Articles

Innovation in the Information Age: The United States, China, and the Struggle Over Intellectual Property in the 21st Century

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Innovation is a key driver of economic success in the 21st century—and therefore a key driver of national power. Many commentators view technology and innovation as the core arena in which the two largest economies and superpowers—the United States and China—will battle in the decades to come. The United States is the world's leading proponent of strict intellectual property regulation. It has consistently sought to strengthen IP law and enforcement in a range of international forums, including many trade and investment treaties. China, by contrast, has long been seen, by the West at least, as the world's leading IP scofflaw. Conversely, many Chinese observers—indeed, many observers around the world—believe the United States is an IP bully that pushes inappropriate legal standards on other nations in an effort to serve the narrow interests of key domestic constituencies. Chinese practice suggests that the Chinese government and Chinese society prefer a more balanced (the United States would say lax) approach to global IP protection. Even that balance is currently in flux, however. China has in

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recent years begun to devote much more attention to domestic IP protection. Nonetheless, there is substantial (though shrinking) divergence in how the United States and China approach IP law today, and this contrast reflects major differences in national interest and economic conditions. At the same time, American history suggests that convergence in IP law and policy will continue to occur, and may well accelerate, as the Chinese economy expands and matures. This is especially true in the increasingly vital and contentious high technology sector. Ultimately, American and Chinese IP approaches to IP law and policy—and the battles over them—cannot be disentangled from the larger relationship between the world's two largest economies.

INTRODUCTION

Innovation is widely seen as a key driver of economic success in the 21st century—and therefore a key driver of national power.[1] And while the secret sauce that yields a highly innovative economy is difficult to identify, let alone replicate, robust and broad intellectual property protection is widely believed to be an essential component.[2] Many commentators view technology and innovation as the core arena in which the two largest economies and superpowers—the United States and China—will battle in the decades to come.[3] As the *Financial Times* recently argued, "The fight over trade is merely a skirmish

1. Stephen Hilgartner, *Intellectual Property and the Politics of Emerging Technology: Inventors, Citizens, and Powers to Shape the Future*, 84 CHI.-KENT L. REV. 197, 198 (2009).

2. *See* Robert Pitofsky, *Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy*, 16 BERKELEY TECH. L.J. 535, 540 (2001).

3. *See* Peter K. Yu, *From Pirates to Partners: Protecting Intellectual Property in China in the Twenty-First Century*, 50 AM. U. L. REV. 131, 132–33 (2000).

in a larger technology war, which itself is a component of a long struggle between a global hegemon—the US—seeking to maintain its dominance, and an ascending challenger—China—that feels it has a moral right to reclaim its status as a great power."[4] This "larger technology war" has many aspects, but a central feature is the promotion of innovation.

Yet how nations ought to protect intellectual property and promote innovation is a matter of substantial debate.[5] The relationship between intellectual property law and innovation is complex, and innovation and imitation can coexist more readily than conventional wisdom suggests.[6] Differing perspectives on optimal and appropriate intellectual property policy have fueled substantial international conflict, whether those differences are grounded in contrasting theories of innovation or simply in differing assessments of the national interest in strong (or weak) intellectual property rules in particular economic sectors or regions.[7] Whether, when, and how intellectual property protection in fact fosters innovation is not the precise focus of this Article. But it is not unrelated to an Article on the struggle over innovation and intellectual property between the two largest economies in the world, given the many differences in how the United States and China currently treat intellectual property rights.[8]

In a nutshell, the United States is the world's leading proponent

4. David Zweig, *Tussle for Tech Supremacy Powers US-China Animosity*, FIN. TIMES (Dec. 5, 2018), https://www.ft.com/content/ddbe9522-f878-11e8-a154-2b65ddf314e9 [https://perma.cc/76QH-GVWZ].

5. *See, e.g.*, Benjamin N. Roin, *Intellectual Property Versus Prizes: Reframing the Debate*, 81 U. CHI. L. REV. 999 (2014) (comparing traditional intellectual property with a prize system of monetary payouts).

6. *See, e.g.*, KAL RAUSTIALA & CHRISTOPHER SPRIGMAN, THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INNOVATION (2012); Kal Raustiala & Christopher Sprigman, *Fake It Till You Make It: The Good News About China's Knockoff Economy*, 92 FOREIGN AFF. 25, 25 (2013); Kal Raustiala & Christopher Sprigman, *Let Them Eat Fake Cake: The Rational Weakness of China's Anti-Counterfeiting Policy*, *in* THE LUXURY ECONOMY AND INTELLECTUAL PROPERTY: CRITICAL REFLECTIONS 263 (Barton Beebe et al. eds., 2015). Deep debates about the purpose and rationale for IP protection are endemic today. *See, e.g.*, Mark Lemley, *Faith-Based Intellectual Property*, 62 UCLA L. REV. 1328 (2015); ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY (2011).

7. For a general treatment of the politics of IP in the international domain, see, e.g., SUSAN SELL, PRIVATE POWER, PUBLIC LAW: THE GLOBALIZATION OF INTELLECTUAL PROPERTY LAW (2003).

8. *See* Shruti Rana, *The Global Battle Over Copyright Reform: Developing the Rule of Law in the China Business Context*, 53 STAN. J. INT'L L. 89, 118–22 (2017) (comparing U.S. and Chinese intellectual property systems).

of strict intellectual property (hereafter IP) regulation.[9] The United States has consistently sought to strengthen IP law and enforcement in a range of international forums, including many trade and investment treaties.[10] China, by contrast, has long been seen, by the West at least, as the world's leading IP scofflaw.[11] This is not because Chinese IP law is especially weak in formal terms, but because Beijing tolerates—or perhaps cannot really control—the huge amount of infringement that takes place within Chinese borders.[12] At the instigation of the United States, IP is a frequent topic in U.S.-China strategic dialogues, such as the 2015 Sunnylands summit, where Chinese President Xi Jinping stated that "both governments will not be engaged in or knowingly support online theft of intellectual properties."[13] Yet many Chinese observers—indeed, many observers around the world—believe the United States is an IP bully that pushes inappropriate legal standards on other nations in an effort to serve the narrow interests of a few key domestic constituencies, such as Hollywood film studios and major pharmaceutical manufacturers.[14] Chinese practice suggests that the Chinese government and Chinese society prefer a more balanced (the United States would say lax) approach to global IP protection.[15] Even that balance is currently in flux, however. China has in recent years begun to devote much more attention to domestic IP protection.[16]

Both perspectives reflect reality, even if they caricature what are often complex and evolving positions. In this Article, I will first focus on American views and practice with regard to IP, with some attention as well to related issues such as digital espionage. I will then

9. Peter K. Yu, *The Rise and Decline of the Intellectual Property Partners*, 34 CAMPBELL L. REV. 525, 540 (2012).

10. *Id.* at 540–42.

11. *See, e.g.*, Patricia E. Campbell & Michael Pecht, *The Emperor's New Clothes: Intellectual Property Protections in China*, 7 J. BUS. & TECH. L. 69, 69–71 (2012).

12. *See* OFFICE OF THE U.S. TRADE REP., 2019 SPECIAL 301 REPORT 42 (2019), https://ustr.gov/sites/default/files/2019_Special_301_Report.pdf [https://perma.cc/RL98-QZRM] (reporting that, in 2016, Chinese and Hong Kong manufacturers produced approximately 63.4% of all counterfeit goods).

13. Joint remarks, as interpreted. President Xi Jinping, Remarks by President Obama and President Xi of the People's Republic of China in Joint Press Conference (Sept. 25, 2015), https://obamawhitehouse.archives.gov/the-press-office/2015/09/25/remarks-president-obama-and-president-xi-peoples-republic-china-joint [https://perma.cc/6ZU2-NWBL].

14. *See, e.g.*, Yu, *From Pirates to Partners*, *supra* note 3.

15. Rana, *supra* note 8, at 102–03.

16. OFFICE OF THE U.S. TRADE REP., *supra* note 12, 41–48 (surveying recent developments in Chinese protection of intellectual property).

contrast that with Chinese articulated views and practice. My basic argument is straightforward: there is substantial (though shrinking) divergence in how the United States and China approach IP law today, and this contrast reflects major differences in national interest and economic conditions. At the same time, American history itself suggests that convergence in IP law and policy will continue to occur, and may well accelerate, as the Chinese economy expands and matures. This is especially true in the increasingly vital and contentious high technology sector. The line between IP policy and technology policy is often blurry, and increasingly the United States and China are battling over global technological dominance. Recent tensions over the global growth of firms such as Huawei and ZTE,[17] or China's "Made in China 2025" plan,[18] illustrate the stakes and the ways technology strategies may impinge upon IP policy—and vice versa.

Ultimately, American and Chinese approaches to IP law and policy—and the battles over them—cannot be disentangled from the larger relationship between the world's two largest economies.[19] National power is a function of economic size but also innovation. Unlike the Cold War, when the U.S. and Soviet economic spheres had little economic contact, the United States and China are deeply economically intertwined.[20] Those pervasive economic ties define the relationship. Yet the two states remain politically and militarily competitive—increasingly so under the Xi and Trump administrations[21]—and while true conflict is not on the immediate horizon, its prospect drives substantial concern in the United States over China's acquisition of American IP and innovations and its overall approach to IP law.[22]

17. *See, e.g.*, Raymond Zhong, *Huawei's U.S. Restrictions Expose a High-Tech Achilles' Heel for China*, N.Y. TIMES (May 21, 2019), https://www.nytimes.com/2019/05/21/technology/huawei-china-us-trade.html [https://perma.cc/G4XT-BPYM].

18. *See infra* notes 122–123 and accompanying text.

19. *See, e.g.*, Alan Rappeport, *Intellectual Property to Take Center Stage as Trump and Xi Meet*, N.Y. TIMES (Nov. 28, 2018), https://www.nytimes.com/2018/11/28/us/politics/intellectual-property-trump-xi.html [https://perma.cc/XY6Z-VTHB].

20. *See* Thomas J. Schoenbaum & Daniel C.K. Chow, *The Perils of Economic Nationalism and a Proposed Pathway to Trade Harmony*, 30 STAN. L. & POL'Y REV. 115, 168–74 (2019) (recounting the 2018 U.S.-China trade war, which impacted hundreds of billions of dollars of goods).

21. *See* Edward Wong, *U.S. v. China: A New Era of Great Power Competition, but Without Boundaries*, N.Y. TIMES (June 26, 2019), https://www.nytimes.com/2019/06/26/world/asia/united-states-china-conflict.html [https://perma.cc/N6L4-UKFM].

