Mapping the New Geographies of "Flexible" Intellectual Property Rights in the 21st Century

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The substantive boundaries of intellectual property rights are rapidly shifting in the face of the dual demands of the digital environment and global trade. From access to medicines for patents, to free speech concerns for copyrights and noncommercial uses for trademarks, intellectual property rights as conceived in the 19th and 20th Centuries are undergoing a profound revision.

Whether these alterations are part of the increasing international focus on "flexibilities,"¹ a "resistance" to present intellectual property norms generally,² or an accommodation to the altered reality of the global digital environment in which many intellectual property rights now operate, there is no question that intellectual property rights, or more accurately the boundaries of those rights, are undergoing fundamental changes in the 21st Century. As more boundaries shift across the entire spectrum of intellectual property rights, the need for normative standards to help "map" these new boundaries becomes more pressing. While there are diverse foundational principles that could be used to shape these norms, "geography" may serve, not merely as a metaphor, but also as a guiding paradigm, for future normative mapping activities.

1. The Flexible Boundaries of 21st Century IP "Geographies"

Intellectual property rights boundaries have always been subject to a certain interpretive "wiggle room,"³ "constructive ambiguity,"⁴ or, the currently more prevalent term, "flexibility."⁵ Even during the latter decades of the 20th Century, when international harmonization efforts were arguably at their highest peak with the establishment of diverse

⁴ Jayashree Watal, Intellectual Property Rights in the WTO and Developing Countries 7 (2001).

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¹ See, e.g, "Doha Declaration on the TRIPS Agreement and Public Health," November 14, 2001, WT/MIN(01)/DEC2.

² Ruth Okediji, "Public Welfare and the International Patent System," in Ruth Okeiji and Margo Bagley (eds), *Patent Law in Global Perspective* (Oxford: Oxford University Press, 2014).

³ See Jerome Reichman, "From Free Riders To Fair Followers: Global Competition Under The Trips Agreement," 29 N.Y.U. J. Int'l L. & Pol. 11, 28 (1997).

⁵ Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/220 (November 14, 2001) (Paragraph 4).

European Union "harmonization" directives⁶ and the negotiation of the Agreement on Trade-Related Aspects of Intellectual Property Rights⁷ (TRIPS), domestic policies were still recognized definitional modifiers of substantive obligations.

The term "flexibility" does not appear in the reported negotiating documents for TRIPS, the premiere international IP standardization instrument of the 21st Century. Nevertheless, there is no question that TRIPS anticipated that its new substantive obligations would be subject to some differing treatment among signatory Member Countries. Key negotiating documents often used the term "standards" in referring to the substantive work of the negotiations.⁸ Yet at its core, TRIPS did not establish universal "standards" for determining the scope of protected intellectual property rights. It established "harmonized" norms. Like harmonies in music, harmonized norms do not anticipate that all countries will apply identical tests and analyses. Instead, some (arguably predictable) level of domestic variation is not only anticipated, it is expected. The clearest example of such harmonization may be the three-part test for patentability established under Article 27 of TRIPS.

TRIPS Article 27 requires that member states provide patent protection "for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application."⁹ Footnote five clarifies this new three-part test: "For the purposes of this Article, the terms 'inventive step' and 'capable of industrial application' may be deemed by a Member to be synonymous with the terms 'non-obvious' and 'useful' respectively."¹⁰ Yet even in 1994 when TRIPS was signed, despite certain *similarities* between European Union and US patent practices, it was clear that the U.S. test for "non-obviousness" was not *identical* to the European Union test for "inventiveness."

Interpretive flexibility is arguably even more firmly demonstrated in TRIPS Article 8 which expressly recognized a Member Country's right to consider domestic needs in interpreting TRIPS obligations. It stated: "Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are *consistent* with the provisions of this Agreement."¹¹ The obligation of "consistency" prevents Member Countries from adopting a provision that, for example, denies patent protection to otherwise qualifying medical inventions. But it does not prevent the grant of compulsory licenses to secure access

⁶ These Directives covered a wide-range of IP issues, including trademark harmonization, First Council Directive 89/104/EEC of 21 December 1988 to approximate the laws of the Member States relating to trade marks [European Trade Mark Directive], [1989] OJ L 40/1; computer software, Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs [European Software Copyright Directive], [1991] OJ L 122/42 as amended; and biotechnology patents, Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions [European Biotechnology Directive]. Many of these directives were amended in subsequent years but their basic role to harmonize intellectual property protections remains unaltered.

⁷ 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].

⁸ See, e.g., "Existence, Scope and Form of Generally Internationally Accepted and Applied Standards/Norms for the Protection of Intellectual Property," Note prepared by the International Bureau of WIPO, MTN.GNG/NG11/W/24 (5 May 1988).

⁹ TRIPS, *supra* note 7, Art. 27(1).

¹⁰ TRIPS, *supra* note 7, Art. 27(1), note 5.

¹¹ TRIPS, *supra* note 7, Art. 8 (Emphasis added).

to required medicines at reasonable prices or the interpretation of novelty obligations to deny patent protection to new uses for existing medicines.

Despite the consistent recognition that some level of interpretive flexibility was permissible even in the most allegedly harmonizing multilateral instruments, it is undeniable that demands for flexibility have increased over time. Such increase may be most readily demonstrated by Paragraph 4 of the *Declaration on the TRIPS Agreement and Public Health*, adopted during the Doha Round in 2001 ("Doha Declaration on Public Health"). The Declaration specifically acknowledged the role of flexibilities in assuring adequate access to medicines: "[W]hile reiterating our commitment to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all. In this connection, we reaffirm the right of WTO members to use, to the full, the provisions in the TRIPS Agreement, which provide *flexibility* for this purpose."¹²

The focus on flexibilities has become so insistent even the World Intellectual Property Organization (WIPO) has recognized its role in its training programs. In a recent chapter on flexibilities in its online course in Advanced International Copyright and Related Rights,¹³ WIPO identified over 20 flexibilities in copyright alone, including the scope of the public domain, the test for "originality," limitations on copyright for purposes of facilitating access to works, such as in the case of disabilities, international exhaustion, and enforcement modalities.¹⁴ The official recognition of so much flexibility, and in foundational areas of copyright such as originality, is a welcome development. Yet as such flexibility is applied across the entire spectrum of traditional intellectual property rights, in combination with the greater international demand for public access across historically strong rights-protected boundaries, it has created new, often unpredictable, geographies for such rights.

Domestically, in the United States, for example, new boundaries have arisen from the development of a "transformation" test for "fair uses."¹⁵ This "transformation" test under copyright has expanded the boundaries of the public domain. In *Author's Guild, Inc. v. Hathitrust*,¹⁶ the Second Circuit Court of Appeals found that a digital scanning project of several universities' library collections, without the permission of the copyright owners of those works, qualified as a transformative, acceptable fair use:

[W]e conclude that the creation of a full-text searchable database [as a result of the scanning of the works in question] is a quintessentially transformative use... [T]he result of a word search is different in purpose, character, expression, meaning, and message from the page (and the book) from which it is drawn. Indeed, we can discern little or no resemblance between the original text and the results of the HDL full-text search [that the project enables]....

http://www.wipo.int/academy/en/courses/distance_learning/dl201.html [Accessed October 4, 2014].

