consumer satisfaction (since they are based on consumers' own preferences), and therefore ultimately lead to greater revenue."²³

Third, geoblocking harms society by raising privacy and free speech concerns. While region- and country-based access control is unlikely to spark major concerns, restrictions of a finer grain, such as those based on specific Internet protocol addresses or Global Positioning System coordinates, could be highly intrusive. Even worse, geoblocking prevents individuals in foreign countries from accessing content that is important for political, social, cultural, or educational purposes. Although this Article focuses on the geoblocking of copyrighted content, it is worth noting that most censored content is copyright protection as a handy pretext to legitimate their controversial actions.²⁴ One may still recall the widely discussed *New York Times* reports about the Russian authorities' confiscation of computers from outspoken activist groups and

²² GREG KOT, RIPPED: HOW THE WIRED GENERATION REVOLUTIONIZED MUSIC 2 (2009) (quoting Peter Jenner, Pink Floyd's first manager); *see also* WILLIAM PATRY, HOW TO FIX COPYRIGHT 183 (2011) ("[A]s much attention as unauthorized uses on the Internet receive, the largest problems facing authors today are not unauthorized uses but the obstacles put in the way of buyers willing to pay for access to or copies of the work. These obstacles have caused a huge loss of income for composers, performers, and photographers (given the sheer volume of works they create).").

²³ WILLIAM PATRY, MORAL PANICS AND THE COPYRIGHT WARS 11 (2009).

²⁴ See Rebecca MacKinnon, Consent of the Networked: The Worldwide Struggle FOR INTERNET FREEDOM 105 (2012) ("Especially in China, strong pressure from the US Trade Representative and US business groups to crack down on copyright violation has had the unfortunate — if unintended — consequence of complementing the Chinese government's efforts to stifle dissent."); William P. Alford, Making the World Safe for What? Intellectual Property Rights, Human Rights and Foreign Economic Policy in the Post-European Cold War World, 29 N.Y.U. INT'L L. & POL. 135, 144-45 (1997) (noting that the U.S. coercive trade policy provided China with "a convenient legitimization" for its repressive measures while constraining the United States' capacity to complain about such actions); Robert S. Rogoyski & Kenneth Basin, The Bloody Case That Started from a Parody: American Intellectual Property Policy and the Pursuit of Democratic Ideals in Modern China, 16 UCLA ENT. L. REV. 237, 239 (2009) (arguing that "existing American foreign policy objectives with respect to intellectual property have been in conflict with American democratic ideals and democratic foreign policy objectives"); Peter K. Yu, Three Questions That Will Make You Rethink the U.S.-China Intellectual Property Debate, 7 J. MARSHALL REV. INTELL. PROP. L. 412, 424–32 (2008) (discussing how the United States' foreign intellectual property policy has greatly undermined its efforts to promote free flow of information and ideas in China).

B.U. J. SCI. & TECH. L.

[Vol. 25:2

opposition newspapers in the name of protecting Microsoft's copyrighted software.²⁵

Fourth, geoblocking is technologically deficient. A key lesson from the digital rights management debate is that no fool-proof technological protection measure exists.²⁶ As a result, those deploying geoblocking technology to protect copyrighted content are forced to engage in a wasteful arms race that diverts resources from creative production to content protection.²⁷ Worse still,

²⁶ See Competition, Innovation, and Public Policy in the Digital Age: Is the Marketplace Working to Protect Digital Creative Works?: Hearing Before the S. Comm. on the Judiciary, 107th Cong. 89-92 (2002) (testimony of Edward W. Felten, Associate Professor of Comput. Sci., Princeton Univ.) (noting that "strong encryption" techniques that a moderately skilled person cannot break do not exist in the real world); Fred von Lohmann, Measuring the Digital Millennium Copyright Act Against the Darknet: Implications for the Regulation of Technological Protection Measures, 24 LOY. L.A. ENT. L. REV. 635, 638 (2004) ("Proponents of the [Digital Millennium Copyright Act]'s anticircumvention provisions were not naive about the technological infallibility of [technological protection measures]. They admitted that no technology would be foolproof against every hacker bent on compromising it."); Pamela Samuelson, DRM (and, or, vs.) the Law, COMM. ACM, Apr. 2003, at 41, 43 (stating that "no DRM technology is hacker-proof"); Dan Jerker B. Svantesson, How Does the Accuracy of Geo-Location Technologies Affect the Law, 2 MASARYK U. J.L. & TECH. 11, 15 (2008) [hereinafter Svantesson, Accuracy of Geo-Location Technologies] ("It will presumably always be possible to circumvent geoidentification and it is therefore unreasonable to demand that e.g. website operators use technologies that are leakage-free."); Yu, Anticircumvention and Anti-anticircumvention, supra note 2, at 23 (noting that "there are no perfect, hacker-proof [digital rights management] systems").

²⁷ I described this endless arms race in an earlier article:

Although copy protection technologies allow copyright holders to lock up creative works, these technologies lose their protective function when they are decrypted. Even worse, once the decryption key is disclosed, the copyrighted work will become available not only to those "techies" who successfully broke the code but also to unsophisticated users around the world. . . . To prevent the public from breaking the copy protection technology, copyright holders must constantly upgrade their technology. Such upgrading, unfortunately, will further attract the attention of hackers, who are eager to tinker with the latest technology. Eventually, the repeated encryption and decryption will create a vicious cycle in which the entertainment industry and the hacker community engage in an endless copy protection arms race.

Peter K. Yu, *P2P and the Future of Private Copying*, 76 U. COLO. L. REV. 653, 722–24 (2005) (footnotes omitted); *see also* Jane C. Ginsburg, *Copyright Legislation for the "Digital Millennium*," 23 COLUM.-VLA J.L. & ARTS 137, 153 (1999) (stating that an "arms race wastes creative resources that might be better directed toward creating original works of authorship, rather than devices that promote piracy"); Trotter Hardy, *Property (and Copyright) in*

²⁵ Clifford J. Levy, Using Microsoft, Russia Suppresses Dissent, N.Y. TIMES (Sept. 11, 2010), https://www.nytimes.com/2010/09/12/world/europe/12raids.html [https://perma.cc/QJN2-CZ7A] (providing the initial report); Clifford J. Levy, Microsoft Changes Policy amid Criticism It Backed Suppression of Dissent in Russia, N.Y. TIMES (Sept. 13, 2010), https://www.nytimes.com/2010/09/14/world/europe/14raid.html [https://perma.cc/2ZQS-MTDD] (providing a follow-up to the initial report); see also Peter K. Yu, Moral Rights 2.0, 1 TEX. A&M L. REV. 873, 890–91 (2014) (discussing these reports).

geoblocking is easy to circumvent. Many foreign Netflix subscribers already use proxies, unblockers, and virtual private networks (VPNs) to access foreign movies and TV shows that are not available through local Netflix accounts.²⁸ Interestingly, the use of geocircumvention tools has hurt Netflix by stunting the growth of its foreign subscribers, whose use of proxy servers and VPNs has caused them to be counted as U.S. subscribers.²⁹

Finally, geoblocking reflects a deeply divided issue that has not achieved international consensus. At the negotiation of the Agreement on Trade-Related Aspects of Intellectual Property Rights³⁰ (TRIPS Agreement) in the late 1980s and early 1990s, countries could not agree on the appropriate protection against parallel importation.³¹ As a result, they had no choice but to "agree to disagree"

Proxy servers and VPNs create an encrypted tunnel between a customer's computer and a server elsewhere, usually in another country. The customer's internet traffic is routed through that server and as a result vendor websites recognise the [Internet protocol] address of the server, rather than that of the customer, which may enable consumers to access content that would otherwise be region-blocked.

STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, supra note 4, at 103.