22. *See* SEAN O'CONNOR, U.S.-CHINA ECON. & SEC. REVIEW COMM'N, HOW CHINESE COMPANIES FACILITATE TECHNOLOGY TRANSFER FROM THE UNITED STATES 3 (2019),

I. U.S. VIEWS ON IP

IP law in the United States is broadly utilitarian in nature.[23] The Copyright Clause of the U.S. Constitution grants Congress the power to "promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[24] Incentives are at the core of this approach: IP rights exist to "promote . . . Progress", and not (at least in the orthodox account) for moral or ethical reasons or to simply enrich creators. This utilitarian grounding is important for several reasons.[25] First, it explains some noteworthy features of U.S. IP law (such as the general lack of "moral rights" for creators.)[26] Second, it may have the effect of making U.S. policymakers see alternative approaches to IP in other nations not as value-laden, culturally-influenced social choices, but instead as simply flawed or even devious policies.[27] Third, it suggests that there are optimal levels of IP protection, that the optimum is almost surely somewhere below a complete level of propertization, and that more IP protection is not always better.[28] IP rights (with the exception of trademark and trade secret) are time-

https://www.uscc.gov/sites/default/files/Research/How%20Chinese%20Companies%20Facilitate%20Tech%20Transfer%20from%20the%20US.pdf [https://perma.cc/4JXH-RYCA] (identifying several mechanisms by which Chinese firms obtain American intellectual property, including investment, licensing agreements, and talent acquisition, as well as cyber theft).

23. Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745, 1750–51 (2012).

24. U.S. CONST. art. I, § 8, cl. 8.

25. *See* Robert Merges, *The Philosophical Foundations of IP Law: The Law and Economics Paradigm*, *in* RESEARCH HANDBOOK ON THE ECONOMICS OF IP LAW 72 (Ben Depoorter & Peter Menell eds., 2019).

26. The Visual Artists Rights Act of 1990 (VARA), 17 U.S.C § 106A, is the rare exception that proves the rule, and was passed to align U.S. law with provisions in the Berne Convention. *See generally* U.S. COPYRIGHT OFFICE, AUTHORS, ATTRIBUTION, AND INTEGRITY: EXAMINING MORAL RIGHTS IN THE UNITED STATES (2019), https://www.copyright.gov/policy/moralrights/full-report.pdf [https://perma.cc/EYW6-LDG9].

27. Leah Chan Grinvald, *Making Much Ado About Theory: The Chinese Trademark Law*, 100 TRADEMARK REP. 964, 1005–06, 1013–14 (2010).

28. Elizabeth L. Rosenblatt, *Intellectual Property's Negative Space: Beyond the Utilitarian*, 40 FLA. ST. L. REV. 441, 482–85 (2013) (arguing against increased regulation over under-regulated IP "negative spaces").

limited monopolies guaranteed by the government.[29] Proper IP law should—though it often does not—reflect a considered balance between the costs of this monopoly power and the benefits yielded by enhanced incentives to create and innovate.

The United States has steadily refined its domestic IP legislation since the Founding.[30] But it has also, over the last 50 years or so, increasingly treated IP as an important foreign policy issue.[31] Since at least the 1970s, the United States has made ever-stronger IP protection a key focus of its trade and investment treaties.[32] As a major trading nation, and the world's largest economy with highly research-intensive universities and firms, the United States has long had an interest in ensuring that IP rights around the world broadly track American law and are enforced vigorously and without discrimination.[33] When the United States encountered resistance abroad in recent decades—as it often did—it used its considerable economic and political power to

29. The incentive structure for trademark and trade secret is distinct, and both trademarks and trade secrets are of indefinite duration. For basics, see generally *Trademarks: What Is a Trademark?*, WORLD INTELLECTUAL PROP. ORG. [WIPO], https://www.wipo.int/trademarks/en/ [https://perma.cc/G4SU-Z947] (last visited Nov. 24, 2019); *What Is a Trade Secret?*, WIPO, https://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm [https://perma.cc/5AY7-QFPY] (last visited Nov. 24, 2019).

30. *See* Dotan Oliar, *Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power*, 94 GEO. L.J. 1771 (2006) (using the record of the Constitutional Convention of 1787 to analyze the U.S. Constitution's Intellectual Property Clause); Thomas B. Nachbar, *Intellectual Property and Constitutional Norms*, 104 COLUM. L. REV. 272 (2004) (recounting the history of judicial and scholarly interpretations of the Intellectual Property Clause).

31. In what may be the first example of an IP provision in a U.S. trade treaty, in 1868 the United States and Russia added an article to their 1832 treaty, Commerce and Navigation, Russ.-U.S., Dec. 18, 1832, 8 Stat. 444, stating that they:

> agree that any counterfeiting in one of the two countries of the trademarks affixed in the other on merchandize to show its origin and quality, shall be strictly prohibited and repressed, and shall give ground for an action of damages in favor of the injured party, to be prosecuted in the courts of the country in which the counterfeit shall be proven.

Additional Article on Trademarks, Russ.-U.S., Jan. 27, 1868, 16 Stat. 725.

32. *See* 2 TREATIES AND OTHER INTERNATIONAL AGREEMENTS OF THE UNITED STATES OF AMERICA, 1776–1949, at 1208, 1220 (Charles I. Bevans ed., 1974).

33. *See Intellectual Property Rights*, OFF. U.S. TRADE REP., https://ustr.gov/trade-agreements/free-trade-agreements/transatlantic-trade-and-investment-partnership-t-tip/t-tip-10 [https://perma.cc/W6TV-HA4N] (last visited Jan. 25, 2020) ("Nearly 40 million American jobs are directly or indirectly attributable to 'IP intensive' industries . . . [which] drive approximately 60 percent of U.S. merchandise exports and a large share of services exports.").

bulldoze others into acquiescence.[34]

As a practical matter, global IP protection has been addressed largely through two paths: global trade agreements, whether bilateral or multilateral, and the work of the World Intellectual Property Organization, or WIPO.[35] The United States is party to eighteen WIPO-administered treaties; China is party to fifteen.[36] While WIPO is solely focused on the topic of IP, and its treaties widely ratified around the globe, many observers consider trade and investment law—which tends to have powerful enforcement mechanisms at its disposal—to be the more significant source of global IP rules.[37] And for the United States, which long was dissatisfied with WIPO as a forum, trade accords have offered an arena in which its relative power could be more fully brought to bear.[38]

The United States ratified its first IP treaty, the Paris Convention for the Protection of Industrial Property, in 1887.[39] The first sustained U.S. effort to include IP rules within a major multilateral trade accord came almost a century later, in the 1970s—a time when China effectively had no domestic IP legislation but the United States was increasingly focused on the importance of IP law domestically, and looking to expand that focus globally.[40] The United States sought to leverage the power of the General Agreement on Tariffs and Trade ("GATT"), the precursor to the World Trade Organization ("WTO"), to strengthen IP protection in foreign jurisdictions.[41] During the Tokyo Round of negotiations of the GATT in the 1970s, the United States and other interested parties proposed an accord on counterfeit goods,

34. Yu, *From Pirates to Partners*, *supra* note 3, at 137–38 (explaining that the U.S. used Section 301 of the Trade Act of 1974, the "H-bomb of Trade Policy," to force China to implement new regimes to protect intellectual property).

35. WIPO administers 26 treaties. *WIPO-Administered Treaties*, WIPO, http://www.wipo.int/treaties/en/ [https://perma.cc/H9AK-2XBN] (last visited Nov. 24, 2019).

36. *WIPO-Administered Treaties: Contracting Parties > China*, WIPO, https://www.wipo.int/treaties/en/ShowResults.jsp?country_id=38C [https://perma.cc/6BD6-S4UM] (last visited Nov. 24, 2019).

37. Laurence R. Helfer, *Regime Shifting: The TRIPS Agreement and the New Dynamics of International Investment*, 29 YALE J. INT'L L. 1, 20–23 (2004).

38. *Id.* at 21.

39. *WIPO-Administered Treaties: Contracting Parties > Paris Convention*, WIPO, https://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=2 [https://perma.cc/8ZVF-3AM8] (last visited Nov. 28, 2019).

40. C. O'Neal Taylor, *The Limits of Economic Power: Section 301 and the World Trade Organization*, 30 VAND. J. TRANSNAT'L L. 209, 211–12 (1997).

41. *Id*.

a then-growing problem in global trade.[42] The GATT parties began negotiations on an "Agreement on Measures to Discourage the Importation of Counterfeit Goods."[43]

The United States failed to get the counterfeit agreement adopted during the Tokyo Round.[44] But the idea reappeared at the 1982 GATT ministers' meeting, where it faced continued opposition from many developing countries.[45] Counterfeits were increasingly seen by U.S. firms as a major threat to global market share.[46] At the same time, IP protection was becoming a more central focus of many sectors, including the American technology industry, which was just taking off.[47] (Microsoft was founded in 1975; the Commodore Vic-20, purportedly the first personal computer to sell more than one million units, debuted in 1980.)[48] The U.S. approach to IP reflected both the relative power of American firms and the porous nature of the U.S. Congress.[49] Lobbyists for IP-dependent firms had easy access to Congress and, seemingly, a case Congress was happy to hear: more IP protection, so it was claimed, meant more profits for U.S. firms and more jobs at home.[50] The U.S. effort to bolster IP rights globally seemed like a win for Americans and, if a loss for anyone, only for foreigners—and foreigners did not vote in American elections.[51]

42. Doris E. Long, *Copyright and the Uruguay Round Agreements: A New Era of Protection or an Illusory Promise?*, 22 AIPLA Q. J. 531, 535–36 (1994).

43. A. Jane Bradley, *Intellectual Property Rights, Investment, and Trade in Services in the Uruguay Round: Laying the Foundations*, 23 STAN. J. INT'L L. 57, 64 n.20 (1987).

44. Lujin Zhao, *Transportation, Cooperation, and Harmonization: GATS as a Gateway to Integrating the UN Seaborne Cargo Regimes into the WTO*, 27 PACE INT'L L. REV. 61, 74 (2015).

45. Bradley, *supra* note 43, at 66–67.

46. Marshall A. Leaffer, *Protecting United States Intellectual Property Abroad: Towards a Multilateral Approach*, 76 IOWA L. REV. 273, 275 (1991).

47. Peter K. Yu, *The Copyright Divide*, 25 CARDOZO L. REV. 331, 356–60 (2003).

48. *See* Bruce Makoto Arnold, *Twenty-Two Columns of Lobrow Revolution: The Commodore VIC-20 and the Beginning of the Home Computer Era*, 6 J. HUMAN. 11, 12 (2017).

49. Mohamed Omar Gad, *Impact of Multinational Enterprises on Multilateral Rule Making: The Pharmaceutical Industry and the TRIPS Uruguay Round Negotiations*, 9 L. & BUS. REV. AM. 667, 674–76, 688–89 (2003).

50. *Id*.