¹² Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/220 (November 14, 2001) (Paragraph 4).

¹³ WIPO Advanced Course on Copyright and Related Rights, DL-201, available at

¹⁴ See, e.g., Severine Dusolier, "Scoping Study on Copyright, Related Rights and the Public Domain" (2011) CDIP/7/INF/2.

¹⁵ I am using the U.S. term for what is generally referred to in other countries as "fair dealing" and is generally governed internationally by the three-step test codified in various multinational instruments, including Article 13 of TRIPS.

¹⁶ 755 F.3d 87 (2d Cir. 2014).

There is no evidence that the Authors write with the purpose of enabling text searches of their books. Consequently, the full-text search function does not 'supersede[] the objects [or purposes] of the original creation,' *Campbell*, 510 U.S. at 579 (internal quotation marks omitted). The HDL does not 'merely repackage[] or republish[] the original[s],' or merely recast 'an original work into a new mode of presentation,' *Castle Rock Entm't, Inc. v. Carol Publ'g Grp., Inc.,* 150 F.3d 132, 143 (2d Cir.1998). Instead, by enabling full-text search, the HDL adds to the original something new with a different purpose and a different character.¹⁷

The decision by the U.S. District Court for the Southern District of New York demonstrated a similar treatment for Google's digitization project, describing Google's use of the copyrighted works at issue as "highly transformative." Like the court in *Hathitrust*, the court in *Authors Guild, Inc. v. Google Inc.*,¹⁸ emphasized that digitization "transforms expressive text into a comprehensive word index that helps readers, scholars, researchers, and others find books. … Google Books has created something new in the use of book text—the frequency of words and trends in their usage provide substantive information."¹⁹

This transformation test has proven so wide-ranging, it has given rise to a new method for analyzing the adverse market impact of an unauthorized use that effectively narrows a copyright holder's ability to control derivative uses that are also found to be transformative. Market impact is one of the four required statutory factors courts must consider in the U.S. to determine fair use.²⁰ In *Bill Graham Archives v. Dorling Kindersley Limited*,²¹ in deciding whether plaintiff's use of defendant's copyrighted posters as a time line in a biographical work on *The Grateful Dead* singing group qualified as an acceptable fair use, the court expressly rejected any attempt to demonstrate an adverse market impact based on lost licensing fees for such literary uses:

In the instant case, the parties agree that DK's use of the images did not impact BGA's primary market for the sale of the poster images. Instead, we look to whether DK's unauthorized use usurps BGA's potential to develop a derivative market... [W]e do not find a harm to BGA's license market merely because DK did not pay a fee for BGA's copyrighted images....Instead, we look at the impact on potential licensing revenues for "traditional, reasonable, or likely to be developed markets."... "[C]opyright owners may not preempt exploitation of transformative markets" *Castle Rock Entertainment, Inc. v. Carol Pub. Group, Inc.*, 150 F.3d 132, 146 n.11 (2d Cir. 1998). Moreover, a publisher's willingness to pay license fees for reproduction of images does not establish that the publisher may not, in the alternative, make fair use of those images. Since DK's use of BGA's images falls within a transformative market, BGA does not suffer market harm due to the loss of license fees.²²

¹⁷ Authors Guild Inc. v. Hathitrust, 755 F.3d 87, 97 (2d Cir. 2014).

¹⁸ Authors Guild, Inc. v. Google Inc., 954 F.Supp.2d 282 (SDNY 2013).

¹⁹ *Ibid.*, p.291.

 $^{^{20}}$ 17 U.S.C. §107(4)("the factors to be considered shall include...the effect of the use upon the potential market for or value of the copyrighted work")

²¹ 448 F.3d 605 (2d Cir. 2006).

²² *Ibid.*, pp. 614 – 615. See also *Authors Guild Inc. v. Hathitrust*, 755 F.3d 87, 100 (2d Cir. 2014)("[I]t is irrelevant that the Libraries might be willing to purchase licenses in order to engage in this transformative use (if

Although the refusal to consider the market effect of potential lost licensing fees in cases of a transformative work remains a strong trend, a few recent decisions have begun to reject this absolutist approach. In *Dr. Seuss Enterprises, LP v. ComicMix, LLC*,²³ the court found the defendant's "mash up" of plaintiff's well-known children's book *Oh, the Places You'll Go (Go)* and *Star Trek*, a well-known science fiction film and television series, was "no doubt transformative."²⁴ Yet despite the transformative nature of *Oh, the Places You'll Boldly Go! ("Boldly"*), the court not only considered the adverse impact of this mash-up on the market demand for plaintiff's work; it cited such impact to support its refusal to dismiss the complaint on the grounds of defendant's claimed fair use. The court stated:

Plaintiff's Complaint alleges that "[i]t is not uncommon for DSE to license" its works, including in "collaborations with other rights holders." And although Defendants might well be able to ultimately disprove this statement as it applies works of *Boldly's* type, there is not currently any record evidence on this point. Plaintiff's allegations are taken as true, and therefore a potential harm to Plaintiff's licensing opportunities is presumed.²⁵

Despite this recognition of presumed market harm, the court, nevertheless, signaled that such harm was "neutralized somewhat by the fact that *Boldly* does not substitute for the original and serves a different market function than *Go*! Indeed, *Boldly's* market relies on consumers who have already read and greatly appreciated *Go*! and Dr. Seuss's other works, and who simultaneously have a strong working knowledge of the *Star Trek* series. It is therefore unlikely that *Boldly* would severely impact the market for Dr. Seuss's works."²⁶

The evolution toward a more flexible approach to permit greater access to IP-based works has similarly appeared in multilateral treaties. Most recently, in the negotiations that led to the establishment of the Marrakech Treaty To Facilitate Access To Published Works For Persons Who Are Blind, Visually Impaired, Or Otherwise Print Disabled "(Visual Impairment Treaty"), the three-step test for fair use under TRIPS Article 13 was directly challenged for its failure to take into consideration emerging interests, including those of NGOs' and end users. The relevant language of Article 13 limits the consideration of unreasonable prejudice to "the legitimate interests of the right holder." This focus on rights holders' interests arguably limits the scope of relevant considerations to those of authors and their assigns.

the use were deemed unfair). Lost licensing revenue counts under Factor Four only when the use serves as a substitute for the original and the full-text-search use does not."); *Cariou v. Prince*, 714 F.3d 694, 708 (2d Cir. 2013)("We have made clear that 'our concern is not whether the secondary use suppresses or even destroys the market for the original work or its *potential derivatives*, but whether the secondary use usurps the market of the original work.")(citations omitted; emphasis added).