²⁹ As one reporter observed:

Cyberspace, 1996 U. CHI. LEGAL F. 217, 251 (discussing the "wasteful 'arms race' of technological-protection schemes, with each side increasing its spending to outperform the other's technology"); Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 319–20 (2002) (discussing an expensive and unending technological arms race).

²⁸ See Peter K. Yu, *Netflix's VPN Ban Cannot Cure TV Studios' Chronic Headaches*, CONVERSATION (Feb. 1, 2016), https://theconversation.com/netflixs-vpn-ban-cannot-cure-tvstudios-chronic-headaches-50833 [https://perma.cc/EZ5S-472J] (discussing Netflix's ban on proxies, unblockers, and VPNs); see also Sabrina Earle, Note, *The Battle Against Geo-Blocking: The Consumer Strikes Back*, 15 RICH. J. GLOBAL L. & BUS. 1, 11–12 (2016) (discussing the "Global Mode" provided by Slingshot, an Internet service provider in New Zealand, that allows access to content worldwide without territorially based geographical restrictions). As an Australian parliamentary report explained:

When a VPN directs your internet traffic through the US to get American content, that's good for US subscriber numbers. With the US market now virtually at saturation point in terms of customers acquisition, Netflix has been turning its eyes to the global markets for growth. With VPN access shut off, all those US subscribers are now going to come up as customers in the UK, Australia, South Korea, Afghanistan, Antarctica, Burkina Faso . . . and so on. It's an impressive list for investors and an impressive list for a company looking to prove its global market dominance.

Claire Reilly, *Why You Can't Have Everything: The Netflix Licensing Dilemma*, CNET (Jan. 14, 2016), https://www.cnet.com/news/why-you-cant-have-everything-the-netflix-licensing-dilemma/ [https://perma.cc/GSZ4-P96Z].

³⁰ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement].

³¹ See Jayashree Watal, From Punta del Este to Doha and Beyond: Lessons from the TRIPS Negotiating Processes, 3 WIPO J. 24, 26 (2011) ("[S]ome Commonwealth members, Hong Kong, China, Singapore, New Zealand and Australia, took the initiative on the exclusion of

B.U. J. SCI. & TECH. L.

[Vol. 25:2

over the exhaustion of intellectual property rights.³² Instead of mandating or forbidding such exhaustion, Article 6 of the TRIPS Agreement merely states that the mandatory WTO dispute settlement process will not be "used to address the issue of the exhaustion of intellectual property rights."³³ Described as the digital equivalent of a ban on parallel importation, geoblocking is an extension of this international debate.³⁴ While content streaming differs significantly from content distribution, such as in relation to ownership³⁵ and exhaustion,³⁶ the lack of international consensus on exhaustion and parallel importation has made it difficult to set laws and policies on geographical access control.³⁷ After all, any effort to facilitate such control will affect not only individuals and businesses in the home country but also those in other countries.³⁸

³² See generally Vincent Chiappetta, *The Desirability of Agreeing to Disagree: The WTO, TRIPs, International IPR Exhaustion and a Few Other Things*, 21 MICH. J. INT'L L. 333 (2000) (contending that the "agreement to disagree" embodied in the TRIPS Agreement actually represents the appropriate international outcome rather than the product of a failed negotiation); S.K. Verma, *Exhaustion of Intellectual Property Rights and Free Trade — Article 6 of the TRIPs Agreement*, 29 INT'L REV. INDUS. PROP. & COPYRIGHT L. 534 (1998) (discussing Article 6 of the TRIPS Agreement in relation to the debate on exhaustion of intellectual property rights).

³³ TRIPS Agreement, *supra* note 30, art. 6.

³⁴ See Shaun Woo Jian Ming, *Geoblocking, VPN, and Copyright*, 35 SING. L. REV. 66, 93 (2017) ("Circumventing geoblocks might be seen as the functional equivalent of parallel importation in the Internet age, as it enables consumers to access copyright works or other subject-matter once it has been put on the Internet anywhere in the world." (footnote omitted)); Siau Ming En, *Govt Looks into Whether VPN Technology Should Be Outlawed*, TODAY (Sing.) (Aug. 22, 2016), https://www.todayonline.com/singapore/creator-rights-part-changes-under-review-copyright-act [https://perma.cc/LSC5-VQMP] (reporting that the chief executive of Intellectual Property Office of Singapore, Daren Tang, "likened VPN technology as a 'digital equivalent of parallel imports").

³⁵ See Kra-Oz, supra note 3, at 393 (describing "the difference between ownership and licensing" as "the key difference between DVDs and streaming content"); see also Peter K. Yu, *How Copyright Law Could Affect Pop Music Without Our Knowing It*, 83 UMKC L. REV. 363, 394–97 (2014) (discussing whether digital downloads are sales or licenses).

³⁶ See sources cited *infra* note 52.

³⁷ See Yu, *Region Codes*, *supra* note 5, at 250 (noting "the wide and longstanding disagreement among WTO member states over what exhaustion rules should apply").

³⁸ See supra text accompanying notes 16 and 24 (discussing how geoblocking would prevent individuals in foreign countries from accessing local content); see also Marketa Trimble, *Geoblocking and "Legitimate Trade*," in INTELLECTUAL PROPERTY RIGHTS AS OBSTACLES TO LEGITIMATE TRADE 53 (Christopher Heath et al. eds., 2018) (discussing geoblocking in relation to territorial restrictions on trade).

the subject of parallel trade from dispute settlement, thus retaining the pre-existing flexibility on differing national policies." (footnote omitted)); Yu, *Spatial Critique, supra* note 6, at 2070 (noting that during the TRIPS negotiations, developed and developing countries failed to reach a consensus on the appropriate international standard concerning the exhaustion of intellectual property rights).

2019]

A HATER'S GUIDE TO GEOBLOCKING

II. TOWARD GLOBAL ACCESS

In view of these arguments and the many problems generated by geoblocking, policymakers and commentators alike have called for greater global distribution of copyrighted content. In his welcoming address at the 2013 WIPO General Assembly, Director General Francis Gurry noted the importance of creating "a seamless global digital marketplace" for copyrighted content.³⁹ In a follow-up interview with the *Intellectual Property Watch* a few months later, Gurry explained:

For as long as it is easier to get content illegally than it is to get it legally, there is an encouragement to piracy. We have to make the conditions to get it legally better than illegally and that is the global digital marketplace.

Let me give you [an] example: if one of the HBO series comes out in a new season in, for example, the US but is not available in the new season in certain other countries. What do people do? Do they wait patiently for three months? No, because they are addicted! So this is where I think our objective ought [to] be a seamless global legal digital marketplace and I think everyone has agreed on this.⁴⁰

Drawing on this proposal, I outlined in an earlier work five distinct paths toward establishing this "seamless global digital marketplace": "[1] a global multi-stakeholder dialogue, [2] international treaty negotiations, [3] domestic law developments, [4] private ordering and [5] technological intervention."⁴¹ While all of these paths have their strengths and weaknesses, their non-mutually-exclusive nature allows a combination of them to be used at the same time.⁴² Providing multijurisdictional access in this proverbial marketplace is important because "[i]n today's age, . . . consumers [increasingly] expect content to be accessible anywhere, anytime."⁴³

To a large extent, these proposals have coincided with the recent trends on copyright developments at both the regional and international levels. In the past few years, members of the European Union have worked tirelessly to establish

⁴² See Yu, Seamless Digital Marketplace, supra note 7, at 279 ("Because [the five paths advanced in this book chapter] are not mutually exclusive, reforms can be introduced through several paths at the same time.").

³⁹ 2013 Address by the Director General, WIPO (Oct. 2, 2013), https://www.wipo.int/about-wipo/en/dgo/speeches/a_51_dg_speech.html [https://perma.cc/76J6-8A9L].