51. *See* Sapna Kumar, *Innovation Nationalism*, 51 CONN. L. REV. 205, 230 (2019) (noting that interest groups used a "victimization narrative" to lobby for strengthening patent protection in the Tariff Act). Notably, America's overseas foes had the same perspective. Yu, *The Copyright Divide*, *supra* note 47, at 363–64 (describing how software piracy "took on a

The momentum toward the pursuit of more stringent IP rights also reflected the fact that there was little to no organized domestic opposition. Rightsholders and their interests (which generally were ever-stronger IP rights) dominated the discussion in Washington.[52] The largely one-sided nature of the IP conversation in Congress would only change meaningfully with the maturation of Silicon Valley, which often depends upon the widespread reproduction of content and which, by the 2010s, became an important counterweight against the strongly pro-rightsholder orientation of U.S. copyright policy.[53] Internationally, of course, there was significantly more opposition to the U.S. approach, and that opposition only grew over time.[54]

To return to the 1980s, the first step in the U.S. strategy to use the global trading system to strengthen IP rules globally was to enhance domestic tools that the United States could use to punish states that lacked adequate IP laws. The 1984 Trade and Tariff Act made the protection of IP in target states part of the process of evaluation for preferential access to the U.S. market.[55] Section 301 of the earlier Trade Act of 1974 had authorized the President to take action to address unreasonable acts, policies or practices that burdened or restricted U.S. commerce.[56] Section 301 was generally a powerful (if widely disliked globally) tool for U.S. unilateral action in the trade arena.[57] The 1984 Act for the first time made poor IP protection in

nationalist overtone" in China: "to screw foreigners was patriotic").

52. Kumar, *supra* note 51, at 234 (arguing that the Copyright Term Extension Act was the result of lobbying by copyright holders, such as Disney); Christopher Buccafusco & Paul J. Heald, *Do Bad Things Happen When Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension*, 28 BERKELEY TECH. L.J. 1, 7–8 (2013).

53. Consider the debate over SOPA and PIPA, companion bills against online piracy introduced in Congress in 2011 that engendered significant public backlash, some of it facilitated by firms such as Google. *See* Jenna Wortham, *Public Outcry Over Antipiracy Bills Begins as Grass-Roots Rumbling*, N.Y. TIMES (Jan. 19, 2012), http://www.nytimes.com/2012/01/20/technology/public-outcry-over-antipiracy-bills-began-as-grass-roots-grumbling.html?pagewantd=1&ref=technology [https://perma.cc/W3EQ-639P].

54. Kumar, *supra* note 51, at 238–41.

55. Gilbert B. Kaplan et al., *Antidumping, Countervailing Duty, and National Security Provisions in the 1988 Trade Act*, 22 GEO. WASH. J. INT'L L. & ECON. 553, 559–61 (1989).

56. Seung Wha Chang, *Taming Unilateralism Under the Mutlilateral Trade System: Unfinished Job*, 31 LAW & POL'Y INT'L BUS. 1151, 1153 (2000).

57. Wolfgang W. Leirer, *Retaliatory Action in the United States and European Union Trade Law: A Comparaison*, 20 N.C. J. INT'L L. & COMP. REG. 41, 44 (1994) ("[D]ismantling . . . section 301" had been "one major objective of European trade negotiators during seven years of the GATT's Uruguay Round negotiations.").

foreign jurisdictions actionable under 301.[58] In doing so, the 1984 Act dramatically increased the importance of IP to American trade policy and gave the executive branch a powerful hammer with which to attack states that failed to adequately protect and enforce IP.[59]

With this hammer in hand, the next step was to multilateralize stronger IP rules. As a key U.S. trade official recounts, achieving agreement on enhanced IP protection in the Uruguay Round of GATT negotiations, which began in 1986,

> was a top offensive objective for the United States. The United States saw IP as the future for US high-tech industries and economic growth, and industry was able to identify significant economic harm resulting from lack of protection and enforcement of IPRs. In addition, US policy makers believed that including IP in the Uruguay Round negotiating package and achieving an outcome that set the stage for increased trade in IP-based goods would build support for the results of the Round as a whole, and help overcome domestic objections to a result that addressed sensitive issues for the United States, such as textiles, safeguards and anti-dumping.[60]

What was known as the "Special 301" provision of the Omnibus Trade and Competitiveness Act of 1988 continued this process.[61] The United States Trade Representative releases an annual "Special 301" Report, which is a review of IP protection and enforcement in foreign jurisdictions.[62] Since its inception, the provision has become "the most discussed trade rule in the world."[63]

During the Uruguay Round negotiations, the United States

58. Kevin C. Kennedy, *Presidential Authority Under Section 337, Section 301, and the Escape Clause: The Case for Less Discretion*, 20 CORNELL INT'L L.J. 127, 134 n.54 (1987).

59. *Id.* at 133–35 ("The President has virtually unfettered discretion in determining whether to retaliate under section 301.").

60. Catherine Field, *Negotiating for the United States*, *in* THE MAKING OF THE TRIPS AGREEMENT: PERSONAL INSIGHTS FROM THE URUGUAY ROUND NEGOTIATIONS 129, 132 (Jayashree Watal & Antony Taubman eds., 2015).

61. Judith H. Bello & Alan F. Holmer, *"Special 301": Its Requirements, Implementation, and Significance*, 13 FORDHAM INT'L L.J. 259 (1989).

62. *Intellectual Property: Special 301*, OFF. U.S. TRADE REP., https://ustr.gov/issue-areas/intellectual-property/Special-301 [https://perma.cc/6997-92UT] (last visited Nov. 24, 2019).

63. Ronald A. Cass, *Velvet Fist in an Iron Glove: The Omnibus Trade and Competitiveness Act of 1988*, 14 REG.: CATO REV. OF BUS. & GOV'T 50, 50 (1991).

used these carrots and sticks to pressure other GATT parties on IP.[64] This form of IP unilateralism engendered significant protest from other states, many of whom believed that more open and balanced IP rules were wholly appropriate, and the United States was simply forcing rules preferential for its home industries on them.[65] But the American approach often worked with important trading partners. Singapore enacted improvements to its copyright law, and Korea strengthened its protection of copyrights, patents and trademarks.[66] And as the Uruguay Round continued, eventually leading to the creation of the World Trade Organization in 1994, the United States was able to move toward its chief treaty-based accomplishment in the field: TRIPs, the Trade-Related Intellectual Property Agreement.[67]

The ostensible rationale for the TRIPs agreement was that the lack of IP protection in many jurisdictions was an increasingly-significant barrier to trade. TRIPs created a floor, detailing minimum standards for IP protection.[68] And because the WTO was a "single undertaking," prospective WTO members had to join TRIPs as part of the overall package of membership.[69] The comprehensive advantages of joining the WTO were very high, and so many nations swallowed hard and accepted TRIPs despite their many previous concerns about American efforts to impose strict IP rights on them.[70] In so doing, these states at times significantly altered their IP policies, generally strengthening the rights of rights-holders, lengthening terms of protection, and building in new and more encompassing enforcement systems.[71] TRIPs led to substantially greater convergence in IP law around the

64. Taylor, *supra* note 40, at 220–22.

65. Henricus A. Stratling, *The GATT Agricultural Debate: A European Perspective*, 18 N.C. J. INT'L & COM. REG. 305, 332, 337 (1993).

66. David A. Gantz, *A Post-Uruguay Round Introduction to International Trade Law in the United States*, 12 ARIZ. J. INT'L & COMP. L. 1, 118 (1995); Dru Brenner-Beck, *Do as I Say, Not as I Did*, 11 UCLA PAC. BASIN L.J. 84, 107–09 (1992).

67. *See, e.g.*, CARLOS CORREA, INTELLECTUAL PROPERTY RIGHTS, THE WTO, AND DEVELOPING COUNTRIES (2000); SUSAN K. SELL, PRIVATE POWER, PUBLIC LAW: THE GLOBALIZATION OF INTELLECTUAL PROPERTY RIGHTS (2003).

68. *See Overview: The Trips Agreement*, WORLD TRADE ORG. [WTO], https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm [https://perma.cc/CL2X-Y5U6] (last visited Jan. 25, 2020).

69. JOHN H. BARTON ET AL., THE EVOLUTION OF THE TRADE REGIME: POLITICS, LAW, AND THE ECONOMICS OF THE GATT AND THE WTO (2008).

70. *See* Adronico O. Adede, *Origins and History of the TRIPS Negotiations*, *in* TRADING IN KNOWLEDGE: DEVELOPING PERSPECTIVES ON TRIPS, TRADE, AND SUSTAINABILITY 23 (Christophe Bellmann & Ricardo Melendez-Ortiz eds., 2013).

71. *Id.*

world, convergence largely modeled on existing American law and preferences.[72]

TRIPs was developed by the United States partly as the apotheosis of its international trade-IP strategy and partly as a reaction to the rise of WIPO, which was seen by many in the United States as too friendly to developing country interests and insufficiently focused on rightsholder interests.[73] WIPO, based in Geneva, is a specialized agency of the United Nations and was founded in 1967.[74] WIPO currently has 192 member states and administers some two dozen IP treaties, most recently the 2013 Marrakesh Treaty to facilitate access to copyrighted works by the blind and visually impaired.[75] WIPO is the home for a number of ongoing discussions over IP-related topics, such as traditional knowledge,[76] competition policy,[77] and the relationship between health and IP,[78] and is a key site for dispute settlement processes for domain names on the Internet.[79] While the United States has long been active in WIPO, the new WTO was a more attractive forum for developing stricter disciplines around IP rules than was WIPO, where U.S. power was more attenuated and traditional one-

72. Donald P. Harris, *TRIPS' Rebound: A Historical Analysis of How the TRIPS Agreement Can Ricochet Back Against the United States*, 25 NW. J. INT'L L. & BUS. 99, 104–05 (2004).

73. Leaffer, *supra* note 46, at 293.

74. *About WIPO*, WIPO, https://www.wipo.int/about-wipo/en/ [https://perma.cc/DM4F-BGHS] (last visited Jan. 26, 2020).

75. WIPO, MAIN PROVISIONS AND BENEFITS OF THE MARRAKESH TREATY (2013), https://www.wipo.int/edocs/pubdocs/en/wipo_pub_marrakesh_flyer.pdf [https://perma.cc/3YQQ-MPCR].

76. *See, e.g.*, PROTECTING TRADITIONAL KNOWLEDGE: THE WIPO INTERGOVERNMENTAL COMMITTEE ON INTELLECTUAL PROPERTY AND GENETIC RESOURCES, TRADITIONAL KNOWLEDGE AND FOLKLORE (Daniel F. Robinson et al. eds., 2017).

77. *See, e.g.*, NEIL WEINSTOCK NETANIEL, *Introduction: The WIPO Development Agenda and Its Development Policy Context*, *in* THE DEVELOPMENT AGENDA: GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES 1 (2008).