²³ 256 F.Supp.3d 1099 (S.D. Cal. 2017).

²⁴ *Ibid.*, p. 1106.

²⁵ *Ibid.*, p. 1108.

²⁶ *Ibid.* See also *TCA Television Corp. v. McCollum*, 839 F.3d 168, 186 (2d Cir. 2016)(dealing with a fair use defense to the unauthorized use of a comedy routine in a dramatic play called *Hand to God*)("While derivative markets are not the principal focus of the fourth inquiry, that does not mean that they are irrelevant. A court considering fair use properly identifies and weighs relevant harm to the derivative market for a copyrighted work, which market includes uses that creators of original works might 'license others to develop.' To be clear, in assessing harm posed to a licensing market, a court's focus is not on possible lost licensing fees from defendants' challenged use. Rather, a court properly considers the challenged use's 'impact on potential licensing revenues for traditional, reasonable, or likely to be developed markets.'")(Citations omitted)

By contrast, Uruguay, Ecuador and Peru offered a proposed Article 2 for the Visual Impairment Treaty that expanded relevant interests to "third parties" and specified a broad range of interests to be considered in relation to such third parties:

When applying either Article 9.2 Berne, 13 TRIPS, 10 WCT, or similar provision in any other multilateral treaty, nothing shall prevent contracting parties to interpret the three-step test in a manner that respects the legitimate interests, including of third parties, deriving from educational and research needs, and other human rights and fundamental freedoms; and other public interests, such as the need to achieve scientific progress and cultural, educational, social, or economic development, protection of competition and secondary markets.²⁷

To a certain extent this text reflects a similar concern raised in TRIPS, Article 30 governing exceptions to patent protection. In language that mimics the three-part test of Article 13 for copyright exceptions, Article 30 provides:

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.²⁸

This obligation to "tak[e] account of the legitimate interests of third parties" in determining whether the exception at issue "unreasonably prejudice[s] the legitimate interests of the patent owner" arguably represents a similar focus on third party interests. Yet, ultimately, the proposed inclusion of a third party interest factor in the Visual Impairment Treaty did not survive the negotiation stages. Nevertheless, the Preamble of the Visual Impairment Treaty recognized the flexibility sought in this draft Article, reaffirming "the importance and *flexibility* of the three-step test for limitations and exceptions established in Article 9(2) of the Berne Convention for the Protection of Literary and Artistic Works and other international instruments..."²⁹

This new flexibility is also strongly reflected in domestic law approaches to patent protection for pharmaceuticals. Although TRIPS requires patent protection for qualifying pharmaceuticals, the United States, perceived as a strong patent protectionist regime, has recently raised the bar for patenting certain pharmaceuticals based on a more searching examination of whether such patents merely seek to protect natural phenomenon. If so, they are considered ineligible subject matter. Ineligibility for natural phenomenon, abstract ideas and laws of nature has been well established under U.S. law.³⁰ However, the examination of such ineligibility has been largely a cursory one, resulting in patents being granted for a diverse array of business methods, software and DNA-based inventions. Over the past five years, the U.S. Supreme Court has created a strong "gateway test" for such exceptions,

²⁷ Draft Compilation of Limitations and Exceptions for Educational Research Institutions 17 (2012), available at *ip-watch.org/weblog/wp-content/uploads/2012/scrr-first-secretariat-draft-compilation.pdf* [last visited October 1, 2014].

²⁸ TRIPS, *supra* note 7, Art. 30.

²⁹ Marrakesh Treaty to Facilitate Access to Published Works for Persons Who are Blind, Visually Impaired, or Otherwise Print Disabled (2013), Preamble, Para. 10 (Emphasis added).

³⁰ Diamond v. Chakrabarty, 447 U.S. 303 (1980).

resulting in a more searching analysis and a rejection of a greater number of applications based on subject matter eligibility. In connection with pharmaceuticals, this test requires proof that the invention at issue does not qualify as an unpatentable "natural phenomenon."³¹

In *Association for Molecular Pathology v. Myriad Genetics, Inc.*,³² based on this gateway test, the Supreme Court found that isolated DNA identified for use in connection with a test for breast cancer (the BRCA gene) did not qualify as patent eligible subject matter. Despite countless previously-granted patents that recognized the patentability of isolated DNA, the Supreme Court found that such DNA qualified as unpatentable *natural* phenomenon: "Myriad did not create anything. To be sure, it found an important and useful gene, but separating that gene from its surrounding genetic material is not an act of invention."³³ In supporting its decision, the Court stressed the critical role of the natural phenomenon exception in assuring public access to "the basic tools of scientific and technological work that lie beyond the domain of patent protection....[W]ithout this exception, there would be considerable danger that the grant of patents would tie up the use of such tools and thereby inhibit future innovation premised upon them. This would be at odds with the very point of patents, which exist to promote creation."³⁴

Other countries have used compulsory licenses to raise the accessibility of the public to patented medicines. In India, for example, public accessibility is part of the statutory analysis for determining if a compulsory license is warranted. Section 84 (1)(b) of the Indian Patent Act expressly provides that such licenses can be granted on evidence "that the patented invention is not available to the public at a reasonably affordable price."³⁵

In *Natco Pharma Ltd. v. Bayer Corporation*,³⁶ the Comptroller of Patents granted an Indian company, Natco Pharma Ltd, a compulsory license to sell Sorafenib, the generic version of the German-based Bayer AG's patented kidney and lung cancer drug Nexavar. Such grant was based in part on the drug's high prices in India. Bayer charged US\$5,600 per month for the drug; Natco charged \$177 per month. In establishing the lack of affordability under Section 84, the Controller stressed the limited amount of the drug Bayer sold in India compared to the relatively higher need: "It stands to common logic that a patented article ... was not bought by the public due to only one reason, *i.e.*, its price was not reasonably affordable to them." Bayer countered that its drug was reasonably priced because it was charging the same price in all countries, but the Controller rejected that defense. He recognized that patentees are entitled to charge prices necessary to recoup their investment. The Controller, however, found that Bayer had failed to provide sufficient evidence regarding

³⁵ India Patent Act of 1970 as amended, s. 84 (1)(b).

³⁶ Natco Pharma Ltd. v. Bayer Corporation, Application for Compulsory Licenses Under Section 84(1) of the Patents Act, 1970, in Respect of Patent No. 215758 (2012), available at hkindia.com/images/compulsory.pdf [Accessed February 2, 2015].

³¹ Mayo Collaborative Services v. Prometheus Labs, Inc., 132 S. Ct. 1289, 1293 (2012).

³² 133 S.Ct. 2107(2013)

³³ *Ibid.*, p. 2117.