⁴⁰ Catherine Saez, *WIPO Director Gurry Speaks on Naming New Cabinet, Future of WIPO*, INTELL. PROP. WATCH (May 8, 2014), https://www.ip-watch.org/2014/05/08/wipo-director-gurry-speaks-on-naming-new-cabinet-future-of-wipo [https://perma.cc/9T92-PY5H].

⁴¹ Yu, *Seamless Digital Marketplace, supra* note 7, at 279; *see also* Yu, *Cloud Content, supra* note 12, at 199–212 (identifying five areas in which law and policy adjustments can be introduced to promote the seamless global distribution of cloud content).

⁴³ *Id.* at 277.

B.U.J. SCI. & TECH. L.

[Vol. 25:2

a digital single market.⁴⁴ Particularly notable was the adoption of two new regulations: Regulation 2017/1128 and Regulation 2018/302.⁴⁵ Adopted in June 2017, Regulation 2017/1128

introduce[d] a common approach . . . to the cross-border portability of online content services, by ensuring that subscribers to portable online content services which are lawfully provided in their Member State of residence can access and use those services when temporarily present in a Member State other than their Member State of residence.⁴⁶

A year later, Regulation 2018/302 was promulgated to prevent "unjustified geoblocking and other forms of discrimination based, directly or indirectly, on the customers' nationality, place of residence or place of establishment."⁴⁷

At the global level, the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (Marrakesh Treaty) allows for the "cross-border exchange of accessible format copies."⁴⁸ Article 5(1) specifically states: "Contracting Parties shall provide that if an accessible format copy is made under a limitation or exception or pursuant to operation of law, that accessible format copy may be distributed or made available by an authorized entity to a beneficiary person or an authorized entity in another Contracting Party."⁴⁹ This provision "seeks to increase the exchange and diffusion of these materials between countries and regions at different levels of socioeconomic development, ensuring that

⁴⁴ See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Agenda for Europe, COM(2010) 245 final (Aug. 26, 2010) [hereinafter A Digital Agenda for Europe] (advancing the vision for a digital single market in Europe); A Digital Single Market Strategy for Europe, supra note 2 (providing the strategy for developing a digital single market in Europe); Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market, COM(2016) 593 final (Sept. 14, 2016) (proposing reform in the copyright area to facilitate the creation of this digital single market). See generally Giuseppe Mazziotti, Managing Online Music Rights in the European Digital Single Market: Current Scenarios and Future Prospects, in INTELLECTUAL PROPERTY AT THE CROSSROADS OF TRADE 142 (Jan Rosén ed., 2012) (discussing the management of digital music rights in a single EU market).

⁴⁵ See Marketa Trimble, Copyright and Geoblocking: The Consequences of Eliminating Geoblocking, 25 B.U. J. SCI. & TECH. L. (forthcoming 2019) (manuscript at 12) [hereinafter Trimble, Copyright and Geoblocking] (discussing these regulations as they relate to geoblocking and the cross-border portability of copyrighted content).

⁴⁶ Regulation 2017/1128 art. 1(1), 2017 O.J. (L 168) 1.

⁴⁷ Regulation 2018/302 art. 1(1), 2018 O.J. (L 60) 1.

⁴⁸ Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled art. 5(1), June 27, 2013, 52 I.L.M. 1309 [hereinafter Marrakesh Treaty].

⁴⁹ Id.

countries with limited or no capacity to produce accessible format copies are not excluded from the [Marrakesh Treaty's] benefits."⁵⁰

Finally, a growing number of commentators have called for the adoption of a global copyright exhaustion regime. As William Patry observed:

There should be worldwide exhaustion of digital rights once a work has been licensed in one country. National or regional exhaustion is a relic of the analog world. Societies should be required to maintain free, publicly accessible online databases of which works they claim the right to administer, as well as contact information for the rights holders sufficient to permit users to contact the rights holders directly. There should be legally required fixed time periods to distribute monies, especially for foreign rights holders. If foreign money is not distributed within the requisite time period, the foreign rightsholder or the home society of the rights holders may bring suit and are entitled to attorney's fees and penalties.⁵¹

A burgeoning literature also exists to "explor[e] ways to update the exhaustionof-right doctrine to meet the ever-evolving needs of the digital environment."⁵² Such updating is badly needed as we move toward "a post-copy world, one where digital works exist as data flows and rarely reside in a material object for more than a transitory period of time, where copies blink into and out of existence on a nearly constant basis."⁵³

While it is still too early to tell whether copyrighted content will be distributed primarily at the global level in the near future, enough promising developments have arisen to signal drastic changes in consumer preferences, business practices, and legal developments. To the extent that we remain bothered by the many problems generated by geoblocking, these developments suggest that this form of geographical access control will likely follow the fate of their ill-advised predecessors — such as DVD region codes — and become obsolete.⁵⁴

 $^{^{50}}$ Laurence R. Helfer et al., The World Blind Union Guide to the Marrakesh Treaty: Facilitating Access to Books for Print-Disabled 54 (2017).

⁵¹ PATRY, HOW TO FIX COPYRIGHT, *supra* note 22, at 182.

⁵² For discussions noting the digital challenge to the exhaustion-of-right doctrine, see generally AARON PERZANOWSKI & JASON SCHULTZ, THE END OF OWNERSHIP: PERSONAL PROPERTY IN THE DIGITAL ECONOMY (2016); Peter K. Yu, *The Copy in Copyright, in* INTELLECTUAL PROPERTY AND ACCESS TO IM/MATERIAL GOODS 65, 79–82 (Jessica C. Lai & Antoinette Maget Dominicé eds., 2016); Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889 (2011); Aaron Perzanowski & Jason Schultz, *Legislating Digital Exhaustion*, 29 BERKELEY TECH. L.J. 1535 (2015) [hereinafter Perzanowski & Schultz, *Legislating Digital Exhaustion*].

⁵³ Perzanowski & Schultz, *Legislating Digital Exhaustion, supra* note 52, at 1539.

⁵⁴ For discussions of the use of DVD region codes to protect copyrighted content, see generally Rostam J. Neuwirth, *The Fragmentation of the Global Market: The Case of Digital Versatile Discs (DVDs)*, 27 CARDOZO ARTS & ENT. L.J. 409 (2009); Yu, *Region Codes, supra* note 5.

B.U. J. SCI. & TECH. L.

[Vol. 25:2

III. FIVE MODEST PROPOSALS

Although international copyright exhaustion and increased global distribution of copyrighted content remain my policy recommendations, the copyright industries and their supportive policymakers, judges, and commentators subscribe to very different views. For many, territoriality remains the bedrock principle of the copyright system,⁵⁵ and strong policy arguments have been advanced to support the greater use of geoblocking to protect copyrighted content.⁵⁶ Taking note of these different policy preferences, this Part outlines five distinct ways to shape geoblocking remedies.

A. Tailored Blocking

A key justification for geoblocking is the need to segment the licensing market for copyrighted content.⁵⁷ Because of practical and business needs, corporate structures, licensing arrangements, and supporting activities (such as dubbing, subtitling, product duplication, and location-based editing), movie producers and TV studios sometimes release copyrighted content in different geographical markets at different times.⁵⁸ As a result, geoblocking will be needed to ensure that the market for the protected content will not be saturated before the content arrives.⁵⁹

While geographical access control may be needed to protect the investments of local copyright holders or licensees, it is possible to tailor geoblocks to specific situations. Although site blocking, or Internet border control, may be considered draconian based on its impact on freedom of opinion and expression

⁵⁵ See Berne Convention for the Protection of Literary and Artistic Works art. 5(3), Sept. 9, 1886, 828 U.N.T.S. 221 (revised at Paris July 24, 1971) ("Protection in the country of origin is governed by domestic law."); Yu, *Spatial Critique, supra* note 6, at 2064 ("Territoriality is the bedrock principle of the intellectual property system, whether the protection concerns copyrights, patents, trademarks, or other forms of intellectual property rights.").