78. *See, e.g.*, Ruth L. Okediji, *The Role of WIPO in Access to Medicines*, *in* BALANCING HEALTH AND WEALTH: THE BATTLE OVER INTELLECTUAL PROPERTY AND ACCESS TO MEDICINES IN LATIN AMERICA (Rochelle Dreyfuss & César Rodriguez-Garavito eds., 2014).

79. David Branigan, *Record Cybersquatting Cases Filed with WIPO in 2018*, INTELL. PROP. WATCH (Mar. 15, 2019), https://www.ip-watch.org/2019/03/15/2018-sees-record-cybersquatting-cases-filed-with-wipo/ [https://perma.cc/3TCA-NPHD]; *see also* WIPO Arb. & Media Ctr., *Guide to WIPO Domain Name Dispute Resolution*, WIPO Pub. No. 892(E) (2003), https://www.wipo.int/export/sites/www/amc/en/docs/guide-en-web.pdf [https://perma.cc/JBE7-Z5V5].

state, one-vote rules prevailed.[80] The United States and its leading trade partners believed TRIPs would serve as a means to regain control of the global IP agenda. And indeed, as one recent analysis notes, since the establishment of TRIPs, "WIPO has struggled to remain relevant."[81]

One might well query (as many have) why the WTO was an appropriate vehicle for modifying IP law around the world,[82] and precisely how stronger IP protection enhances trade.[83] Weak IP protection clearly enables infringement and thereby reduces revenues for IP rightsholders.[84] But its impact on trade is more ambiguous. Certainly some products will not be traded, or will be traded less, in the absence of effective IP rights.[85] If a firm in State A has a new technology and State B does not effectively enforce patents, the firm may be reluctant to allow anyone to sell or use the technology—or even to produce specialized parts for it.[86] On the other hand, many IP rules in trade accords actually restrict trade, as in trade in gray market goods—that is, legitimate goods that are unlicensed in a particular jurisdiction[87]—or in

80. IP has become a paradigmatic example of a regime complex: an array of partially-overlapping, non-hierarchical regimes in a given topical domain. Regime complexes allow and indeed engender strategic use of parallel or overlapping regimes. *See* Kal Raustiala & David Victor, *The Regime Complex for Plant Genetic Resources*, 58 INT'L ORG. 227 (2004). *See generally* 19 GLOBAL GOVERNANCE (2013) (special issue on regime complexes); Laurence R. Helfer, *Regime-Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking*, 29 YALE J. INT'L L. 1 (2004).

81. Julia C. Morse & Robert O. Keohane, *Contested Multilateralism*, 9 REV. INT'L ORG. 385, 394 (2014).

82. Joseph Straus, *The Impact of the New World Order on Economic Development: The Role of Intellectual Property Rights Systems*, 6 J. MARSHALL REV. INTELL. PROP. L. 1, 2–4 (collecting critiques).

83. Claire R. Kelly, *Power, Linkage and Accommodation: The WTO as an International Actor and Its Influence on Other Actors and Regimes*, 24 BERKELEY J. INT'L L. 79, 84–86 (2006).

84. Whether this results in more or less innovation, however, is a harder question: there is not a monotonic relationship between the stringency of IP rights and rates of innovation. At the basic level that is why patents are twenty years and not indefinite.

85. Daniel Benoliel & Bruno Salama, *Towards an Intellectual Property Bargaining Theory: The Post-WTO Era*, 32 U. PA. J. INT'L L. 265, 290–91 (2010).

86. *Id.*; *see* Kitsuron Sangsuvan, *Separation of Powers in Intellectual Property Rights: Balancing Global Intellectual Property Rights or Monopoly Power in the Twenty-First Century by Competition Law*, 26 N.Y. INT'L L. REV. 1, 1 (2013).

87. *See* Michael A. Ugolini, *Gray-Market Goods Under the Agreement on Trade-Related Aspects of Intellectual Property Rights*, 12 TRANSNAT'L L. 451, 452 (1999).

knockoff goods.[88] The overall effect is plausibly positive, but not clearly so.

This is not to say that IP has no role in trade accords; just that the rationale for including IP rules in multilateral treaties as a way to enhance *trade* is not overwhelming, and this was one reason for pushback from other nations. Global IP protection is really something the United States, and many U.S. industries,[89] have wanted for other reasons.[90] Trade accords are simply the most effective vessel for those efforts. The strategy of including TRIPs as a core part of the new WTO reflected that assessment.[91] But the U.S. interest in using trade and investment treaties to strengthen IP protection globally did not stop with TRIPs. So-called "TRIPS-plus" accords proliferated in the years after the WTO came into being.[92] These were multilateral as well as bilateral. For example, the Anti-Counterfeiting Trade Agreement, negotiated in 2011 but not yet in force, was only in the most nominal sense a trade accord; the fundamental focus was strengthened IP protection.[93]

The most recent example of the use of the United States using trade treaties to strengthen IP is the Trans Pacific Partnership ("TPP") agreement.[94] TPP as it originally was intended is defunct, after President Trump's withdrawal from the process.[95] But it lives on in an altered guise—minus the United States—as the "Comprehensive and Progressive Agreement for Trans Pacific Partnership."[96] TPP contained elaborate IP provisions aimed at the upward harmonization of

88. *See* RAUSTIALA & SPRIGMAN, THE KNOCKOFF ECONOMY, *supra* note 6.

89. Brook K. Baker & Katrina Geddes, *Corporate Power Unbound: Investor-State Arbitration of IP Monopolies on Medicines – Eli Lilly v. Canada and the Trans-Pacific Partnership Agreement*, 23 J. INTELL. PROP. L. 1, 3–4 (2015).

90. Kumar, *supra* note 51, at 237.

91. *Id.* at 239–42.

92. *See, e.g.*, Susan Sell, *TRIPS Was Never Enough: Vertical Forum Shifting, FTAS, ACTA, and TPP*, 18 J. INTELL. PROP. L. 447, 448 (2011).

93. *See, e.g.*, *Anti-Counterfeiting Trade Agreement*, ELECT. FRONTIER FOUND., https://www.eff.org/issues/acta [https://perma.cc/8G7H-GTCB] (last visited May 9, 2020).

94. *TPP Full Text*, OFF. U.S. TRADE REP., https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text [https://perma.cc/Z76A-ECMJ] (last visited Jan. 26, 2020).

95. Withdrawal of the United States From the Trans-Pacific Partnership Negotiations and Agreement, 82 Fed. Reg. 8497 (Jan. 25, 2017).

96. Matthew P. Goodman, *From TTP to CPTPP*, CTR. STRATEGIC & INT'L STUD. (Mar. 8, 2018), https://www.csis.org/analysis/tpp-cptpp [https://perma.cc/9KDR-EXBM].

substantive IP regulations as well as strengthening enforcement.[97] Indeed, alongside investor-state dispute settlement, IP was arguably the core economic agenda of the United States with regard to TPP.[98] Then-U.S. Trade Representative Michael Froman described TPP as the "first trade agreement to really take on the digital economy, issues around e-commerce and the free flow of data across borders; pushing back on new forms of digital protectionism, with countries trying to put walls around the internet or require companies to move their infrastructure to a country in order to serve that country."[99] With the astonishing growth of the modern Internet, which now comprises over 4 billion users and nearly 2 billion websites,[100] securing global protection of IP rights, many of which live online, is widely perceived as even more valuable and imperative.[101] How the Trump administration will pursue this agenda post-TPP is unclear, but the political pressures to do so will not abate.[102]

TPP was seen by some trade observers as the most significant trade accord since the creation of the WTO, and perhaps the most significant driver of IP reform. As Peter Drahos wrote in 2016—before the election of Donald Trump—TPP "may turn out to be the agreement that most transforms national regulatory systems, perhaps even more so than the Uruguay Round."[103] The IP rules in TPP followed the template refined by the United States over several administrations: use the

97. Peter N. Fowler et al., *ASEAN and Intellectual Property: Will a Complicated History Lead to a Certain Future?*, 40 LOY. L.A. INT'L & COMP. L. REV. 167, 201–04 (2017).

98. Tania Voon & Elizabeth Sheargold, *The Trans-Pacific Partnership*, 5 BRIT. J. AM. LEGAL STUD. 341, 349–51, 359–61 (2016).

99. Interview by Merit E. Janow, Dean, Colum. Univ. Sch. Int'l & Pub. Affairs, with Michael Froman, U.S. Trade Rep. (June 20, 2016), https://www.cfr.org/event/future-us-trade-and-trans-pacific-partnership-conversation-michael-froman [https://perma.cc/5Y2Q-V8W5].

100. *Total Number of Websites in Real Time*, INTERNET LIVE STATS, https://www.internetlivestats.com/total-number-of-websites/ [https://perma.cc/ZF87-PZEY] (last visited Jan. 26, 2020) (counting the number of websites as over 1.75 billion); Simon Kemp, *Digital 2019: Global Internet Use Accelerates*, WE ARE SOCIAL (Jan. 30, 2019), https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates [https://perma.cc/HRT6-KD7C] (counting the number of Internet users as 4.388 billion).

101. *IP Issues in the Distribution of Content on the Internet*, WIPO, https://www.wipo.int/sme/en/e_commerce/internet_content.htm [https://perma.cc/77DS-P6CD] (last visited Jan. 26, 2020).

102. *China to Raise Penalties on IP Theft in Trade War Compromise*, BLOOMBERG (Nov. 24, 2019), https://www.bloomberg.com/news/articles/2019-11-24/china-to-raise-penalties-on-ip-rights-violations [https://perma.cc/T24W-EFPK].

103. Peter Drahos, *China, The TPP and Intellectual Property*, 47 INT'L REV. INTELL. PROP. COMPETITION L. 1, 1 (2016).

carrot of greater U.S. market access to demand stronger IP protection, and gradually increase those protections with each new bilateral and multilateral trade accord.[104] Post-TPP, one can expect the United States to continue to seek these outcomes, whether via bilateral trade accords or, possibly, a new multilateral initiative or even accession to a lightly-altered but renamed TPP (much like how the Trump administration has attempted to do with the North American Free Trade Agreement, or NAFTA, which is now superseded by the new USMCA, or United States-Mexico-Canada Agreement).

Why is the United States so concerned with strengthening IP rights globally? Simply put, IP is a huge part of the contemporary American economy. Although the following numbers should be taken with a very substantial grain of salt, according to the U.S. Chamber of Commerce "America's IP is worth $6.6 trillion, more than the nominal GDP of any other country in the world."[105] Moreover, "IP-intensive industries account for over 1/3–or 38.2%–of total U.S. GDP. . . . The direct and indirect economic impacts of innovation are overwhelming, accounting for more than 40% of U.S. economic growth and employment."[106] These figures were largely drawn from a U.S. Patent and Trademark Office report back in 2012, which claimed that nearly 1/3 of all U.S. jobs were related to IP-intensive industries.[107] While that fraction is likely inflated, even if the real figure is 1/4 or 1/5 it is still a very large number.