³⁴ *Ibid.*, p. 2111 (citing *Mayo Collaborative Services v. Prometheus Laboratories*, 132 S. Ct. 1289, 1291 (2012)(citations and internal quotations omitted)). Notably, in *Mayo Collaborative*, the Supreme Court had recognized that the *application* of a naturally occurring phenomenon might qualify for patent protection where the claims demonstrated the existence of an "inventive concept", defined as " an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Mayo Collaborative Services v. Prometheus Laboratories, Ibid.*, p. 1294 (citations and internal quotations omitted). Yet despite this recognition of the potential for a patentable invention based on the *application* of a natural phenomenon, no such patentable invention was found in *Mayo Collaborative*. To the contrary, rejections in the pharmaceutical area for ineligible subject matter remain high.

Bayer's investment recoupment. Ultimately, he granted Natco a non-exclusive license to manufacture and sell the drug in India for \$177 per month in exchange for a 6% royalty.

In *Lee Pharma Ltd. v. AstraZeneca AB*,³⁷ the Controller of Patents affirmed the continuing critical role of price on availability determinations when it denied Lee Pharma's application for a compulsory license for manufacturing and selling AstraZeneca's patented diabetes treatment Saxagliptin in India. The court specifically described Lee Pharma's proposed price as "clearly...several times the alleged cost of import" of the drug.³⁸ Lee Pharma's failure to provide a law cost alternative, along with its failure to establish the unavailable nature of Saxagliptin in India at a reasonable price was fatal to its request.

Internationally the strongest evidence of the growing role of public access as a new modifier for the boundaries for IP geographies may be the creation of Article 31*bis* as a protocol to the TRIPS Agreement. Established in 2005 in direct response to the Doha Declaration,³⁹ Article 31*bis* permits eligible countries the right to grant compulsory licenses for patented pharmaceuticals for purposes of importation where the granting country lacks sufficient manufacturing capacity to produce the drug. Such compulsory licenses must be limited to "only the amount necessary to meet the needs of the eligible importing Member [so long as] the entirety of this production shall be exported to the Member..."⁴⁰ Paragraph 5 of Preamble stresses that Article 31*bis* is "without prejudice to the rights, obligations and *flexibilities* that Members have under the provisions of th[e] TRIPS Agreement ... including those reaffirmed by the [Doha Declaration] on Public Health and to their interpretation."⁴¹

Creating a new normative standard that secures public access, and more accurately redefines the present geographies to reflect the greater emphasis to be placed on such access, would appear an undeniable next step. Yet a new normative geography based on the foundational principle of public access (over other principles, such as creation incentivization) may not be necessary or even desirable. Before reworking present boundaries, based on 19th Century territoriality-based norms, we must be certain that such effort is required to secure to countries the domestic flexibility necessary to meet the demands of the 21st Century. At a minimum, any such new geography must be carefully crafted, or the openness of public access today could become the anarchy of unbordered flexibilities tomorrow.

2. The Geography of "Public Access"

³⁷ C.L.A. No.1 of 2015 (Decision of the Controller, January 19, 2016), available at

http://ipindia.nic.in/writereaddata/Portal/News/33_1_2-compulsory-license-application-20jan2016.pdf.

 $^{^{38}}_{20}$ Ibid., ¶ 30.

³⁹ Doha Declaration, *supra* note 1.

⁴⁰ "Amendment of the TRIPS Agreement" (December 8, 2005) WT/L/641, Art.31*bis*.

⁴¹ *Ibid*. (Emphasis added). The Protocol came into effect on January 29, 2017 after having been ratified by the required 2/3s of the then current members of the World Trade Organization. Protocol Amending the TRIPS Agreement, Para. 4; Sixth Extension of the Period for the Acceptance by Members of the Protocol Amending The TRIPS Agreement, WT/L/1024 (December 1, 2017). Non-ratifying members have until December 31, 2019 to ratify the Protocol. *Ibid*. It is likely the period for such ratification will be extended.

Despite the increasing public drumbeat underscoring today's need for greater public access, the battle between protectionism and access is not a new one in the annals of international IP norm creation. To the contrary, concern over public access formed an ongoing source of tension between parties during the development of the key 19th Century instruments governing international IP protection even today.

Both the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention)⁴² (governing copyright) and the Paris Convention for the Protection of Industrial Property (Paris Convention)⁴³ (governing patents and trademarks) undeniably marked an increase in international protectionism for intellectual property rights. Founded on a normative principle of territorial –based rights (geography in its purest sense), both instruments represent the first significant plurilateral agreements in their respective fields. Yet the history of international intellectual property standards memorialized in those Conventions from the 19th Century underscores that the standards contained in them did not represent any inevitable protectionist choice on behalf of the negotiating parties. To the contrary, the myth of the monolithic protectionism of 19th Century when such norms were being created. In fact several countries, such as the Netherlands and Switzerland, rejected patent protection because of its perceived adverse impact on innovation and commercial development.⁴⁴

By contrast, in Britain, patent protection was initially considered helpful to the working man since "[i]nvention was regarded as [their] 'legitimate occupation."⁴⁵ Subsequent narratives emphasized the goal of rewarding inventive genius and the need to enable British companies to exploit fully their technological advances. Anti-patent narratives not only disputed these views, using the rhetoric of Empire, they couched their challenge in terms of the adverse effect of patents on British industrial growth:

The abolitionists contended that patents for inventions obstructed the free flow of information, restricted adoption of new technology and slowed the pace of industrialization... [J.E. Thorold] Rogers [an occasional Professor of Political Economy at Oxford]...emphasized the obstructive potential of patents, likening the patentee to a squatter on the public domain, 'squatting upon materials and powers which are the property, not of individuals, but of the human race.' ... Most abolitionists were willing to concede that such artificial incentives [as patent protection] might have been necessary in pre-Industrial Britain...they argued that patents had served their purpose and now could be safely disposed of.⁴⁶

Germany demonstrated a similar anti-patent stance with several trade associations and chambers of commerce in Germany in 1893 condemning patents of invention as "injurious to

⁴² Berne Convention for the Protection of Literary and Artistic Works, July 14, 1967, art. 2, 828 U.N.T.S. 221.

⁴³ Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, revised at Stockholm July 14, 1967, 828 U.N.T.S. 305.

⁴⁴ Christopher May & Susan Sell. *Intellectual Property Rights: A Critical History* (Boulder: Lynn Reinmer Publishers Inc. 2006), p. 112 (describing the Dutch's rejection of patent protection as "an obstacle to the growth of industry").

⁴⁵ Maureen Coulter, *Property in Ideas: The Patent Question in Mid-Victorian Britain* (Missouri: The Thomas Jefferson University Press, 1991), p. 55.

⁴⁶ *Ibid.*, pp. 88-89.

common welfare."⁴⁷ Yet the German patent debate turned British arguments on their head. The absence of patent protection had allowed Germany to develop its domestic industries by imitating others people's goods. In a memorandum in support of patent protection, Wiener Siemens argued that imitative German products had gained a poor reputation in the global market, leading to lost exports.⁴⁸ To regain market share it needed to develop, not only quality products based on foreign inventions, but also completely new products based on German innovation. Socialist concerns also played a role in supporting patent protection as supporters relied on the potential patents offered workers to escape from poverty, thereby having a moderating social impact.