⁵⁶ See supra text accompanying notes 12–14.

⁵⁷ *Cf.* Claude E. Barfield & Mark A. Groombridge, *The Economic Case for Copyright Owner Control over Parallel Imports*, 1 J. WORLD INTELL. PROP. 903, 908 (1998) ("Historically, the segmentation of markets through territorial restraints has been the predominant organizing principle in the protection of intellectual property rights.").

⁵⁸ See Yu, *Region Codes, supra* note 5, at 200–06 (discussing the need for sequential release of movies and TV programs). As I noted in an earlier book chapter, sequential release of media and entertainment content is generally justified by three reasons:

First, actors, directors and producers cannot promote entertainment projects around the world at the same time. . . . Second, producers may select different release times to maximize viewership. . . . Third, the interest in foreign markets may grow considerably after a movie or TV program has proven successful in the primary market.

Yu, Seamless Digital Marketplace, supra note 7, at 268 (citations omitted).

⁵⁹ See Yu, Seamless Digital Marketplace, supra note 7, at 265 ("If Australian fans have already watched a US show via Netflix, who will tune in when the show finally arrives in Australia?").

and other human rights,⁶⁰ its use in *The Football Association Premier League Ltd v. British Telecommunications PLC* is instructive.⁶¹ To prevent the unauthorized live streaming of soccer games, Justice Richard Arnold of the Chancery Division of the High Court of Justice of England and Wales granted live blocking injunctions against streaming servers that delivered infringing content in real time.⁶² The granted injunctions were timed specifically to strike an appropriate balance between copyright protection on the one hand and access to information and the freedom to conduct business on the other.⁶³

While one could certainly advance access-based arguments to "free" the blocked content, local content availability has greatly weakened those arguments. To a large extent, Justice Arnold's live blocking injunctions function the same way as the real-time blackouts we see on cable television when two channels have been scheduled to broadcast the same sports game at the same time.⁶⁴ When blackouts occur, which channel is to be blacked out will largely depend on the specific licensing arrangements the league has made with the broadcast channels.⁶⁵

To be sure, copyright holders may need geoblocking to start more than a minute before the release of the protected content — be it a movie or a TV program. Given the high acquisition or licensing costs, considerable marketing efforts, and the substantial advertising revenue involved,⁶⁶ content providers understandably will want geographical access restrictions to start at least a few weeks before content release. After all, if members of the local audience have already accessed the protected content overseas a couple of weeks before the

⁶⁵ See id.

⁶⁶ See Mark Sweney, BSkyB Signs New Five-Year Deal for Exclusive Rights to HBO TV Catalogue, GUARDIAN (Jan. 29, 2014), https://www.theguardian.com/media/2014/jan/30/bskyb-five-year-deal-exclusive-rightshbo-tv-catalogue [https://perma.cc/MFA2-QUA6] (reporting BSkyB's five-year deal for the exclusive rights to the entire HBO TV catalogue, including Game of Thrones, that was worth as much as 275 million British pounds).

⁶⁰ See Peter K. Yu, *Digital Copyright Enforcement Measures and Their Human Rights Threats, in* RESEARCH HANDBOOK ON HUMAN RIGHTS AND INTELLECTUAL PROPERTY 455, 466 (Christophe Geiger ed., 2015) (discussing the human rights threats posed by Internet border control measures).

⁶¹ The Football Ass'n Premier League Ltd v. British Telecomms. PLC [2017] EWHC (Ch) 480 (Eng.).

⁶² See *id*. at [24] ("[T]he Order is a 'live' blocking order which only has effect at the times when live Premier League match footage is being broadcast.").

⁶³ See id. at [44] ("[The order] requires the Court to consider the comparative importance of, and the justifications for interfering with, [the Premier League's] copyrights on the one hand and the Defendants' freedom to carry on business and internet users' freedom to impart or receive information on the other hand.").

⁶⁴ See MLB.TV Out-of-Market Packages, MAJOR LEAGUE BASEBALL, https://www.mlb.com/live-stream-games/subscribe [https://perma.cc/23N9-ZKJY] (last visited Mar. 27, 2019) (providing information about blackout restrictions).

B.U. J. SCI. & TECH. L.

[Vol. 25:2

content becomes locally available, most of these individuals are unlikely to view the content again when it arrives.

Nevertheless, the further away the time of overseas viewing is from the time of local release — whether before or after — the weaker the case for geoblocking will be. Indeed, that case will be quite weak if it is unclear whether the protected content will ever be locally shown. For shows that are not popular enough to attract foreign distribution, few individuals will access the content overseas. If enough of these individuals have accessed the content, their cross-border access will provide useful signals to copyright holders.⁶⁷ When the content is finally released, there is also a strong possibility that the local audience will be eager to view the content even when some members of that audience have already accessed the content overseas.

Moreover, the content those individuals have accessed abroad may differ from the content that is now being locally shown. For instance, the U.K. version of the TV show *The Office* is significantly different from the U.S. version.⁶⁸ Likewise, the U.S. version of the animé *Macross, Robotech*, is disappointedly different from the original Japanese classic.⁶⁹ Even the length of *Game of Thrones* episodes has varied from country to country.⁷⁰ In addition, some movies and TV programs may come with special features, interviews, behind-the-scenes footage, or other tie-ins that are unique to the local market,⁷¹ not to mention the widespread use of dubbing and subtitles in markets that do not speak the same language as the original production.⁷²

⁶⁷ As I noted in the context of region-coded DVDs:

While providers will no longer have full control over their product, they could benefit by gathering more information about the needs and interests of local consumers. For example, when high volumes of Japanese animés are being imported into Region 1, such importation clearly signals a growing demand for those products in the United States. The importation may also provide distributors with useful information about whether they have correctly priced the products and whether the features they include on Region 1 DVDs are comparable to those found on DVDs from other regions.

Yu, *Region Codes, supra* note 5, at 226 (footnote omitted). The same argument can be made when a considerable number of users with Australian Internet protocol addresses view the protected content from a U.S. website.

⁶⁸ See id. at 221 ("[S]ome viewers may prefer the original Ricky Gervais' version of *The Office* but not Steve Carell's American remake.").

⁶⁹ See *id.* at 219 ("For faithful animé fans, *Robotech* is just not an acceptable substitute for *Macross.*").

⁷⁰ See Zareh, supra note 13, at 264 ("According to Trey Hatch, HBO's Vice President and Senior Counsel for Programming, 'Game of Thrones is considerably shorter on HBO Asia and . . . on Free TV in the Middle East."").

⁷¹ See Yu, *Region Codes*, *supra* note 5, at 222 & n.149 (noting the variations in the supplemental content provided in different markets).

⁷² See *id.* at 200, 210 (discussing dubbing and subtitling); *see also* Yu, *Seamless Digital Marketplace, supra* note 7, at 271–72 (discussing how the Internet and new communications technologies break traditional linguistic barriers).