Whatever the exact figures, IP is plainly very important to the American economy, and numbers like these, however spurious or exaggerated, often drive the debate within the Beltway on IP policy. The United States has huge medical, pharmaceutical, and technology industries that care deeply about patents and export their goods worldwide.[108] Many American film, television, music, and video game

104. Drahos calls this the "Global IP Ratchet." PETER DRAHOS, THE GLOBAL RATCHET FOR INTELLECTUAL PROPERTY RIGHTS: WHY IT FAILS AS POLICY AND WHAT SHOULD BE DONE ABOUT IT (2003), https://www.anu.edu.au/fellows/pdrahos/reports/pdfs/2003globalipratchet.pdf [https://perma.cc/6LR2-ER2M].

105. *Why Is IP Important?*, GLOBAL INNOVATION POL'Y CTR., http://www.theglobalipcenter.com/resources/why-is-ip-important/ [https://perma.cc/CGE2-YKYX] (last visited Nov. 24, 2019).

106. *Id*.

107. *USPTO Report Shows Intellectual Property-Intensive Industries Contribute $5 Trillion, 40 Million Jobs to U.S. Economy*, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/learning-and-resources/ip-motion/intellectual-property-and-us-economy [https://perma.cc/XFP4-FTQS] (last visited Nov. 24, 2019).

108. Gad, *supra* note 49 (explaining the pharmaceutical industry's influence on patent protection in the GATT's Uruguay Round).

firms see robust copyright protection as their lifeblood.[109] And trademarks are critical to a very wide range of American businesses. Of the top ten brands on the Forbes list of the world's most powerful brands, only two—#7, Samsung, and #9, Toyota—are not primarily American companies.[110] Apple, Google, Microsoft, Facebook, Disney, McDonald's, and GM—and the rest of the top ten—may be multinationals, but they were founded and headquartered in the United States. These IP-sensitive firms and industries have generally found a friendly reception in Washington, and have successfully lobbied to export the American approach to IP globally.[111]

In short, there are powerful structural reasons for why the United States pursues IP law so vigorously in its foreign policy. And because access to the U.S. market is so attractive to many states, we can expect the U.S. government, whatever party is in power, to continue to use trade and investment treaties as a lever to push foreign jurisdictions toward stricter IP law domestically.[112]

II. THE UNITED STATES & CHINA

It is no mystery that the jurisdiction of greatest concern to the United States with regard to IP has long been China.[113] Concern about

109. *See* Jay P. Kesan & Andres A. Gallo, *The Political Economy of the Patent System*, 87 N.C. L. REV. 1341, 1360 (2009) (tracking industry influence over Congress with regards to patents).

110. Kurt Badenhausen, *The World's Most Powerful Brands 2019: Apple On Top at $206 Billion*, FORBES (May 22, 2019), http://www.forbes.com/powerful-brands/ [https://perma.cc/N9ZB-3KW6].

111. Ian D. McClure, *Accountability in the Patent Market Part II: Should Public Corporations Disclose More to Shareholders?*, 246 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 417, 431–32 (2016).

112. One area of potential change concerns the growing political power of technology firms. The SOPA/PIPA legislative debate in the United States highlighted the divergence in views on certain forms of IP protection between, roughly put, Northern California (Silicon Valley) and Southern California (Hollywood). The latter has long been a core driver of ever-stronger IP protection in Congress. The former, despite its huge size, was traditionally less active in Washington and less focused on IP generally. The proposed SOPA/PIPA bills focused on online piracy and contained especially strong provisions. Both were killed due to opposition largely flowing from Silicon Valley, and illustrating the nascent but rapidly growing political power of Northern California interests in IP policy and in Washington generally.

113. Yuan Yang, *US-China Tech Dispute: Suspicion in Silicon Valley*, FIN. TIMES (Jan. 20, 2020), https://www.ft.com/content/e5a92892-1b77-11ea-9186-7348c2f183af [https://perma.cc/F8LD-LJ2A].

Chinese IP practices is intense in Washington and has been for some time.[114] Given the vast scale of the Chinese market, the United States considers it vital to rein in Chinese copying, and it has exhorted China to bring Chinese rules and practices in line with international standards.[115] That exhortation has grown tremendously as U.S.-China trade has likewise grown in the years since China began widely opening its economy in the 1990s.[116] China's comparatively weak enforcement of its IP laws,[117] and the widespread copying and counterfeiting that takes place in China,[118] have long confounded the United States and other Western governments.[119]

American concern has been tied to the scale and scope of copying in China, but also to the Chinese policy of "indigenous innovation"—a policy that American business has seen as a green light for copying.[120] According to past statements from Beijing, indigenous innovation can include "enhancing original innovation through co-innovation and re-innovation based on the assimilation of imported

114. Lara Seligman, *Congress to China: 'Stop Stealing Our Stuff'*, FOREIGN POL'Y (July 26, 2019), https://foreignpolicy.com/2019/07/26/congress-to-china-stop-stealing-our-stuff/ [https://perma.cc/F8LD-LJ2A].

115. *See Dispute Settlement: DS362: China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, WTO, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds362_e.htm [https://perma.cc/U27U-BYX8] (last visited Nov. 24, 2019). Among others, Argentina, Australia, Canada, the European Communities, India, Taiwan, Turkey, and Thailand all joined the suit against China as third parties.

116. Jacques deLisle, *Of Chinese Walls, Battering Rams, and Building Permits: Five Lessons about International Economic Law from Sino-U.S. Trade and Investment Relations*, 17 U. PA. J. INT'L ECON. L. 513, 515 (1996) ("China's trading relationship with the United States has grown from near-zero levels before 1979 to $40 billion or more in the mid-1990s.").

117. Chinese enforcement is changing; this issue is discussed below. While the magnitude of the change is debated, the political dynamics in Washington continue to reflect the view that China is a major pirate nation.

118. *See* ORG. ECON. CO-OPERATION & DEV. [OECD] & EUR. UNION INTELL. PROP. ORG. [EUIPO], ILLICIT TRADE: TRENDS IN COUNTERFEIT AND PIRATED GOODS 28 (2019), https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/trends_in_trade_in_counterfeit_and_pirated_goods/trends_in_trade_in_counterfeit_and_pirated_goods_en.pdf [https://perma.cc/L2Q8-AEJ7] (discussing that between 2014 and 2016, more than 75% of all seized counterfeit and pirated goods originated in China or Hong Kong).

119. Rana, *supra* note 8, at 100–02. David Orozco notes that at one point, "President Barack Obama personally called China's new president, Xi Jinpin[g], to ask him to take serious steps to investigate and halt any IP thefts against U.S. companies . . . ." David Orozco, *The Knowledge Police*, 43 HOFSTRA L. REV. 417, 417 (2014).

120. *See* Siyuan An & Brian Peck, *China's Indigenous Innovation Policy in the Context of Its WTO Obligations and Commitments*, 42 GEO. J. INT'L L. 375, 400–02 (2011).

technologies"—in other words, innovation through copying.[121] As high technology becomes ever more critical to economic success, China's technology policies have expanded—and come under continued attack. China's various joint venture rules, in which foreign firms seeking to enter the Chinese market must work with Chinese firms and often share their IP in the process, are emblematic.[122] China's "Made in China 2025" program seeks to have China dominate global technology markets by 2049.[123] For many in the West, the intended path to that outcome runs through their IP.[124]

The United States first raised IP protection as an issue with China in the 1980s, shortly after the resumption of normal diplomatic relations in 1979.[125] By 1989, the United States was focusing on China in the Special 301 process, and then-U.S. Trade Representative Carla Hills named China to the "priority watch list."[126] Seeking to improve matters, China entered into an MOU with the United States to create a copyright law. (China had created a patent law in 1984.)[127] The MOU declared that

> The U.S. Government and the Chinese Government, acting in the spirit of their Bilateral Agreement on Trade Relations, and wishing to develop further economic and trade relations between both countries on the basis of the principles of equality and mutual benefit as well as nondiscriminatory treatment, and to improve protection of intellectual property rights, have agreed as follows:

121. JAMES MCGREGOR, APCO WORLDWIDE, CHINA'S DRIVE FOR 'INDIGENOUS INNOVATION:' A WEB OF INDUSTRIAL POLITICS 4 (2010), https://www.uschamber.com/sites/default/files/documents/files/100728chinareport_0_0.pdf [https://perma.cc/HL3W-CHCL].

122. Daniel C.K. Chow, *China's Indigenous Innovation Policies and the World Trade Organization*, 34 NW. J. INT'L L. & BUS. 81, 94–96 (2013).

123. James McBride & Andrew Chatzky, *Is 'Made in China 2025' a Threat to Global Trade?*, COUNCIL FOREIGN REL. (May 13, 2019), https://www.cfr.org/backgrounder/made-china-2025-threat-global-trade [https://perma.cc/96VM-JFV7].

124. WAYNE M. MORRISON, CONG. RESEARCH SERV., IF10964, IN FOCUS: THE MADE IN CHINA 2025 INITIATIVE: ECONOMIC IMPLICATIONS FOR THE UNITED STATES 1–2 (2019).

125. *See generally* Warren Maruyama, *U.S.-China IPR Negotiations: Trade, Intellectual Property, and the Rule of Law in a Global Economy*, *in* CHINESE INTELLECTUAL PROPERTY LAW AND PRACTICE 165 (Mark A. Cohen et al. eds., 1999).

126. WIPO, *PRC Agrees to Push for Copyright Law That Will Protect Computer Software*, 3 WORLD INTELL. PROP. REP. 151–52 (1989).

127. Peter K. Yu, *Piracy, Prejudice, and Perspectives: An Attempt to Use Shakespeare to Reconfigure the U.S.-China Intellectual Property Debate*, 19 B.U. INT'L L.J. 1, 9 (2001).

> 1. The Chinese Government will submit a draft of a copyright law, taking into account the trend of international practice. . .[128]

In addition, the MOU specified that software would be covered as a literary work, subject to the same rules governing other forms of copyrightable material. (The United States had begun to treat software as copyrightable in the 1980s; in years to come software piracy would become a major source of friction with China.)[129] In 1990 China passed such a law, and in 1992 the Berne Convention on copyright entered into force in China.[130] China again amended its copyright law, as well as its earlier-promulgated patent law, as part of its entry package to the WTO.[131] As this suggests, Chinese IP law was from the beginning subject to substantial foreign pressure, and the United States—using the leverage of the international trading order—was a major part of that pressure.[132]

American pressure did not let up after China joined the WTO. In 2007, for instance, the United States pursued action within the WTO against China for its IP policies.[133] The United States alleged that China had violated a number of its TRIPs obligations (as well as the Berne Convention on copyright).[134] The European Communities, Mexico, and Japan joined the case against China.[135] The United States and its allies prevailed on a number of the charges, but not all.[136] The WTO Panel found it impermissible for China to provide for the removal of an infringing trademark as the only precondition for the sale of counterfeit goods seized by Chinese customs authorities. But the

128. WIPO, *supra* note 126, at 151–52.

129. In 1980, Congress added "computer program" to section 101 of the U.S. copyright code. *See* Government Patent Policy Act of 1980, Pub. L. No. 96-517, § 10(b), 94 Stat. 3015. *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983), was the first case upholding this approach.