Although the inclusion of international norms for patenting that appeared in the 1883 Paris Convention can be seen as evidence of the failure of the anti-patent movement, the Convention still allowed countries a flexible approach under which they could reject patent protection to achieve goals of public access. Unlike the TRIPS Agreement, established over a century later, the Paris Convention of 1883 did not *obligate* countries to protect inventions under patent. It merely required national treatment for those countries that chose to do so. Thus, for example, England declined to permit patents for chemicals in order to challenge Germany's dominance until the early decades of the 20th Century. Similarly, many countries eschewed patent protection for pharmaceuticals until the TRIPS Agreement obligated such protection.⁴⁹ In England, where vestiges of the anti-patent movement remained strong, novelty requirements were often inconsistently applied in order to avoid abuses of what were perceived to be vestiges of royal privileges.⁵⁰

Given the strong anti-patent background that existed in the earlier formative years of the Paris Convention, the question arises whether adopting a public access norm for future IPR mapping activities would effect any real change. If the geography of public access is as long-lived as the more traditional territorial geography that forms the normative boundary for 20th Century mapping activities, what impact would the adoption of a new norm that merely expresses what has been occurring have on IPR boundaries? Perhaps of greater concern is the corollary question whether such changes would be worth the effort. The scope of rights originally delineated in 19th Century IP treaties such as the Paris and Berne Conventions reflected critical and inconsistent line drawing between the competing boundaries of access and territoriality. If the foundational normative principle for mapping 21st Century geographies is based on "public access," then increasing such access becomes a "thumb on the scale" in close cases. It is arguable that such "thumb on the scale" effect is already happening, such as through the application of the transformation test for fair use in the United States.⁵¹

⁴⁷ Fritz Machlup, "An Economic Review of the Patent System, Study of the Subcommittee on Patents, Trademarks and Copyrights of the Committee of the Judiciary," available at *https://mises.org/etexts/patentsystem.pdf* [Accessed October 7, 2014], p. 4.

⁴⁸ Markus Lang, *The Anti-Patent Movement Revisited: Institutional Change and Cognitive Frames in Nineteenth-Century Germany* 8 (2010), available at

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1695437; Ludwig Fischer, Werner Siemens und der Schutz der Erfindungen (Warner Siemens and the Protection of Inventions) 31 (Springer-Verlag Berlin Heidelberg Publishers 1922.

⁴⁹ TRIPS, *supra* note 7, Art. 27(1)(requiring patents for inventions "in all fields of technology").

⁵⁰ Zorina Khan, The Democratization of Invention: Patents and Copyrights in American Economic Development, 1790 -1920 (Cambridge: Cambridge University Press, 2005), pp. 30 – 37.

⁵¹ Bill Graham Archives v. Dorling Kindersley Limited, 448 F.3d 605 (2d Cir. 2006). See also Authors Guild, Inc. v. Google Inc., 954 F.Supp.2d 282 (SDNY 2013); Cariou v. Prince, 714 F.3d 694 (2d Cir. 2013).

A geography based on *public* access rights does not necessarily translate into one of *free* access for remaining rights. But such access right could significantly reduce their scope. This reduction would appear in a narrowing of the rights granted IP owners. In the United States, derivative rights granted copyright owners have been narrowed as unexploited markets, including newly discovered transformative ones, are expressly eliminated from an author's future protected licensing activities.⁵²

A public access norm would also reduce potential compensation when an exploitation right conflicts with a perceived public access right. In cases such as fair use (fair dealing) under copyright, compensation would be eliminated. Under a fair use exception, the author receives no compensation for the use even it is a commercial one. Public access grants, however, do not have to model the uncompensated, royalty-free license that a fair use determination gives rise to. To the contrary, public access could be supported through an increased use of compulsory licenses. The use of such a license requires some compensation be provided to the patent holder. But as *Natco* in India amply demonstrates, payment under such licenses is generally markedly lower than the price the patent holder would charge.

I do not mean to suggest that a reduction in compensation is not necessarily warranted in certain instances. Undeniably certain works of innovation and creativity would continue to be produced even if all exploitation rights were restricted to compulsory licenses. But those which require significant monetary and labor inputs, such as pharmaceuticals, computer software and special-effects-laden motion pictures, would undoubtedly be produced in significantly reduced numbers. Although the history of open source and user-generated content demonstrates that some creators will continue to produce content with no expectation of compensation, fortunately these are not our only sources for content creation. The Apple operating system on which I am writing this article remains a proprietary source, with the result that Apple is willing to invest millions of dollars in research to create the user-friendly, utility-enhanced software that lets me write without being a technology expert.

Before we create new geographies of intellectual property rights based on a public access norm, we must understand the precise nature of the geography that we are changing. "Geography" – or more particularly its impact on the normative rights represented by intellectual property –has played a powerful historical role in the creation of IPR boundaries. This "geography" is not necessarily the "geography" of the physical world - the map of the mountains, rivers, deserts and seacoasts of the globe – although physical geography may play a role in such activities. Instead, it is geography in one of its most prevalent legal forms – territoriality – that became one of the driving norms for IP "mapping" activities.

3. Geography, Destiny and Intellectual Property

Geography has often been defined as "destiny" particularly in connection with the industrial development of a particular country. Jared Diamond, one of the foremost exponents on geographic industrial determinism of the 1980s, rejected cultural or other

But see Dr. Seuss Enterprises, LP v. ComicMix, LLC, 256 F.Supp.3d 1099 (S.D. Cal. 2017)(discussed supra notes 24-26 regarding possible retrenchment of such broad access principles in limited situations)..

⁵² Authors Guild Inc. v. Hathitrust, 755 F.3d 87, 100 (2d Cir. 2014).

explanations to support historic distinctions in industrial development in favor of the simple impact of physical geography:

History followed different courses for different peoples because of differences among peoples' environments....In short, Europe's colonization of Africa had nothing to do with differences between European and African peoples themselves.... Rather, it was due to accidents of geography and biogeography—in particular, to the continents' different areas, axes, and suites of wild plant and animal species. That is, the different historical trajectories of Africa and Europe stem ultimately from differences in real estate.⁵³

Beyond industrial determinism, physical geography has also effected cultural development. Mountains, deserts and jungles generally serve to isolate communities from one another while rivers and flatlands generally facilitate cross-border and cross-cultural exchanges. Thus, for example, the traditional indigenous textiles of the Kuna Yala of the San Blas Islands of Panama reflect a culture developed apart from foreign contact until the colonialization of the Spanish Empire in the 16th Century. These indigenous textiles, referred to as "molas", consist of elaborate embroidery designs created by a reverse appliqué pattern historically used on dresses and blouses.⁵⁴ Only women of the tribe who have been trained in the stories represented by the geometric shapes used in the designs, and in the special hand embroidery that creates them, are authorized to produce these molas.

