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ARTICLES

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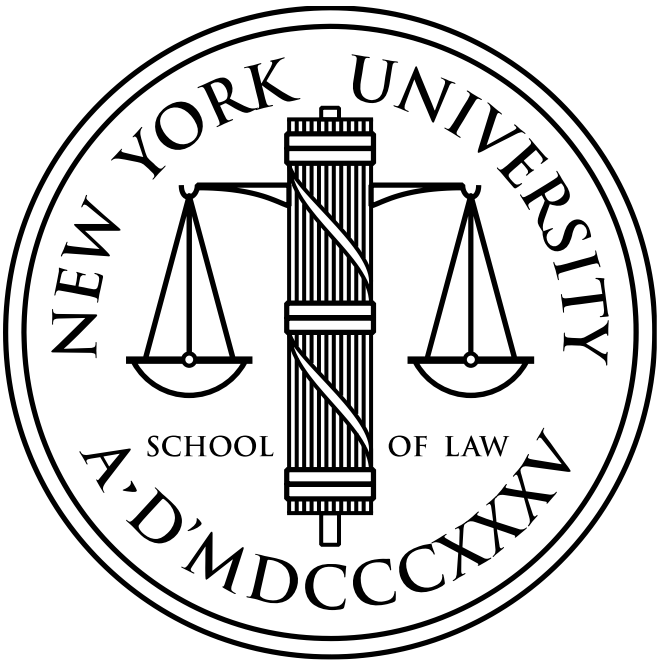

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VOL. 10 BOARD OF EDITORS – ACADEMIC YEAR 2020-2021

PREFACE

Our Spring 2021 issue – Volume 10, Issue 2 – explores practical and theoretical problems in our intellectual property system. All modern and unsettled.

First, Professors William E. Kovacic, Robert C. Marshall, and Michael J. Meurer offer an impressive case study analyzing rampant price-fixing patterns observed in the chemical industry from 1980 to present. In doing so, the authors conclude – based on empirical evidence validated by our staff – that international chemical firms have used patent licensing schemes to achieve serial collusion. Based on these findings, the authors call on the antitrust community to show greater skepticism towards patent schemes and to recognize that "[l]icensing arrangements can provide attractive means for serial colluders to cloak illegal collaboration in the guise of seemingly legitimate activity in which direct interaction among competing firms might seem normal and unremarkable."

Second, Professor Brian L. Frye publishes yet another piece challenging our preconceptions of intellectual property. Here, Frye points out an apparent contradiction in copyright policy: We label copyright as a mere quasi-form of property, yet view authors in an overly romantic fashion. Frye accuses copyright owners of using this anomaly for their benefit – at the expense of the public. Based on these observations, Frye calls for the intellectual property community to stray from these romantic inclinations and instead view copyright authors as mere "landlords."

Third, Staff Editor Zachary Shufro and Katie Dixon provide us with a thoughtful note examining the art market's reliance upon authentication and the rising use of artificial intelligence and blockchain as tools for achieving this objective (along with their nefarious uses). In doing so, the Shufro and Dixon conclude that "[w]hile technology can streamline, reinforce, and guarantee the authenticity of a work, it can also create the opportunity for nefarious actors to perpetrate fraud on a massive scale. Until the art market adapts ways to address these risks, the old adage of caveat emptor—buyer beware—will continue to be the hallmark of the market."

Finally, I offer my own note: An analysis of the text and legislative history of Section 111(a)(5) of the Copyright Act. This work was prompted by the recently filed case *ABC, et. al. v.*

Goodfriend in the Southern District of New York – to be argued later this year.

This issue will be the last of the Tenth Volume's tenure. On behalf of our staff, we thank you for reading. Speaking personally . . . serving as this journal's Editor-in-Chief has been the highest honor of my academic career. It has been a pleasure working alongside this team.

Sincerely,

Zachary J. Bass
Editor-in-Chief
NYU Journal of Intellectual Property & Entertainment Law

NEW YORK UNIVERSITY

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PATENTS AND PRICE FIXING BY SERIAL COLLUDERS

WILLIAM E. KOVACIC,* ROBERT C. MARSHALL,** AND MICHAEL J. MEURER***

Antitrust law has long been mindful of the danger that firms may misuse their patents to facilitate price fixing. Courts and commentators addressing this danger have assumed that patent-facilitated price fixing occurs in a single market. In this Article, we extend conventional analysis to address firms' patent misuse to facilitate price fixing across multiple products lines. By doing so, we expose gaps in existing agency enforcement and scholarly proposals for reform. Important legal tests that make sense in the single market setting do not carry over to the context we call serial collusion, where certain offenders engage in repeat collusion across product lines. This Article argues that there is an urgent need to recast these tests to address serial collusion of the sort that prevails in the chemicals, auto parts and electronics industries. To support this argument, we develop empirical evidence consistent with the possibility that serial colluders in the chemical industry acquired and used patents to support their collusion, either directly to coordinate and monitor output and pricing or indirectly to deter new firm entry by erecting patent thickets as a barrier to entry. Throughout this Article, we describe the flaws of current antitrust doctrine when it comes to assessing patents and price fixing,

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suggest doctrinal improvements, and provide guidance to antitrust enforcers about how to better understand and combat serial collusion facilitated by patents.