130. *See* Stephanie L. Sgambati, Comment, *China's Accession to the Berne Convention: Bandaging the Wounds of Intellectual Property in China*, 3 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 139, 140–41 (1992).

131. Peter K. Yu, *A Half-Century of Scholarship on the Chinese Intellectual Property System*, 67 AM. U. L. REV. 1045, 1047 (2018).

132. *See* Yu, *From Pirates to Partners*, *supra* note 3, at 137–54.

133. Peter K. Yu, *The TRIPS Enforcement Dispute*, 89 NEB. L. REV. 1046, 1075–76 (2011).

134. *Id.* at 1075.

135. *Id.* at 1055–56.

136. Panel Report, *China—Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, ¶ 8.1, WTO Doc. WT/DS362/R (adopted Jan. 26, 2009).

Panel did not support the broader and more significant U.S. allegation that the thresholds for Chinese criminal penalties for willful IP infringement were set too high.[137] Most importantly, the Panel found China in violation of the requirement that foreign owners of creative works receive the same protection as domestic owners of similar material, as well as the requirement that WTO members have available laws "so as to permit effective action against any act of infringement of intellectual property rights covered by this agreement," including remedies which "constitute a deterrent to further infringements."[138]

The United States has nonetheless continued its drumbeat of pressure on Beijing. The 2013 report of the Commission on the Theft of American Intellectual Property, co-chaired by former Ambassador to China Jon Huntsman, focused extensively on China.[139] The Commission declared that "China is the world's largest source of IP theft."[140] According to the report, China's share of world "IP theft" is nearly 80%.[141] Striking a similar chord, when briefing reporters at the White House in February 2013, Undersecretary of State Robert Hormats called China's treatment of IP "a serious and highly troubling issue."[142] Criticism of China continued largely unabated. A January 2017 report of the Office of the U.S. Trade Representative ("USTR") to Congress highlighted how little progress the federal government believed had occurred in Chinese IP policy and practice.[143] USTR stated that "inadequacies in China's IPR protection and enforcement regime continue to present serious barriers to U.S. exports and investment."[144] Moreover, "[a]lthough the central government has modified China's IPR laws and regulations in an effort to bring them into line with China's WTO commitments, effective IPR enforcement has not been achieved, and IPR infringement remains a serious problem throughout China."[145] In 2019, the Commission on the Theft of American

137. *Id.*

138. *Id.* ¶¶ 7.170, 7.394.

139. NAT'L BUREAU OF ASIAN RES., THE IP COMMISSION REPORT: THE REPORT OF THE COMMISSION ON THE THEFT OF AMERICAN INTELLECTUAL PROPERTY (2013), http://ipcommission.org/report/IP_Commission_Report_052213.pdf [https://perma.cc/Y8DP-6Z5P].

140. *Id*. at 2.

141. *Id.* at 3.

142. *See* Raustiala & Sprigman, *Fake It Till You Make It*, *supra* note 6.

143. OFFICE OF THE U.S. TRADE REP., 2016 REPORT TO CONGRESS ON CHINA'S WTO COMPLIANCE 8 (2017).

144. *Id.*

145. *Id.* at 134.

Intellectual Property released its most recent report, in which it applauded the Trump administration's focus on China, deemed China "the most active and persistent perpetrator of economic espionage," and called for denial of access to the American banking system for any foreign entity that "steals IP."[146]

The Trump administration has sought to ratchet up the pressure on China. In August 2017, U.S. Trade Representative Robert Lighthizer formally initiated an investigation of China's IP practices under Section 301.[147] USTR's investigation followed President Trump's memorandum instructing USTR to consider initiating an investigation.[148] The President asserted that "the United States is a world leader in research-and-development-intensive, high-technology goods," and that "violations of intellectual property rights and other unfair technology transfers potentially threaten United States firms by undermining their ability to compete fairly in the global market."[149] USTR's 2018 Special 301 Report acknowledged some improvement but found that China had continuously failed to implement its promises to improve its IP law and enforcement.[150] The accelerating trade war with China is based on many contentious issues, but IP remains central.[151] In short, while China has significantly increased its domestic IP activity in recent years—such as the granting of patents[152]—and

146. NAT'L BUREAU OF ASIAN RES., IP COMMISSION 2019 REVIEW: PROGRESS AND UPDATED RECOMMENDATIONS 2, 5 (2019), http://www.ipcommission.org/report/ip_commission_2019_review_of_progress_and_updated_recommendations.pdf [https://perma.cc/VGH2-C5NR].

147. Press Release, Office of the U.S. Trade Rep., USTR Announces Initiation of Section 301 Investigation of China (Aug. 18, 2017), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/august/ustr-announces-initiation-section [https://perma.cc/52TY-ZC4F].

148. Presidential Memorandum of Aug. 14, 2017, Addressing China's Laws, Policies, Practices, and Actions Related to Intellectual Property, Innovation, and Technology, 82 Fed. Reg. 39,007 (Aug. 17, 2017).

149. *Id*.

150. OFFICE OF THE U.S. TRADE REP., *supra* note 12.

151. *See, e.g.*, Karen Yeung & Chad Bray, *US-China Tech War Shrouded by 'New Red Scare' as Donald Trump Cracks Down on IP Theft*, S. CHINA MORNING POST (Aug. 1, 2019), https://www.scmp.com/economy/china-economy/article/3021024/new-red-scare-shrouds-us-china-tech-war-trump-cracks-down [https://perma.cc/B8XA-B5J7].

152. Gene Quinn & Steve Brachmann, *Increases in Innovation, Patent Boom Leads to Development in China*, IP WATCHDOG (Apr. 18, 2018), https://www.ipwatchdog.com/2018/04/18/increases-innovation-patent-boom-development-china/id=95994/ [https://perma.cc/GA7T-ZUDW] ("In 2017, more than 1.3 million patent applications were filed with China's State Intellectual Property Office (SIPO), the largest patent filing total for any country and

seems to be focused more on enforcement,[153] the U.S. government believes there is still a long road to go. (I will say more on China's changing approach to IP below.)

It is important to note that U.S. concerns over Chinese IP practices often cannot be disentangled from larger concerns over digital espionage and conflict. Chinese copying often is digital in nature and involves cyber espionage for commercial purposes—sometimes by agents that are part of, or are working closely with, the Chinese government.[154] In criticizing this practice, President Obama argued that while normal, or political, espionage is OK, cyberespionage for commercial gain is not:

> Every country in the world, large and small, engages in intelligence gathering . . . there is a big difference between China wanting to figure out how they can find out what my talking points are when I meet with the Japanese [sic] which is standard . . . and a hacker directly connected with the Chinese government or Chinese military breaking into Apple's software systems to see if they can obtain the designs for the latest Apple product. That's theft. And we can't tolerate that."[155]

This distinction between "good" and "bad" espionage is not always well received or comprehensible to outsiders. Even former American officials have noted the difficulty with American line drawing. Michael Hayden, former director of the CIA and NSA, characterized Obama's position as: "'You spy, we spy, but you just steal the wrong stuff.' That's a hard conversation."[156] It is hard because it is not always clear that the United States does not assist its own firms through its espionage, even if the United States does not directly copy IP as part of this practice. And it is hard because, for many nations, the line between the political and the economic is not as clear as it is to Americans.

Nonetheless, the U.S. government has continued to see Chinese copying of American technology as a major problem, and a

greater than the combined filings that year in the United States, Japan, South Korea, and Europe.").

153. *See infra* notes 199–213 and accompanying text.

154. *See generally* Andrew Cheongseh Kim, *Prosecuting Chinese "Spies:" An Empirical Analysis of the Economic Espionage Act*, 40 CARDOZO L. REV. 749 (2018).

155. *See* ADAM SEGAL, THE HACKED WORLD ORDER: HOW NATIONS FIGHT, TRADE, MANEUVER, AND MANIPULATE IN THE DIGITAL AGE 134 (2015).

156. *Id.*

security as well as an economic threat. For example, in 2018, the National Intelligence Council ("NIC") issued a report on China's "1000 Talents" program,[157] which ostensibly targets U.S.-based or trained Chinese nationals to bolster China's technology sector and stem brain drain. The underlying goal, according to the report, is "to facilitate the legal and illicit transfer of U.S. technology, intellectual property" to China—what the NIC termed "an unprecedented threat."[158] The same week, the White House issued a report whose title sums up the state of affairs from the perspective of the Trump administration: *How China's Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World*.[159]

III. PIRATE NATION

The history of IP protection in the United States is instructive when considering policy differences with China, as well as the likelihood of greater convergence between the two nations. That history is well-documented by historians but rarely noted in policy debates. Simply put, in the 18th and even in the 19th centuries, when it was a rising world power itself, the United States was a major infringer of foreign IP rights.[160] Like China today, the United States frequently incurred the wrath of more established economic powers for this behavior.[161] American IP policy and practice were not accidental, moreover. It was part of a strategy for economic success that ultimately fostered the tremendous rise of the American industrial machine. As a leading historian of American IP policy describes,

> Officially, the young republic pioneered a new criterion

157. Jenny Leonard, *China's Thousand Talents Program Finally Gets the U.S.'s Attention*, BLOOMBERG (Dec. 29, 2019), https://www.bloomberg.com/news/articles/2019-12-12/china-s-thousand-talents-program-finally-gets-the-u-s-s-attention [https://perma.cc/KXF9-Q87E].

158. Anthony Capaccio, *U.S. Faces "Unprecedented Threat" from China on Tech Takeover*, BLOOMBERG (June 22, 2018), https://www.bloomberg.com/news/articles/2018-06-22/china-s-thousand-talents-called-key-in-seizing-u-s-expertise [https://perma.cc/H53X-5QEG].

159. WHITE HOUSE OFFICE OF TRADE & MFG. POL'Y, HOW CHINA'S ECONOMIC AGGRESSION THREATENS THE TECHNOLOGIES AND INTELLECTUAL PROPERTY OF THE UNITED STATES AND THE WORLD (2018), https://www.whitehouse.gov/wp-content/uploads/2018/06/FINAL-China-Technology-Report-6.18.18-PDF.pdf [https://perma.cc/B8P4-N277].