The key takeaway of this tailored blocking proposal is not that policymakers and judges should shape geoblocking remedies the same way as Justice Arnold did in *Premier League*;⁷³ rather, it is to emphasize the need for tailoring to strike a more appropriate balance between proprietary control and user access. It is worth bearing in mind that obtaining overseas access to copyrighted content is not the same as accessing this content through pirate channels. While the former may not benefit local copyright holders or licensees, it will provide either direct or indirect benefits to foreign copyright holders or licensees — and, in turn, the original creators. Given the increasingly globalized market, spillovers between different licensing markets are inevitable, and copyright holders should take these spillovers into consideration when planning distribution and licensing strategies.⁷⁴

B. Geocircumvention Exception

While tailored geoblocking can help strike an appropriate balance between proprietary control and user access, policymakers and judges should be prepared to introduce geocircumvention exceptions. Thus far, some jurisdictions have pushed for legislation that permits the circumvention of geoblocking technology. In the final report of the Australian Productivity Commission, for example, Recommendation 5.2 called on the Australian Government to "amend the Copyright Act 1968 (Cth) to make clear that it is not an infringement for consumers to circumvent geoblocking technology."⁷⁵ That recommendation further stated that the government should "avoid any international agreements that would prevent or ban consumers from circumventing geoblocking technology."⁷⁶

The push for geocircumvention exceptions is similar to the wide array of proposals about the right to hack or the right to circumvent that surfaced more than a decade ago. For instance, Congressman Richard Boucher introduced the Digital Media Consumers' Rights Act of 2003, which sought to create an exception for the circumvention of "a technological measure in connection with access to, or the use of, a work if such circumvention does not result in an

⁷³ The Football Ass'n Premier League Ltd v. British Telecomms. PLC [2017] EWHC (Ch) 480 (Eng.).

⁷⁴ See Earle, *supra* note 28, at 16–18 (discussing changes in attitudes toward geoblocking that companies can make on their own); *see also* Yu, *Seamless Digital Marketplace, supra* note 7, at 285 (lamenting how "content providers . . . have not spent enough time developing strategies and platforms that would allow rights holders in different countries to share in revenues generated through a single global distribution platform").

⁷⁵ PRODUCTIVITY COMM'N, *supra* note 1, at 145; *see also* STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, *supra* note 4, at 108 (recommending that "the Australian Government amend the Copyright Act's section 10(1) anti-circumvention provisions to clarify and secure consumers' rights to circumvent technological protection measures that control geographic market segmentation").

⁷⁶ PRODUCTIVITY COMM'N, *supra* note 1, at 145.

B.U. J. SCI. & TECH. L.

[Vol. 25:2

infringement of the copyright in the work."⁷⁷ Julie Cohen argued that "licensees . . . should be accorded rights of electronic self-help when necessary to preserve the balance that the Copyright Act is intended to establish."⁷⁸ Andrew Shapiro underscored the need for allowing people to engage in what he described as "fair hacking" or "fair breach," which he analogized to fair use.⁷⁹ Similarly, as part of the Canadian copyright law reform, Michael Geist proposed to "include a positive user right to circumvent a technological measure for lawful purposes."⁸⁰

Although a significant number of governments, policymakers, and commentators have favored the introduction of geocircumvention exceptions, the copyright industries and their supportive policymakers, judges, and commentators are reluctant to support broad exceptions for such circumvention.⁸¹ To enlist their support, advocates of geocircumvention exceptions may need to push for narrower tailoring,⁸² similar to the earlier proposal for tailored geoblocking.⁸³ Possible justifications for such circumvention are remediation for false negatives,⁸⁴ the exercise of cultural

⁸¹ See Productivity Comm'n, *supra* note 1, at 145; Standing Comm. on Infrastructure & Commc'ns, *supra* note 4, at 108.

⁸² See Michelle Edelman, Note, *The Thrill of Anticipation: Why the Circumvention of Geoblocks Should Be Illegal*, 15 VA. SPORTS & ENT. L.J. 110, 126–28 (2015) (discussing the possible creation of an exception to the anti-circumvention provision of the Digital Millennium Copyright Act for some "non-infringing uses of geoblock circumvention in the entertainment context").

⁸³ See discussion infra Part III.A.

⁸⁴ See Svantesson, Accuracy of Geo-Location Technologies, supra note 26, at 15 (discussing the production of false negatives in relation to the use of geolocation technology). But see Kevin F. King, Personal Jurisdiction, Internet Commerce, and Privacy: The Pervasive Legal Consequences of Modern Geolocation Technologies, 21 ALB. L.J. SCI. &TECH. 61, 70 (2011) ("Today, leading geolocation technologies are up to 99.9% accurate at the country level and more than 97% accurate at the state level within the United States.").

⁷⁷ H.R. 107, 108th Cong. § 5(b)(1) (2003).

⁷⁸ Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089, 1092 (1998).

⁷⁹ ANDREW L. SHAPIRO, THE CONTROL REVOLUTION: HOW INTERNET IS PUTTING INDIVIDUALS IN CHARGE AND CHANGING THE WORLD WE KNOW 179 (1999) (proposing "a rule analogous to fair use that might be known as 'fair hacking' or 'fair breach'").

⁸⁰ Michael Geist, *Anti-circumvention Legislation and Competition Policy: Defining a Canadian Way?*, *in* IN THE PUBLIC INTEREST: THE FUTURE OF CANADIAN COPYRIGHT LAW 248–49 (Michael Geist ed., 2005).

2019]

A HATER'S GUIDE TO GEOBLOCKING

rights,⁸⁵ the need for knowledge and education,⁸⁶ and accommodation for disabilities.⁸⁷

As many users may not be technologically savvy enough to circumvent geoblocking technology,⁸⁸ policymakers should introduce user-friendly mechanisms to facilitate access to the protected content⁸⁹ — for example, by issuing access codes that support geocircumvention. To obtain these access codes, the government can set up a mechanism to allow users to enter the requisite information, similar to the administrative complaint procedure provided in Section 296ZE of the U.K. Copyright, Designs and Patents Act.⁹⁰

⁸⁶ See Yu, *Region Codes, supra* note 5, at 227–28 (discussing how geographical access restrictions have posed barriers to students who seek to use DVDs to learn foreign languages).

⁸⁹ As one commentator observed:

⁹⁰ Section 296ZE provides:

Where the application of any effective technological measure to a copyright work other than a computer program prevents a person from carrying out a permitted act in relation to that work then that person or a person being a representative of a class of persons prevented from carrying out a permitted act may issue a notice of complaint to the Secretary of State.

⁸⁵ See Kra-Oz, supra note 3, at 404 ("Of particular importance is the ability of émigrés and expats to enjoy access to cultural content originating from their respective homelands, whether for their own personal enjoyment or to help give their children a sense of shared heritage."); Yu, *Region Codes, supra* note 5, at 226–30 (discussing the impact of geographical access restrictions on the enjoyment and exercise of cultural rights); Jacklyn Hoffman, Note, *Crossing Borders in the Digital Market: A Proposal to End Copyright Territoriality and Geo-Blocking in the European Union*, 49 GEO. WASH. INT'L L. REV. 143, 146 (2016) ("[G]eoblocking discriminates against immigrants and linguistic minorities, who are denied access within the European Union to online content in their native languages.").

⁸⁷ See Marrakesh Treaty, *supra* note 48, art. 5(1) (allowing for the "cross-border exchange of accessible format copies").

⁸⁸ See COMM. ON INTELLECTUAL PROP. RIGHTS & THE EMERGING INFO. INFRASTRUCTURE, NAT'L RESEARCH COUNCIL, THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE 218 (2000) [hereinafter DIGITAL DILEMMA] ("Most people are not technically knowledgeable enough to defeat even moderately sophisticated systems and, in any case, are law-abiding citizens rather than determined adversaries.").

[[]O]ne key problem with circumvention is that it requires some technological prowess, alongside a willingness to take risks (even under a legal framework that would acknowledge a right to circumvention, the act itself would probably still void many consumer warranties). Thus, until circumvention becomes particularly user-friendly, it would most likely serve only a select minority of users.

Kra-Oz, *supra* note 3, at 412; *see also* Tian Yijun, *Problems of Anti-Circumvention Rules in the DMCA & More Heterogeneous Solutions*, 15 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 749, 785 (2005) (stating that "a future [amendment to the Digital Millennium Copyright Act] should provide specific legal mechanisms to help eligible users obtain necessary circumvention assistance from the appointed government agency when these users are not capable of circumventing the technological protection measures by themselves").