By contrast, the traditional embroidery of Gujarat, India, reflects India's longstanding role as a trade cross-roads. Created from cotton grown in the region, the embroidered images incorporate a wide-range of both geometric designs and physical elements, such as elephants and people.⁵⁵ Most significantly, the abhala style textiles in Gujarat incorporate mirrors through-out the design, giving it a bold festive appearance.

Geographic determinism remains a potent, if somewhat altered, force today. As Robert Kaplan in his latest work THE REVENGE OF GEOGRAPHY warns:

[R]ather than eliminating the relevance of geography, globalization is reinforcing it. Mass communications and economic integration are weakening many states, exposing a Hobbesian world of small, fractious regions. Within them, local, ethnic, and religious sources of identity are reasserting themselves, and because they are anchored to specific terrains, they are best explained by reference to geography. Like the faults that determine earthquakes, the political future will be defined by conflict and instability with a similar geographic logic. The upheaval spawned by the ongoing economic crisis is increasing the relevance of geography even further, by weakening

⁵³Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies* (New York: W. W. Norton & Company, 1991), pp. 25 & 401.

⁵⁴ See generally Mari Lyn Salvador, "Kuna Women's Arts: Molas, Meaning, and Markets", in Eli Bartra (ed), *Crafting Gender: Women and Folk Art in Latin America and the Caribbean* (Durham: Duke University Press, 2003), p. 47 (discussing Kuna Yala clothing designs and techniques). For pictures of traditional and nontraditional mola patterns, see Maricel E. Presilla, *Mola: Cuna Life Stories and Art* (New York: Henry Holt and Co., 1996).

⁵⁵ Gujarat's textile handicraft, a legacy of Indian culture, available at *http://blog.indianeagle.com/2013/10/26/gujarats-textile-handicraft-a-legacy-of-indian-culture* [Accessed October 1, 2014].

social orders and other creations of humankind, leaving the natural frontiers of the globe as the only restraint.⁵⁶

Geography similarly remains a viable basis for exploring the future boundaries of IP rights in the 21st Century. Although I do not believe that geography is an immutable determiner of fate, there is no question that physical geography has played a role in the creation of disparate IP systems, and continues to play a role today. The modern intellectual property laws and treaties that shape current debates over IP geographies grew up largely in the cauldron of Western Europe under the combined forces of the Industrial Revolution, 19th Century Neo-Imperialism and the global trade that they engendered.⁵⁷ The current impact of geography on intellectual property systems is amply demonstrated by countries such as China, Brazil and India where stronger IP enforcement exists along the developed coastal areas, and is largely non-existent in the interior regions where geography has given rise to a different set of factors to impede its protection.

Beyond physical limitations on enforcement, geography also gave rise to cultural limitations on such enforcement as well. In one of the earliest, most recognized, works in the field, William Alford's A BOOK IS AN ELEGANT OFFENSE: INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION underscored the impact of Confucianism on IP protection in China. He contrasted Europe's "notion that authors and inventors had a property interest in their creations that could be defended against the state,"⁵⁸ with China's continued practice "to regulate this area predominantly in terms of however best to maintain the state's authority."⁵⁹ Alford claimed that Confucianism explained these distinctions: "Lying at the core of traditional Chinese treatment … was the dominant Confucian vision of the nature of civilization and of the constitutive role played therein by a shared and vital past.... Simply stated, the need to interact with the past sharply curtailed the extent to which it was proper for anyone other than persons acting in a fiducial [sic] capacity to restrict access to its expressions."⁶⁰

Although Alford's view of the inherent cultural conflicts between Confucianism and intellectual property rights has been subsequently questioned,⁶¹ his contention that cultural differences lie at the heart of distinctions regarding the degree and scope of protection afforded intellectual property rights in various countries remains potent today. These distinctions are not limited to East-West differences in culture. To the contrary, they underscore some of the critical differences in protection that have developed among the West as well. The history of IP Dispute Settlement proceedings before the World Trade Organization is rife with disputes arising between the United States and the European

⁵⁶ Robert Kaplan, "The Revenge of Geography," Foreign Policy, 96 (May/June 2009). Kaplan expanded these views in his subsequent work *The Revenge of Geography* (New York: Random House, 2012), pp. 34-35.

⁵⁷ See generally Christopher May and Susan Sell, *Intellectual Property Rights: A Critical History* (Boulder: Lynn Reinmer Publishers Inc, 2006); Catherine Seville, *The Internationalisation of Copyright Law: Books, Buccaneers and the Black Flag in the Nineteenth Century* (Cambridge: Cambridge University Press, 2006); Doris Estelle Long, "Exposing the Processes of Empire in the International Protection of Intellectual Property" in Debora Halbert and William T. Gallagher (eds), *Intellectual Property in Context: Law and Society Perspectives* (Cambridge University Press, 2015).

⁵⁸ William P. Alford, *To Steal a Book is an Elegant Offense: Intellectual Property Law in Chinese Civilization* (Stanford: Stanford University Press, 1995), p. 18.

⁵⁹ Ibid.

⁶⁰ *Ibid*., pp. 19-21.

⁶¹ See Peter K. Yu, "Intellectual Property and Asian Values" (2012) 16 MARQ. INTELL. PROP. L. REV. 329, 340-349.

Union.⁶² Cultural distinctions similarly underlie the differing treatment of intellectual property as a source of development in a country's public innovation strategies. The United States, for example, has emphasized the increasing need for greater enforcement of its citizens' intellectual property rights: "Intellectual property is to the digital age what physical goods were to the industrial age. We must ensure that intellectual property is protected in foreign markets and promote greater cooperation on international standards that allow our technologies to compete everywhere."⁶³ By contrast, China's 2008 "national strategy" emphasized the developmental role of such protections, including the critical need for public access to innovation: "Coordination and uniformity between intellectual property policy and policies of culture, education, science, and health, need to be strengthened to safeguard the right of the public to legally and rationally utilize innovation findings and information in their cultural, educational, scientific and public health activities, promote the fair sharing of innovation and information and ensure that the government is able to deal with public crises."⁶⁴

Recent pronouncements regarding the role of intellectual property in supporting the development of artificial intelligence demonstrate similar contrasts. <u>The National Artificial Intelligence Research and Development Strategic Plan</u> published by the United States discusses the evidence of increasing "deep learning" and "deep neural net" patents to support its strategy for increasing research and development in the field.⁶⁵ By contrast, China's published State Council Notice on the Issuance of the Next Generation Artificial Intelligence Development Plan expressly recognizes "establish[ing] an AI technology standards and intellectual property system" as a critical "guarantee measure" in effectuating its stated goals of using AI "to accelerate the construction of an innovative nation and global power in science and technology."⁶⁶

4. Geography, Territory and 19th Century "Maps"

Beyond its role in diverse access and development trends, "geography" has historic normative claims that support its adoption as the continuing paradigm for 21st Century intellectual property rights (IPR) boundaries. "Geography's" legal cousin "territory" formed the fundamental backbone for both the Berne and Paris Conventions. Born during the 19th Century when Neo-Imperialism flourished, both Conventions reflect the philosophic foundations of Neo-Imperialism in the strong relationship established between IP rights and the sovereign authority of the country in which the right was sought to be protected.⁶⁷ Both Conventions embraced national treatment as a *plurilateral* obligation,⁶⁸ yet this advance was

⁶² See, e.g., "United States – Section 110(5) of the US Copyright Act", Report of the Panel, June 15, 2006, WT/DS/1601R.