160. Yu, *Rise and Decline of the Intellectual Property Partners*, *supra* note 9, at 533–41.

161. *Id*. at 534–56.

> of intellectual property that set the highest possible standards for such claims—worldwide originality and novelty. At the same time, through a variety of measures, the government endorsed and supported the violation of intellectual property of European states and individuals. *The United States emerged as the world's leading industrial leader by illicitly appropriating mechanical and scientific innovations from Europe*.[162]

American piracy in the 18th and 19th centuries was not limited to patentable inventions, though that was economically a critical part. For example, for much of its history the United States excluded foreign books from copyright protection.[163] Early American law likewise prohibited foreign inventors from obtaining U.S. patents on inventions they had already patented elsewhere.[164] The ban on copyrights for foreign authors was not lifted until 1891, and, even then, foreign authors were required to manufacture their books on American territory as a condition of protection.[165] This domestic manufacturing requirement did not disappear entirely until Ronald Reagan was in the White House.

Strategically weak IP policies date back to the birth of the Republic. Indeed, this approach was central to Alexander Hamilton's famous 1791 Report on Manufactures.[166] Hamilton believed that the United States could obtain many of the benefits of European technologies by simply replicating them.[167] As Hamilton acknowledged, most manufacturing nations "prohibit, under severe penalties, the exportation of implements and machines, which they have either invented or improved."[168] Many nations also prohibited the emigration of skilled machinists, who had practical knowledge about how manufacturing worked. Hamilton wanted both the machines and the men who knew how to operate them, and he advocated for breaking foreign countries'

162. DORON BEN-ATAR, TRADE SECRETS: INTELLECTUAL PIRACY AND THE ORIGINS OF AMERICAN INDUSTRIAL POWER xxi (2004) (emphasis added).

163. For an extensive look at publishing in the 19th century and its relation to IP, see ROBERT SPOO, WITHOUT COPYRIGHTS: PIRACY, PUBLISHING, AND THE PUBLIC DOMAIN (2013).

164. Yu, *Rise and Decline of the Intellectual Property Partners*, *supra* note 9, at 534.

165. *Id.* at 540.

166. Alexander Hamilton, Report on the Subject of Manufactures (Dec. 5, 1791), *reprinted by* FOUNDERS ONLINE, NAT'L ARCHIVES (n.d.), https://founders.archives.gov/documents/Hamilton/01-10-02-0001-0007#ARHN-01-10-02-0001-0007-fn-0123 [https://perma.cc/Q9QB-HYQP] (last visited Jan. 26, 2020).

167. *Id.* at VIII.

168. *Id.*

laws to get them.

Hamilton was not the only founder who saw economic advantage in copying other nation's IP. Benjamin Franklin regularly republished the works of British authors without seeking their permission or offering payment. (Franklin also was happy to borrow inventions when useful.)[169] The British lambasted the early Americans for copying their writers without permission. In language that, slightly tweaked, could have been inserted into Jon Huntsman's report of the 2013 Commission on the Theft of American Intellectual Property, Charles Dickens bewailed "the exquisite justice of never deriving sixpence from an enormous American sale of all my books."[170] Early Americans saw IP infringement as a way to prosper and gain advantage against the largest industrial power of the day, the British Empire. The result was "an all-out economic contest between the United States and its former ruler in which respect for individuals' and nations' intellectual property took a back seat to the nationalist developmental impulse."[171]

In short, the current American obsession with stringent and global IP protection is not wholly new, but it is certainly not a traditional interest or focus of the nation. Quite the contrary, the United States was happy to be a leading pirate vis-à-vis the great powers of the day when it suited American economic interests.[172] As the U.S. economy changed, and the United States became a rising power, U.S. IP policy also changed.[173] IP protection is today a core U.S. international interest because IP is central to the contemporary American economy and IP dependent firms in the United States have substantial political power.[174] (Though there are still a few significant areas of the U.S. economy that operate without much IP protection.)[175] In a global economy in which U.S. goods are often at a price disadvantage,[176] IP-

169. BEN-ATAR, *supra* note 162, ch. 3 (giving extensive attention to Franklin). As Ben-Atar notes, however, Franklin had some idiosyncratic views about IP compared to his contemporaries.

170. *See* Raustiala & Sprigman, *Fake It Till You Make It*, *supra* note 6.

171. BEN-ATAR, *supra* note 162, at 118.

172. Yu, *Rise and Decline of the Intellectual Property Partners*, *supra* note 9, at 533–41.

173. Yu, *From Pirates to Partners*, *supra* note 3, at 180.

174. *See supra* note 107 and accompanying text.

175. For example, fashion and food. *See* RAUSTIALA & SPRIGMAN, THE KNOCKOFF ECONOMY, *supra* note 6.

176. Robert Route & Jan A. Van Mieghem, *How Much Does It Cost to Manufacture Overseas Versus at Home*?, NW. U. KELLOGG INST. (July 10, 2017),

laden goods remain an area in which the United States has notable comparative advantage. There are, of course, many wrinkles to the brief history of American IP policy I have presented. But the core trajectory is broadly accurate. This trajectory is instructive to bear in mind when considering the current and future policy of the United States' greatest IP *bete noire*: China.

IV. CHINESE VIEWS

Contemporary Chinese law is formally protective of IP and, on paper at least, comparable with existing international standards.[177] Since 2001, China has been a member of the WTO and therefore a party to TRIPs.[178] And while American complaints are sometimes overblown, Chinese enforcement of IP rights has nonetheless long been fairly weak and inconsistently applied.[179] By nearly all accounts Chinese society and businesses engage in substantial imitation and copying, at least as compared to their Western counterparts.[180] Copying is generally more tolerated in China than in the West.[181] This basic difference in attitudes and policies between the two great powers is widely accepted.[182] The sources of this difference, and its magnitude and likely trajectory, are more contested.

Many analysts point to cultural factors to explain the persistence of widespread copying in China. (Though of course China is far from the only nation to have a more permissive view of IP than the United States does.) One common argument looks to the powerful legacy of Confucian thinking, which is claimed to cast copying in a

https://insight.kellogg.northwestern.edu/article/how-much-does-it-cost-to-manufacture-overseas-versus-at-home [https://perma.cc/A79B-UPLV].

177. Rana, *supra* note 8, at 102–03.

178. Yu, *Rise and Decline of the Intellectual Property Partners*, *supra* note 9, at 529.

179. Rana, *supra* note 8, at 107–08, 125–26.

180. *Id*.

181. I say more on this below. Copying is arguably valorized in China in some contexts. So-called "*shanzhai*" copying, for instance, is often depicted in China as admirable or justifiable, signifying the plucky ingenuity of the Chinese people. It can have a deep class dimension, as well. The writer Yu Hua, for example, asserts that *shanzhai* "represents a challenge of the grassroots to the elite, of the popular to the official, of the weak to the strong." YU HUA, CHINA IN TEN WORDS 188 (2012); *see also* Barton Beebe, *Shanzhai, Sumptuary Law, and Intellectual Property in Contemporary China*, 47 U.C. DAVIS L. REV. 849 (2014).

182. Yu, *Piracy, Prejudice, and Perspectives*, *supra* note 127, at 16–37.

positive light—as more homage than piracy.[183] As one scholar of Chinese history has argued, "the incorporation of elements of past works in one's own was not undertaken with the intent to steal another author's ideas. Rather, imitation [in historical China] was the means for authors to demonstrate their knowledge and mastery of history; it was a form of tribute to their predecessors."[184] A similar analysis suggests that IP law, at least as it has been conceived in the West, "goes firmly against the grain of Asian culture, which supports the concept of sharing, not protecting, individual creative work."[185] Countries such as China that are said to have a "collective" culture—"one that emphasizes sharing over individual ownership rights"—have significantly higher rates of copying and counterfeiting than do countries with "individualist" cultures.[186] These broad generalizations often attract ire, but they are widely believed—and arguably reinforced by practices such as the extensive Chinese craft industry in fine art copies (such as that famously associated with the "Dafen Oil Painting Village" in Shenzen.)[187] If, indeed, Chinese cultural traditions cast copying as sharing rather than stealing, and more homage than piracy, it is not surprising that Chinese IP policy differs from that of the more individualist United States. By this account, the difference between the two great powers is more a question of values than interests.

William Alford, in his influential *To Steal a Book is an Elegant Offense*, criticizes this cultural account of Chinese IP law as too strong and too simplistic.[188] Nonetheless, Alford broadly agrees that the past was and remains a very important source of legitimacy in China, and that this reverence for the past has important implications for how IP rights are perceived today.[189] "The indispensability of the past, for personal moral growth," Alford writes, "dictated that there be broad

183. *Id.* at 16–21.

184. Thomas Tze-Hun Chou, *Private Copyright Investment in China*, 1 J. SMALL & EMERGING BUS. L. 375, 393 (1997) (emphasis added).

185. W.R. Swinyard et al., *The Morality of Software Piracy: A Cross-Cultural Analysis*, 9 J. BUS. ETHICS 655, 662 (1990).

186. Donald B. Marron & David G. Steel, *Which Countries Protect Intellectual Property? The Case of Software Piracy*, 38 ECON. INQUIRY 159, 172 (2000). For a broader take on the philosophical roots of IP in China, see Peter Yu, *Intellectual Property, Asian Philosophy and the Yin-Yang School*, 7 WIPO J. 1 (2015).

187. WINNIE WONG, VAN GOGH ON DEMAND: CHINA AND THE READY-MADE (2013). The story of Dafen is more complicated than simply copying, as Wong describes.

188. WILLIAM P. ALFORD, TO STEAL A BOOK IS AN ELEGANT OFFENSE: INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION (1995).

189. *Id*.

access to the common heritage of all Chinese." This, and other factors, "militated against thinking of the fruits of intellectual endeavor as private property."[190] Like other analysts of China, Alford contrasts this perspective with the West, where the 17th and 18th centuries "witnessed the development of an approach toward intellectual property in Europe that had no counterpart in imperial Chinese history."[191] He notes as well that many great Chinese painters tolerated or even welcomed forgery of their work because "[s]uch copying, in effect, bore witness to the quality of the work copied and to its creator's degree of understanding and civility."[192]

To what degree culture in fact plays a role in China's approach to imitation and innovation is unclear. But however imitation and innovation were understood in traditional China, it is incontrovertible that contemporary Chinese IP law is of relatively recent vintage.[193] China passed its first post-revolutionary patent and trademark laws in the 1980s; its first copyright law in 1990.[194] At the time of these laws' passage, China was very poor—substantially poorer than it is now.[195] The period between the birth of these domestic IP laws and today was of course one of astounding economic growth in China, some of it clearly involving IP infringement.[196] Perhaps like the early United States, China found its economic interests were best served by imitating, not innovating.