B.U. J. SCI. & TECH. L. [Vol. 25:2

Nevertheless, for this mechanism to work in today's environment of ubiquitous and instantaneous communication, that procedure will need to grant online approval shortly after the user has made a request. Such approval will resemble the old procedure the National Archives employed to issue Click-Use Licences for Crown Copyright materials in the United Kingdom,⁹¹ which has since been replaced by the Open Government Licence for Public Sector Information.⁹²

To be sure, the copyright industries and their supportive policymakers will remain concerned about the potential abuse of this procedure. We could therefore design the mechanism with suspension, fines, or other penalties to alleviate the rights holders' concerns. For instance, those users who have been found to have abused the mechanism will have to wait for the completion of a manual review of any future request. In the event that repeated abuse is found, the offender could also be suspended from using the mechanism for a limited period of time.

C. Geographic Redirects

When accessing websites, users sometimes get rerouted to different webpages or websites.⁹³ When the latter occurs, users often notice the rerouting, even when the rerouting has not been fully disclosed. For example, U.S. users seeking to conduct a Google search in a foreign country will be redirected to the local

⁹² Open Government Licence for Public Sector Information, NAT'L ARCHIVES, http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3 [https://perma.cc/35V5-NPQ7].

⁹³ As an Adobe representative explained:

Copyright, Designs and Patents Act 1988, c. 48, § 296ZE(2) (UK); *see also* Jacqueline D. Lipton, *Solving the Digital Piracy Puzzle: Disaggregating Fair Use from the DMCA's Anti-Device Provisions*, 19 HARV. J.L. & TECH. 111, 141–43 (2005) (discussing this provision).

⁹¹ See OFFICE OF PUBLIC SECTION INFO., NAT'L ARCHIVES, THE UNITED KINGDOM IMPLEMENTATION OF THE EUROPEAN DIRECTIVE ON THE E-USE OF PUBLIC SECTOR INFORMATION — THE FIRST TWO YEARS 16–18 (2007), http://www.nationalarchives.gov.uk/documents/information-management/ukimplementation-first-years.pdf [https://perma.cc/7F6Z-8WZZ] (discussing the U.K. government's Click-Use Licence).

When customers access the Adobe.com website they can choose to see whichever website they wish to see. We automatically try to get them to look at the Australian site, for a number of different reasons. There is local content. There is information in relation to local user groups and communities that use our technology that they can learn from and contribute to. There is information that is relevant to the local market in relation to Australian based pricing and other content and information. That content is a richer and more personalised experience for an Australian customer than they would get if they accessed a webpage that was in another language or for another country... with relation to relevance and personalisation, the personalization was not of the product; it was the experience when online.

STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, *supra* note 4, at 63.

Google site.⁹⁴ If they want to access Google.com instead, they will have to type in a specific Uniform Resource Locator (www.google.com/ncr) or enable the "no country redirects" option in their browsing software.⁹⁵

This type of geographic redirect can be quite helpful in addressing issues that call for geoblocking. For instance, if a movie or a TV program is already available on a Japanese website, a geographic redirect will get a Japanese user who attempts to access the protected content from a U.S. website to visit the Japanese site instead. In doing so, the redirection will not only inform the user about the local website but will also automatically transfer him or her to the site preferred by the local copyright holder or licensee. As Dan Jerker Svantesson suggested: "A possible compromise can be found in the fact that we can use geolocation technologies to guide users to country-specific pages instead of using such technologies to prevent access to foreign content."⁹⁶

To be sure, geographic redirects do not prevent determined users from avoiding the local website — to take advantage of better pricing or broader choices, perhaps.⁹⁷ Nevertheless, such redirection can provide a helpful nudge.⁹⁸ While airlines sometimes offer different prices to U.S. and Asian customers based on the websites they visit, few customers visit multiple country-specific websites from the same airline before making their final purchase.⁹⁹ As with any technological self-help measure, geographic redirects aim to induce the majority of users to access the protected content from local websites, rather than to

⁹⁵ Id.

⁹⁶ Dan Jerker B. Svantesson, Delineating the Reach of Internet Intermediaries' Content Blocking — "ccTLD Blocking", "Strict Geo-location Blocking" or a "Country Lens Approach"?, 11 SCRIPTED 153, 165 (2014).

⁹⁷ As I noted in an earlier article:

[T]he internet users' increasing ability to locate content throughout the world means they can now circumvent the price controls the entertainment industry has carefully put in place based on local market conditions. For example, if a movie is streamed in Region A for \$6.99 and Region B for only \$2.99, the use of a VPN will allow the content to be accessed for only \$2.99 even when the viewer resides in Region A.

Yu, Seamless Digital Marketplace, supra note 7, at 270.

⁹⁸ See generally RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2008) (discussing how we can design choice environments to nudge us in beneficial directions); CASS R. SUNSTEIN, WHY NUDGE?: THE POLITICS OF LIBERTARIAN PATERNALISM (2014) (explaining why choice architecture is helpful rather than harmful).

⁹⁹ See Emily McNutt, *Tip: Save Money by Booking Your Flight on the Foreign Version of a Carrier's Website*, THE POINTS GUY (Aug. 24, 2016), https://thepointsguy.com/2016/08/tip-save-money-booking-on-foreign-version-of-a-site [https://perma.cc/YU3A-DRCL] ("If you're flying on an international carrier or traveling to a destination abroad, there's a chance you could be able to score a better deal by booking on the foreign version of the airline's website.").

⁹⁴ Whitson Gordon, *Avoid Getting Redirected to Country-Specific Versions of Google,* LIFEHACKER (Aug. 9, 2012, 10:30 AM), https://lifehacker.com/avoid-getting-redirected-to-country-specific-versions-o-5933248 [https://perma.cc/5VMN-L6QE].

B.U. J. SCI. & TECH. L. [Vol. 25:2

prevent a small number of determined users from circumventing geographic access control.

D. Access Portability

In the past few years, access portability has received considerable attention from policymakers and scholars alike. As noted earlier, such portability has partly inspired the development of a digital single market in Europe.¹⁰⁰ As the European Commission declared in *A Digital Agenda for Europe*:

Consumers expect, rightly, that they can access content online at least as effectively as in the offline world. Europe lacks a unified market in the content sector. For instance, to set-up a pan-European service an online music store would have to negotiate with numerous rights management societies based in 27 [now 28] countries. Consumers can buy CDs in every shop but are often unable to buy music from online platforms across the EU because rights are licensed on a national basis. This contrasts with the relatively simple business environment and distribution channels in other regions, notably the US, and reflects other fragmented markets such as those in Asia.¹⁰¹

At the global level, Article 5(1) of the Marrakesh Treaty also explicitly allows the "cross-border exchange of accessible format copies."¹⁰²

A few years ago, Marketa Trimble, a fellow contributor to this symposium, advanced an innovative proposal about the use of "digital passports" to facilitate cybertravel,¹⁰³ thereby allowing users to "view or use content on the Internet that they would otherwise not be permitted to access because of geolocation tools that block access to [such] content."¹⁰⁴ As she observed:

[L]egal cybertravel might be conditioned upon the use of a digital passport that would identify not only the user's location or domicile but also the user's identity or account; such a condition would permit cybertravel but require that the user maintain accurate information about his or her identity. This solution would allow cybertravel but defeat anonymization; users would be able to obscure their current location if, for instance, the digital passport required information about the user's domicile or residence but not the user's current location.¹⁰⁵

In Professor Trimble's view, "[t]he use of residence or domicile as the determinative factor for access to Internet content would [allow] . . . countries

¹⁰⁰ See supra notes 44–47 and accompanying text.

¹⁰¹ A Digital Agenda for Europe, supra note 44, at 7.