⁶³ National Economic Council, "A Strategy for American Innovation: Driving Towards Sustainable Growth and Quality Jobs" (September 2009), available at

http://www.whitehouse.gov/administration/eop/nec/StrategyforAmericanInnovation [Accessed October 4, 2014]. ⁶⁴ "Outline of National Intellectual Property Strategy" (2008), available at

http://www.wipo.int/wipolex/en/details.jsp?id=859 [Accessed October 4, 2014).

⁶⁵ The National Artificial Intelligence Research And Development Strategic Plan 12-14 (Executive Office of the President (US) October 2016).

⁶⁶ State Council Notice on the Issuance of the Next Generation Artificial Intelligence Development Plan 25-26 (July 20, 2017)

⁶⁷ Doris Estelle Long, "Exposing the Processes of Empire in the International Protection of Intellectual Property," *supra* note 57..

⁶⁸ Paris Convention for the Protection of Industrial Property 1883 (1883)(Paris Convention, Original), Art. 2; Berne Convention for the Protection of Literary and Artistic Work 1883 (Berne Convention, Original), Art. 2.

tempered by the continuing recognition of sovereign power over the terms on which such national treatment would be extended.

Article 2 of the 1886 Berne Convention premised national treatment on "the accomplishment of the conditions and formalities prescribed by law in the country of origin of the work."⁶⁹ Furthermore, enforcement of the rights granted under the Convention, including seizure of pirated goods, was expressly subject to the domestic legislation of the country where such seizure was sought.⁷⁰ Even in areas where substantive standards were established, such as in the definition of a copyright protectable work under Article 4 of the Berne Convention,⁷¹ parties were free to maintain domestic variations in the types of works for which protection would be granted, particularly in connection with newly emerging technologies, and commercially useful applications of copyrighted works to marketed goods, including, for example, applied art and cinematography.⁷²

Industrial property protection under the Paris Convention reflected an even greater affirmance of the power of sovereigns over the scope of protection afforded IP within their territories. Even the national treatment obligation for patents contained in Article 2 of the Convention was strictly limited by the requirement that inventors comply with any "formalities and conditions" the country in which protection was sought imposed, including critically, registration and examination obligations.⁷³ Countries were also granted the right to obligate patent holders to practice their invention within the territorial boundaries of the granting country in order to maintain patent rights. Article 5 expressly provided that patents remained under any working obligation ["l'obligation d'exploiter son brevet"] that might exist in the country where protection was sought.⁷⁴ The obligation to "work" or practice the patented invention within the country allowed sovereigns to impose compulsory licenses, and ultimately to revoke the patent grant if the owner failed to work the invention within a particular period of time. A local working requirement assured domestic access to foreign technologies beyond that obtainable from the mere disclosure contained in the patent grant.

Yet despite the strong territorial nature of intellectual property rights in the 19th Century, there was already evidence that such territoriality was giving way in the face of the demands of international trade. As early as 1886, in *Apollinaris Co. v. Scherer*, ⁷⁵ one of the first in a line of cases in the United States that are now referred to as "grey market" or "parallel import" cases, the court specifically recognized that the source-designating function of the mark was not constrained by the plaintiff's territorial rights: "[T]he defendant is selling the genuine water, and therefore the trade-mark is not infringed. There is no exclusive

⁶⁹ Berne Convention, Original, *supra* note 68, Art. 2. The ultimate elimination of formalities as a limitation on domestic copyright protection occurred during the Berlin Revision in 1908. See Berne Convention for the Protection of Literary and Artistic Works, 1886 (Berlin Act, 1908), Art. 5(1).

⁷⁰ See, e.g., Berne Convention, Original, *supra* note 68, Art. 12 (requiring the seizure of pirated goods "on importation" but providing that such seizure "take place in accordance with the domestic legislation of each country."). The reliance on domestic legislation for accomplishing seizures of pirated goods has been retained to the present day. Berne Convention, Paris Act, Art. 16(3).

⁷¹ Berne Convention, Original, *supra* note 68, Art. 4.

⁷² Compare Berne Convention, Original, *supra* note 68, Art. 4 (no listing of applied art as covered

copyrightable work) with Berne Convention, Berlin Act 1908, Art. 4 (adding to the list of protected works a special exception for "works of art applied to industrial purposes" which only need to be protected "so far as the domestic legislation of each country allows").

⁷³ Paris Convention, Original, *supra* note 68, Art. 2.

⁷⁴ Paris Convention, Original, *supra* note 68, Art. 5.

⁷⁵ Apollinaris Co. v. Scherer, 27 F. 18 (CCSDNY 1886).

right to the use of a name or symbol or emblematic device *except to denote the authenticity of the article* with which it has become identified by association. The name has no office *except to vouch for the genuineness of the things* which it distinguished from all counterfeits; and until it is sought to be used as false token to denote that the product or commodity to which it is applied is the product of commodity which it property authenticates, the law of trademark cannot be invoked."⁷⁶ This "universality" approach, however, was expressly rejected by U.S. courts in *A. Bourjois & Co., Inc. v. Katzel*,⁷⁷ in 1923, at the same time that the first drafts for protection of well-known marks outside of traditional domestic registration obligations were being circulated internationally.⁷⁸

Technology has similarly eroded the utility of "territory" as a foundational principle. Territoriality for trademarks eroded in the face of domain names whose global utility demanded an international solution. Copyrights became global communication tools as usergenerated content flooded the internationally accessible media of digital communications.

In the 19th Century, the lure⁷⁹ of the "civilizing" message of property and technology motivated the strong protectionist regimes of the Berne and Paris Conventions. Individuated creativity became the norm for intellectual property. Copyright required "originality"; patents required identified inventors. Such individuated creativity was combined with property-based rhetoric that transformed intellectual property into the highly protected legal creature of today. Yet the arguably negative influences of "geography" on IP-accessibility does mean that access should be automatically accepted as the paradigm for use in crafting 21st Century IPR "geographies." Just as the progressive benefits of technology and property may have been overstated in the 19th Century, so too the developmental benefits of open access may be overstated today. To avoid such imbalances, we need a more nuanced approach that builds on the positive lessons of earlier geographies, while simultaneously crafting new boundaries to reflect the altered realities of the 21st Century.