Yet China has been strengthening its IP laws and institutions in recent years. China has a number of new procedural innovations in the works which many foreign lawyers believe (or hope) will lead to more transparent and fair treatment of foreigner's IP rights.[197] A 2017 $1.5 million trademark infringement ruling in Suzhou in favor of New Balance, along with a 2017 win by Under Armour against a Chinese firm with a very similar logo named "Uncle Martian," have been

190. *Id.* at 20.

191. *Id.* at 18.

192. *Id.* at 29.

193. Rana, *supra* note 8, at 99–107.

194. For a more extensive history, see Peter Yu, *The Transplant and Transformation of Intellectual Property Laws in China*, *in* GOVERNANCE OF INTELLECTUAL PROPERTY RIGHTS IN CHINA AND EUROPE 20 (Nari Lee et al. eds., 2016).

195. *See* WAYNE M. MORRISON, CONG. RESEARCH SERV., RL33534, CHINA'S ECONOMIC RISE: HISTORY, TRENDS, CHALLENGES, AND IMPLICATIONS FOR THE UNITED STATES 3–6 (2019).

196. *Id.*

197. *See, e.g.*, Gabriella Kennedy & Jian Hong Chow, *China's New 5-Year Plan on Developing Judicial Protection of Intellectual Property Rights*, IP & TMT Q. REV. 1, 6–8 (2017).

viewed as auspicious signs that China is beginning to take IP infringement more seriously.

Chinese authorities have also revamped patent laws and created specialized courts to hear IP disputes.[198] Partly as a consequence, and to the surprise of many, China has surpassed the United States to become the world's top issuer of patents.[199] As the *Wall Street Journal* has reported, China issued 359,000 new patents in 2015, up 54% from 2014. U.S. patents, meanwhile, slipped less than 1% to 298,400.[200] Patent volume, in and of itself, is a fuzzy marker of innovation. The U.S. Patent and Trademark Office, as experienced and professional as any such agency in the world, issues many patents that are quite dubious and often invalidated in litigation. (It recently issued a patent to Apple for what is essentially a paper bag.)[201] There is no reason to think China's patent office is any different, and indeed given China's higher levels of corruption, relative inexperience in patent approval, and vast and often uneven bureaucracy, more reason to think many of these new patents are suspect. But looked at in a broad context, the remarkable rise in Chinese patents and the incremental changes occurring in Chinese IP policy suggest that more stringent and consistent IP protection is increasingly seen as valuable for the Chinese economy.

Indeed, Chinese firms are more frequently using IP law to try to block rivals—a favorite tactic in the United States that will surely continue to grow in China. For example, one Chinese firm received an injunction to block sales of the iPhone 6 and 6+ in Beijing, a huge market for Apple.[202] This suggests the ways that foreign efforts to strengthen IP law in China may create some unintended effects, as Chinese firms learn to navigate and employ a more sophisticated IP regulatory apparatus to their benefit.

And as Chinese firms such as Alibaba, Xiaomi, Huawei,

198. *China Opens Intellectual Property Courts to Improve Image*, BLOOMBERG (Nov. 2, 2014), https://www.bloomberg.com/news/articles/2014-11-03/china-opens-intellectual-property-courts-to-improve-image [https://perma.cc/Q3DZ-9BM3].

199. Quinn & Brachmann, *supra* note 152.

200. Jack Nicas & Josh Chin, *Stronger Chinese Patent Laws Also Help US Companies*, WALL STREET J. (July 20, 2016), https://www.wsj.com/articles/stronger-chinese-patent-laws-also-help-u-s-companies-1468994404 [https://perma.cc/695W-5S2R].

201. Hal 90210, *Apple Patents Bold New Innovation – A Paper Bag*, GUARDIAN (Sept. 20, 2016), https://www.theguardian.com/technology/2016/sep/20/apple-patent-recycled-paper-bag [https://perma.cc/CGP9-7VJT].

202. Hope King, *Apple Ordered to Halt iPhone 6 Sales in Beijing*, CNN (June 17, 2016), https://money.cnn.com/2016/06/17/technology/apple-iphone-beijing-patent/index.html [https://perma.cc/3MWT-G3Y2].

Tencent and HTC rapidly expand globally, their interest in strong IP protection has also grown.[203] Indeed, it is striking how many recent commentators have declared a transformation in Chinese IP attitudes. Somewhat hyperbolically, perhaps, in 2017 the Silicon Valley site *Techcrunch* declared:

> China is quickly becoming a (if not *the)* global leader in intellectual property protection and enforcement. And there too, just as Western democracies (especially the United States) have grown increasingly skeptical of the value of intellectual property and have weakened protection and enforcement, China has been steadily advancing its own intellectual property system and the protected assets of its companies and citizens.[204]

More soberly, but broadly consistent with this claim of change, *The Economist* states that:

> THERE was a time, not that long ago, when China's big internet companies were dismissed by investors in Silicon Valley as marginal firms with a tendency to copy Western products. Not any more. Today they are monsters with increasingly hefty international ambitions.[205]

The Economist noted as well that Western companies had stymied some of these ambitions with a time-honored strategy often-deployed by Chinese firms: copying the best features of a given platform (e.g., WeChat) and fending off the invaders.[206]

China's overall approach to IP rights may also reflect broader social concerns. Even though many Chinese remain very poor, China's inequality is extremely high,[207] and recently it has become one

203. Yukon Huang & Jeremy Smith, *China's Record on Intellectual Property Rights Is Getting Better and Better*, FOREIGN POL'Y (Oct. 16, 2019), https://foreignpolicy.com/2019/10/16/china-intellectual-property-theft-progress/ [https://perma.cc/968L-WDDM].

204. Wayne Sobon, *The Surprising Rise of China as IP Powerhouse*, TECHCRUNCH (Apr. 11, 2017), https://techcrunch.com/2017/04/11/the-surprising-rise-of-china-as-ip-powerhouse/ [https://perma.cc/N9MJ-QRLC].

205. *China's Internet Giants Go Global*, ECONOMIST (Apr. 20, 2017), https://www.economist.com/business/2017/04/20/chinas-internet-giants-go-global [https://perma.cc/5XV2-M6XG].

206. *Id*.

207. Anjani Trivedi, *China's Racing to the Top in Income Inequality*, BLOOMBERG (Sept. 22, 2018), https://www.bloomberg.com/opinion/articles/2018-09-23/china-s-racing-to-the-top-in-income-inequality [https://perma.cc/6X28-ZS3U].

of the world's largest markets for luxury goods.[208] But it is also the world's leading workshop for counterfeit goods. As a result China has for years been awash in "*shanzhai*" goods; that is, goods that mimic Western goods but are often tweaked for a Chinese market.[209] As Barton Beebe has argued, IP law in China (and elsewhere) effectively functions as a form of sumptuary law, reinforcing social hierarchies by limiting the availability of desirable goods and brands to the elite.[210] "As [Chinese] enforcement efforts continue to improve," Beebe suggests, "the production and consumption of shanzhai status goods, meanwhile, will likely slowly be reduced to manageable and non-threatening levels."[211] It is hard to say how much of the impetus for stricter trademark protection in China is Chinese elites' own desire to rein in rampant aping of high end brands, in an effort to ensure that status distinctions are clarified. But given how few Chinese brands are significant outside China, it is not wholly implausible that this is a part of the story.

More broadly, the increasing stringency of Chinese IP law likely reflects China's incredibly rapid economic growth. China today is, as an economic matter, a completely different country compared to China in 2000.[212] (According to World Bank data, China's GDP in this period rose by an astonishing 1000%.)[213] Just as the United States, once pilloried as an infringer, became a leading proponent of IP protection when that served its economic interests,[214] so too may China increasingly see secure IP rights as a valuable tool to promote and protect innovation and profit. But this is likely to be a slow process, and not only because China may indeed have a different historical and cultural relationship to copying. Even in 2020, there is still widespread poverty and tremendous economic inequality in China.[215] The pursuit of foreign IP and technology is not only a way for China, as in early

208. Lauren Indvik, *Study: Chinese Shoppers to Make Up 46% of Luxury Goods Purchases in 2015*, VOGUE (Nov. 20, 2018), https://www.voguebusiness.com/consumers/chinese-consumers-luxury-purchases-growth-bain [https://perma.cc/5HKJ-XG8J].

209. Bruce Sterling, *New Shanzhai [] (Shanzhai)*, WIRED (Aug. 24, 2018), https://www.wired.com/beyond-the-beyond/2018/08/new-shanzhai-%E5%B1%B1%E5%AF%A8-shanzhai/ [https://perma.cc/34NG-8NUD].

210. *See* Beebe, *supra* note 181.

211. *Id.* at 869.

212. *China*, WORLD BANK: DATA, https://data.worldbank.org/country/china [https://perma.cc/VS2C-G9NX] (last visited Nov. 28, 2019).

213. *Id*.

214. Yu, *Rise and Decline of the Intellectual Property Partners*, *supra* note 9, at 534.

215. Trivedi, *supra* note 207.

America, to grow its economy rapidly and catch up with powerful rivals; it is also a social salve that allows poorer Chinese access to some version, perhaps recast and *shanzhai*'d, of goods that they covet but cannot afford.[216] In short, the incentives for tolerance of copying remain in China, even if over the longer term we can expect a gradual tightening of IP law.

CONCLUSION

Intellectual property, once a small part of the international legal agenda, is now a core part of contemporary trade and investment treaties and the subject of some two dozen stand-alone treaties. Securing stronger IP rights and more robust enforcement mechanisms has been a goal of U.S. foreign economic policy since at least the 1970s. China has been in the U.S. crosshairs for many years when it comes to IP policy and enforcement. In nearly every U.S.-China summit and strategic dialogue, at the WTO and other international forums, and in many reports from the U.S. government and private actors, China's IP infringement is castigated by the United States. The Trump administration has, since 2016, only intensified these attacks. As the United States increasingly views China as a strategic threat economically, politically, and militarily, these attacks on Chinese IP and innovation practices are only likely to grow.

China's IP policy and practices are increasingly seen as improving, however. Not unrelatedly, China has in recent years become more focused on building an innovation-based economy and a powerful technology sector. Whatever the best descriptor of the current U.S.-China relationship, the two states are deeply economically intertwined and China increasingly seeks to move up the value chain and soon become, as its "Made in China 2025" strategy suggests, a major technology and innovation hub. Like the United States before it, China may be transitioning its IP policy as its broader economy transitions. Powerful social and economic incentives still exist in China that encourage copying of Western products. Deeper divergences in values—surrounding individuality, the role of homage and copying, and reverence for the past—may shape the differing national approaches in fundamental ways. But convergence in American and Chinese IP law and practice is occurring, and further convergence is likely in the future.

216. Raustiala & Sprigman, *Let Them Eat Fake Cake*, *supra* note 6.