¹⁰² Marrakesh Treaty, *supra* note 48, art. 5(1).

¹⁰³ Trimble, *Future of Cybertravel, supra* note 19, at 639.

¹⁰⁴ Id. at 569.

¹⁰⁵ Id. at 639.

2019] *A HATER'S GUIDE TO GEOBLOCKING*

[to] legislate for their own nationals and permanent residents and the laws [to] follow those persons wherever they travel."¹⁰⁶

While requiring individuals to use "digital passports" to access foreign websites could raise uneasy questions about privacy protection — an issue of which Professor Trimble is keenly aware¹⁰⁷ — simple mechanisms can be put in place to allow users to provide information about their Internet service accounts without revealing their personal identity.¹⁰⁸ It is also now common for cable service providers to require users to show a valid cable subscription before obtaining online access to premium content, such as the latest episodes of their favorite TV shows.¹⁰⁹ In addition, some websites use credit card information to determine the type of content the user will be entitled to access.¹¹⁰

¹⁰⁷ See Trimble, *Future of Cybertravel, supra* note 19, at 657 (noting the need to support the proposed system with "a strict data protection structure that would impose both legal and technical requirements on Internet actors").

¹⁰⁸ See Natasha Lomas, Europe Agrees to End Geoblocks on Travelers' Digital Subscriptions by 2018, TECHCRUNCH (Feb. 8, 2017), https://techcrunch.com/2017/02/08/europe-agrees-to-end-geoblocks-on-travelers-digitalsubscriptions-by-2018 [https://perma.cc/2JSB-CUQ3] (citing the suggestion of a European Commission spokesperson that service providers can use "a contract for Internet or telephone connection" to verify the user's country of residence).

¹⁰⁹ As one commentator observed:

Many Networks require viewers to sign-in with their "TV Provider"... in order to view recent episodes that have already been aired via linear TV. This sign-on requirement serves two purposes. First, it allows Networks to control who has access to the television shows. Second, it prevents fans of shows from "cord cutting." Cord cutting refers to the cancellation of traditional television services, generally meaning cable subscriptions, and these cord cutters instead depend on video streaming via the Internet. This allows members of the public to stop paying high costs for cable television and still watch shows via streaming. However, networks combat this by requiring TV provider sign-on accounts, which requires viewers to keep their cable subscription.

Earle, supra note 28, at 9 (footnotes omitted).

¹⁰⁶ *Id.* at 650. Interestingly, this position resembles the choice-of-law preference in the ancient Mediterranean. As the late Alan Watson observed: "In the ancient Mediterranean world, law was generally personal rather than territorial. Thus, in Greco-Roman Egypt, the Egyptians were governed by native Egyptian private law, the Greeks by the Hellenistic 'common law'..., the Romans by Roman law and other smaller groups — such as the Jews — by their personal law." ALAN WATSON, LEGAL TRANSPLANTS: AN APPROACH TO COMPARATIVE LAW 31 (2d ed. 1993).

¹¹⁰ See PRODUCTIVITY COMM'N, supra note 1, at 142 (noting that geoblocking "can be implemented via . . . credit card numbers"); STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, supra note 4, at 103 ("Many [information technology] vendors seek to further enforce geoblocking by checking customers' credit cards at the point of sale, or by only shipping to addresses within a certain region."); European Commission Press Release, supra note 15 ("The online content service providers like Netflix, MyTF1 or Spotify will verify the subscriber's country of residence by using means such as payment details [or] the existence of an internet contract ").

B.U. J. SCI. & TECH. L.

[Vol. 25:2

For illustrative purposes, this proposal, upon implementation, would allow U.S. users traveling abroad to access content hosted on U.S. websites after they have provided the requisite information about their U.S. Internet service. Likewise, U.K. users would be able to do the same when they travel to the United States for work or study. If some users happen to divide their time between two locations — in my case, Hong Kong and the United States — they should be able to use their two Internet service accounts to access content hosted on websites in both locations.

E. Voluntary Geoblocking

Self-help has always been available to property owners.¹¹¹ While it may be ill-advised to encourage copyright holders to engage in a technological arms race,¹¹² there is no reason why these rights holders cannot put up "virtual fences"¹¹³ to protect their copyrighted content. For more than two decades, commentators have widely discussed the use of technological self-help to protect intellectual property¹¹⁴ or to strike a more appropriate balance between proprietary control and user access.¹¹⁵

¹¹⁴ See, e.g., DIGITAL DILEMMA, *supra* note 88, at 312 (stating that it is "a perfectly understandable goal" when the Digital Millennium Copyright Act is "[i]nterpreted as an incentive for copyright owners to protect their own property, rather than to rely solely on the police and the courts"); Yu, *Anticircumvention and Anti-anticircumvention, supra* note 2, at 24 ("It is important to remember that the anticircumvention provision of the [Digital Millennium Copyright Act], and the WIPO Internet Treaties on which it was based, were created to promote self-help."); Peter K. Yu, *The Escalating Copyright Wars*, 32 HOFSTRA L. REV. 907, 918–20 (2004) (discussing self-help as a strategy the entertainment industry could use to fight the copyright wars).

¹¹⁵ See, e.g., Cohen, *supra* note 78, at 1137–42 (calling for the recognition of "rights of electronic self-help" among copyright licensees to restore the balance in the copyright system).

¹¹¹ See JESSICA LITMAN, DIGITAL COPYRIGHT 133 (2001) ("Backed up by th[e] legal control [provided by property laws, homeowners] can use protective devices — locks, burglar alarms, electrified fences, vicious attack dogs — to keep outsiders out of her home"). But see Yochai Benkler, Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain, 74 N.Y.U. L. REV. 354, 426 (1999) ("Landlords can no longer use self-help against tenants in most jurisdictions, but instead must resort to summary process. Life, limb, and the public peace were considered by courts too important to sacrifice in the name of effective self-help." (footnote omitted)).

¹¹² See supra note 27 and accompanying text.

¹¹³ See Ian R. Kerr et al., *Technical Protection Measures: Tilting at Copyright's Windmill*, 34 OTTAWA L. REV. 7, 13 (2002) (stating that technological protection measures "can operate as safeguards or 'virtual fences' around digitized content, whether or not the content enjoys copyright protection"); Ejan Mackaay, *Intellectual Property and the Internet: The Share of Sharing, in* THE COMMODIFICATION OF INFORMATION 133, 136–38 (Neil Weinstock Netanel & Niva Elkin-Koren eds., 2002) (discussing the "fencing" aspect of property). *But see* Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 HARV. J.L. & TECH. 41, 53 (2001) (discussing the uneasiness of using the "fence" metaphor).

To some extent, the continuous need for self-help has explained why virtually all proposals against geoblocking have been framed as proposals for geocircumvention exceptions, as opposed to a ban on geoblocking.¹¹⁶ Even in its highly critical report on the discriminatory regional pricing of information technology products, the Australian House of Representatives recommended that "the Australian Government consider enacting a ban on geoblocking [only] as an option of last resort."¹¹⁷

The continuous allowance for geoblocking as technological self-help can be important for another reason. Depending on the licensing arrangements, copyright holders may have obligations to block access to copyrighted content by users in jurisdictions not covered by those arrangements.¹¹⁸ In *Carsey-Werner Co. v. British Broadcasting Corp.*, for example, the court found that BBC did not "purposefully direct[] its activities towards residents of the forum state"¹¹⁹ when it had "implemented technology and had in place terms of use to prevent California viewers from accessing the [copyrighted TV program]."¹²⁰ To this court, which ultimately dismissed the case, it did not matter that some U.S. users successfully used VPNs or proxy servers to circumvent BBC's geoblocking technology.¹²¹

To a large extent, the use of geoblocking as technological self-help can be viewed as a "speed bump" that aims to frustrate people who want access to the protected content without the copyright holder's authorization.¹²² The goal of installing this speed bump is to "help . . . keep honest people honest"¹²³ — or, as Fred von Lohmann put it, to help "keep[] technically unsophisticated people honest."¹²⁴ While this speed bump is unlikely to prevent aggressive drivers from driving at excessive speed, most drivers do slow down.¹²⁵ For instance, on

¹¹⁶ See, e.g., PRODUCTIVITY COMM'N, supra note 1, at 145.