5. Creating a new map for the 21st Century

The advances in communicative media – such as the Internet, text messaging and smart phones – have completely altered the nature of traditional publication and performance venues. Interactions between author/reader and performer/audience in these new media have virtually eliminated the distinctions between creator and audience. Global warning, sustainable development, artificial intelligence, and pandemics have similarly placed new demands on the access to technological developments that can assist in equalizing economic development. Social justice and the fundamental right to participate in one's culture have raised a new rights-based consciousness among end users and policy makers.

These demands undoubtedly require reconsideration of the existing geographies crafted from the territorial-based norms of the 19th Century. But in crafting a new IP rights map, we should carefully recalibrate existing norms as opposed to simply wiping the slate clean and

⁷⁶ Apollinaris, 27 F. 18, 20 (Emphasis added).

⁷⁷ A. Bourjois & Co., Inc. v. Katzel, 260 US 689 (1923).

⁷⁸ Doris Estelle Long, "Unitorrial" Marks and the Global Economy" (2002) 1 J. Marshall Rev. Intel. Prop. L. 191.

⁷⁹ See Niall Ferguson, *Empire: The Rise and Demise of the British World Order and the Lessons for Global Power* (New York: Basic Books 2004), p xxvii.

starting over. Much of the present political turmoil we face today comes from global powers treating the physical map of the world as one without recognizable pre-existing borders.⁸⁰ We should not apply this same misguided approach to the present map of IP rights. To the contrary, there are many lessons to be learned from the battles in the 19th Century that can help ensure that the norms we create today strike a balance between access and protection that will avoid the problems of the perceived protectionist past.

First, the IPR regime established by the 19th Century Berne Convention and Paris Convention contains critical access-protection measures that should be reconsidered and reinvigorated. Among those access rights is the in-country working obligation imposed on domestic patents in Article 5 of the Paris Convention.⁸¹ Such obligations, tied to the benefits of domestic patent disclosures, supports the technology transfer goals at the heart of today's social justice demands.

A much under-used Article in TRIPS, the most protectionist multilateral IP treaty to date, Article 30 actually establishes a fair use/fair dealing right for patents that should be reconsidered and re-invigorated. In language that tracks Article 13 for copyright, Article 30 provides:

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.⁸²

Such "fair dealing" provisions could be applied domestically to expand acceptable uses of a patented invention, particularly since Article 30 allows consideration of "the legitimate interests of *third parties*."⁸³ Such third parties could include generic manufacturers and patients among others.

Second, similar to "progress" in the 19th Century, we must avoid turning "access" into the ultimately "civilizing influence" for today's geographies.⁸⁴ Neither access nor protection *is an unbounded benefit*. It is the balance between the two that provides the most rational boundaries. Such balances may be better achieved by providing tests, similar to Articles 13 and 30 of TRIPS, that recognize the need to balance competing interests to reach an equitable result. Those who support access must also recognize that creators and inventors share the same need to secure income from their work, as do those who would use their works and inventions. We should focus on articulating factors and norms for *balancing* rights. Without such balance, no defensible international mapping norm is possible.

A corollary to this second lesson is the equally critical need to reconcile access demands with the economic realities of today's marketplace. Although many factors contributed to the eventual failure of the anti-patent movements of the 19th Century, one of the most significant factors was the 1873 financial crisis. It made the free trade needs that

⁸⁰ See David Fromkin, A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East (New York: Holt Publishing Co. 1989).

⁸¹ Paris Convention, Original, *supra* note 68, Art. 5.

⁸² TRIPS, *supra* note 7, Art. 30.

⁸³ TRIPS, *supra* note 7, Art. 30 (Emphasis added).

⁸⁴ Niall Ferguson, *supra* note 79, p xxvii.

supported an absence of patent protection appear a failed policy.⁸⁵ The successful emphasis by the pro-patent forces on the *economic* value of patents ultimately mustered the necessary support across a broad array of interests in favor of stronger patent protection in the 19th Century. This would suggest that while access based on free speech and other non-economic social justice demands may provide a powerful ethical basis for greater access to intellectual property, a focus on the developmental benefits of such increased access may ultimately prove a more convincing basis for revising presently protectionist norms.

Fourth, the anti-patent battles of the 19th Century teach us that icons matter in mustering the public support required to achieve a re-working of IP geographies. The perceived need for greater protection of local industry in the form of heightened patent protection was supported by the increasing number of technology expos that stressed the significance of innovation to progress. These expos also demonstrated that such progress was largely within the hands of large companies such as Siemens Co., The Edison Electric Company, and Farbenfabriken vorm. Friedr. Bayer & Co. These companies were generally helmed by "myth-making inventors" such as Thomas Edison and Werner Siemens. These men fueled the myth of the Heroic Inventor which in turn fueled the perceived need for patent protection to encourage such "heroic" efforts.⁸⁶ Similar icons would be helpful in promoting the benefits of greater access as an economic benefit.

Finally, in an era of increasing technological advancement, we must be careful to avoid blinding ourselves to the lure of "technological innovation" as we re-draw the geographies of 21st Century intellectual property. Like the lure of "progress" in the 19th Century, the unexamined benefits of "technology" today threaten to redraw boundaries of ownership that may actually be counter-productive to the movement toward greater "access" that has been the hallmark of many of the acknowledged "flexibilities" that are redrawing IP boundaries. For example, many have argued that copyright protection should be expanded to protect works created by nonhuman authors. In connection with works generated through the application of artificial intelligence, the concept of the "romantic robot" has begun to appear as a basis for expanding copyright protection to such non-human created works. From "romantic robots" to animal selfies,⁸⁷ this contended-for expansion has been the supported by the argument that more than mere humans have the ability to create original works. I agree. There is little doubt that such non-human authors do in fact have the ability to produce works that meet the relatively low standards of originality applied under 21st Century copyright doctrines. Yet, that is not the issue. The issue is whether the public domain into which these works would be placed without such expansion should be shrunk to accommodate this new form of technological innovation. The answer to that question requires a far more nuanced examination than the simple benefit of technological innovation affords.

Conclusion

Far from being an outdated paradigm, territorially-based geographies remain a powerful starting point for creating new IP rights boundaries in the face of altered 21st Century demands for greater public access. The members of what I refer to as the "Developed

⁸⁵ Markus, Lang, "The Anti-Patent Movement Revisited: Institutional Change and Cognitive Frames in Nineteenth Century Germany," available *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1695437* [Accessed October 7, 2014], p.19.

⁸⁶ Doris Estelle Long, "Exposing the Processes of Empire in the International Protection of Intellectual Property," *supra* note 57.

⁸⁷ Naruto v. Slater, 888 F.2d 418 (9th Cir. 2018).

South," China, India and Brazil, are already using patent working obligations and other techniques to deal with access issues. These laws are not copies of one another. To the contrary, they represent a range of choices that are among the strongest representations today that geography remains a powerful factor in crafting access-based norms for the 21st Century. It may also remain a powerful paradigm for drawing the new boundaries for intellectual property rights today.