¹¹⁷ STANDING COMM. ON INFRASTRUCTURE & COMMC'NS, *supra* note 4, at 115; *see also* Trimble, *Copyright and Geoblocking*, *supra* note 45 (discussing the potential consequences of eliminating geoblocking for copyright law and practice).

¹¹⁸ See, e.g., Marketa Trimble, *Geoblocking, Technical Standards and the Law, in* GEOBLOCKING AND GLOBAL VIDEO CULTURE 54, 58–59 (Ramon Lobato & James Meese eds., 2016) (discussing the minimum standards for geoblocking in copyright licensing agreements).

¹¹⁹ Carsey-Werner Co. v. British Broad. Corp., No. CV 17-8041 PA (ASx), 2018 U.S. Dist. LEXIS 33862, at *8 (C.D. Cal. Feb. 23, 2018).

¹²⁰ Id. at *19.

¹²¹ See id. at *3 (noting that the TV program at issue "could be viewed by persons in the United States using virtual private networks ('VPNs') or proxy servers").

¹²² "Speed Bump" vs. Music Copying, BLOOMBERG (Jan. 9, 2002), https://www.bloomberg.com/news/articles/2002-01-08/a-speed-bump-vs-dot-music-copying [https://perma.cc/M8F6-P57A] (interview with Professor Edward Felten of Princeton University).

¹²³ DIGITAL DILEMMA, *supra* note 88, at 218.

¹²⁴ von Lohmann, *supra* note 26, at 639.

¹²⁵ As a National Research Council study observed:

B.U. J. SCI. & TECH. L.

[Vol. 25:2

YouTube, the message "[t]he uploader has not made this video available in your country" has nudged users to turn to other content on the platform — which, ironically, may sometimes be identical to the content that has been geoblocked.¹²⁶

CONCLUSION

Like any technological protection measure, the use of geographical access control to protect copyrighted content has swung back and forth like a pendulum.¹²⁷ Although such control has been around for at least two decades,¹²⁸

DIGITAL DILEMMA, *supra* note 88, at 218.

¹²⁶ See Yu, Spatial Critique, supra note 6, at 2110 ("[A] growing number of YouTube accounts have imposed geographical restrictions to prevent viewers from having access to all content, thereby taking away YouTube's earlier strength as a region-free platform for disseminating and viewing content.").

¹²⁷ This pendulum swing is similar to the one involving digital rights management (DRMs), to which geographical access control is a subset. As Emery Simon, a former attorney with the Business Software Alliance, recalled in the DRMs context:

The software industry has used DRMs for twenty-five years. It goes through a cycle. The software industry tightens up the DRMs and consumers scream, because they can't do very much with the software when it fails, or they want to reload it. Companies loosen up on the DRM, and the piracy goes way up, and then they tighten up on it. That has been the cycle, and that continues to be the cycle, and we're reconciled to that cycle. What we do in that cycle is we abandon technologies that consumers hated the worst. I'll give you an example. There is something called a dongle, a little piece of hardware that people attach to the back of the PC with which the PC has to shake hands in order to run the software. People hated it. Nobody uses a dongle anymore. So yes, there are DRMs that are hated by the marketplace, and are taken out of the marketplace in response to the market.

Edited & Excerpted Transcript of the Symposium on the Law & Technology of Digital Rights Management, 18 BERKELEY TECH. L.J. 697, 750 (2003) (remarks of Emery Simon of the Business Software Alliance); see also Kerr et al., supra note 113, at 31 (recalling that "in the early 1980s many companies that sold software applications employed a form of copy protection to prevent the floppy disks on which their applications were sold from being copied" and that "[m]assive consumer resistance to this approach led to the abandonment of this [technological protection measure] and yet software companies subsequently found the risk of illegal copying to be within acceptable limits").

¹²⁸ See Ramon Lobato, Introduction: The New Video Geography, in GEOBLOCKING AND GLOBAL VIDEO CULTURE, supra note 118, at 10, 13 ("Geolocation technology dates back to the end of the 1990s when the first tech companies specialising in location detection, such as Infosplit, began to appear."); Yu, *Cloud Content, supra* note 12, at 187 ("Used commonly to protect movies, television programmes, computer software and online games, [DVD region codes] were introduced in the late 1990s to limit content access to only the authorized geographic region").

[[]Technical protection services] with what might be called "curb-high deterrence" — systems that can be circumvented by a knowledgeable person — are sufficient in many instances. They can deter the average user from engaging in illegal behavior and may deter those who may be ignorant about some aspects of the law by causing them to think carefully about the appropriateness of their copying.

the recent efforts by policymakers and judges to introduce geoblocking have rejuvenated the debate on the expediency and effectiveness of using geographical restrictions to protect copyrighted content.

While I remain skeptical of the ultimate effectiveness of such restrictions and have found it ill-advised to patch up outdated copyright licensing models,¹²⁹ I understand why territorially based access control has remained popular among the copyright industries and their supportive judges, policymakers, and commentators. Taking note of their different policy preferences, this Article identifies five distinct ways for policymakers, judges, and rights holders to shape geoblocking remedies.

In doing so, I hope to demonstrate that the policy debate in this area is neither simplistic nor binary. Instead, a multitude of geoblocking remedies exist, and they fall on a wide spectrum featuring considerable flexibilities. Whether one remedy is preferable to another will largely depend on a holistic cost-benefit analysis that is driven by empirical evidence.¹³⁰ Because the five proposals advanced in this Article can complement each other, policymakers and judges may want to consider the simultaneous use of a combination of these remedies.

¹²⁹ As I noted in the conclusion of a more recent article:

Today, people are no longer content with just watching programs on television or listening to CDs at home. Instead, they listen to music stored in the cloud when they travel, watch foreign television shows recommended by distant friends, and generate mash-ups of worldwide digital content. Any laws that fail to accommodate these geographically dispersed activities and the related consumer expectations will quickly become obsolete.

Yu, *Spatial Critique, supra* note 6, at 2116; *see also* Yu, *Cloud Content, supra* note 12, at 194 ("With increased globalization and frequent consumer travel, a model that conditions the enjoyment of digital content on the place of purchase or first usage is seriously outdated."); Yu, *Region Codes, supra* note 5, at 263–64 ("Although region-based restrictions have some benefits, they are slowly becoming obsolete. They do not sit well with today's rapidly globalizing world, where goods and people are increasingly mobilized and where lifestyle and consumer preferences continue to change.").

¹³⁰ See PATRY, HOW TO FIX COPYRIGHT, *supra* note 22, at 52 (noting the need for "mandatory, independently-produced, impartial, empirically rigorous impact statements before any new copyright legislation is passed"); Peter K. Yu, *Digital Copyright and Confuzzling Rhetoric*, 13 VAND. J. ENT. & TECH. L. 881, 918–22 (2011) (noting the need for the proponents of intellectual property reform to provide credible empirical support); Peter K. Yu, *The Strategic and Discursive Contributions of the Max Planck Principles for Intellectual Property Provisions in Bilateral and Regional Agreements*, 62 DRAKE L. REV. DISCOURSE 20, 29 (2014) ("[T]he development of intellectual property law and policy should not be conducted as a faith- or rhetoric-based exercise. Instead, it should be based on empirical support and verifiable data.").