INTRODUCTION

In the history of antitrust enforcement, patents have occupied center stage in a number of Supreme Court cases addressing horizontal price fixing and conspiracies to monopolize.[1] As one eminent economist has observed, "some of the worst price fixing schemes in American history were erected on a foundation of agreements to cross-license complementary and competing patents."[2] Over forty years ago, a formative study by George Priest identified the collusive potential of patent licenses. Priest described how a patent owner might, through licensing agreements with rivals, create a cartel:

> The Patent Act, as interpreted by the courts, has allowed persons granted or assigned patents broad authority to set licensee output, to allocate licensee territories, and even to fix minimum licensee prices. This has meant that a group of firms agreeing, in violation of the Sherman Act, either to fix prices or allocate output, could disguise its agreement by obtaining a patent on an unimportant process and executing licenses to previously competing members which incorporate the provisions of the illegal agreement.[3]

In essence, a patent holder, who can control output and thus affect prices for products that make use of its invention, could become a ring leader for a cartel under the cover of organizing a patent licensing scheme.

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[1] Notable examples include *United States v. Singer Manufacturing Co.*, 374 U.S. 174 (1963); *United States v. New Wrinkle, Inc.*, 342 U.S. 371 (1952); *United States v. Gypsum Co.*, 333 U.S. 364 (1948); *United States v. Line Material Co.*, 333 U.S. 287 (1948); *Hartford-Empire Co. v. United States*, 324 U.S. 570 (1945); *Standard Oil Co. (Indiana) v. United States*, 283 U.S. 163 (1931).

[2] FREDERIC M. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 452 (2d ed. 1980). *See also* Irene Till, *The Legal Monopoly*, *in* THE MONOPOLY MAKERS: RALPH NADER'S STUDY GROUP REPORT ON REGULATION AND COMPETITION 289, 307 (Mark J. Green ed., 1973) ("Harnessed to serve the ends of corporate enterprise, the patent has become a potent instrument for restraint of trade.").

[3] George L. Priest, *Cartels and Patent License Arrangements*, 20 J.L. & ECON. 309, 309 (1977). Other commentators from this period who identified the collusive possibilities posed by patent licensing agreements include LAWRENCE A. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST 551–54 (1977) [hereinafter HANDBOOK OF THE LAW OF ANTITRUST]; Till, *supra* note 2, at 310 ("Licensing agreements have contained production and marketing quotas for licensees. Directly or indirectly they have served as vehicles for setting prices and establishing limited market territories . . . ."); William F. Baxter, *Legal Restrictions on Exploitation of the Patent Monopoly: An Economic Analysis*, 76 YALE L.J. 267, 336 (1966) (observing that price restrictions in patent licensing agreements can constitute "the backbone of a loose-knit cartel").

Early in the twentieth century, courts struggled to characterize patent licenses and pools that increased patent-based profits by restraining market competition. The recent *FTC v. Actavis, Inc.* decision recalled this body of law and noted: "[*United States v. Line Material Co.*] explained that 'the improper use of [a patent] monopoly,' is 'invalid' under the antitrust laws and resolved the antitrust question in that case by seeking an accommodation 'between the lawful restraint on trade of the patent monopoly and the illegal restraint prohibited broadly by the Sherman Act.'"[4] Courts were generally deferential to patent licensing schemes so long as they were confined to the duration of the patent agreement and did not involve products beyond the patented product.[5]

In the years between Line Material[6] and recent pay-for-delay cases, government antitrust agencies have detected and prosecuted several thousand price-fixing agreements.[7] Yet, judicial decisions, enforcement agency statements, and other accounts of these agreements rarely mention patents. This absence puzzles us. One possible reason is that judicial opinions and enforcement agency guidance, especially from the 1930s through the 1970s, discouraged price-fixers from using patents to advance their goals.[8] The wariness of antitrust policy concerning patent licensing practices crested in the late 1970s with the Department of Justice's (DOJ) issuance of what became known as the "Nine No-Nos"—a set of licensing practices that the Antitrust Division would regard as per se illegal violations of the Sherman Act.[9] In response, companies perhaps worried that restrictive patent license terms

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[4] 570 U.S. 136, 148 (2013) (citing *Line Material*, 333 U.S. at 310).

[5] *See* Brulotte v. Thys Co., 379 U.S. 29, 33–34 (1964) (ruling that a contract requiring the licensee to pay royalties to the licensor after the licensed patent had expired was patent misuse); *see also* Kimble v. Marvel Ent., LLC, 576 U.S. 446, 465 (2015) (reaffirming principle of *Brulotte*). The most contentious and often revisited issue in this period involved *United States v. General Electric, Co.*, 272 U.S. 476 (1926), where the Supreme Court validated a licensing term by which the licensor set the price of the licensee's output from the application of the licensed patent. *See infra* notes 97–101 (discussing judicial reconsideration of *General Electric*).

[6] 333 U.S. 287 (1948).

[7] The Workload Reports prepared by the Antitrust Division of the Department of Justice (DOJ) for fiscal years 1960 through 2019 indicate that the DOJ initiated nearly 2,800 criminal cases alleging violations of Section 1 of the Sherman Act. *See Division Operations*, DEP'T JUST., https://www.justice.gov/atr/division-operations (last accessed May 13, 2021) (providing downloadable workload statistics regarding agency enforcement actions by primary type of conduct at issue). Most of these matters involved horizontal price fixing or agreements among competitors to allocate customers or sales territories. *See id.*

[8] ANDREW I. GAVIL ET AL., ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 1111–22 (3d ed. 2017).

[9] *Id.* at 1112. In 1995, the federal antitrust agencies issued guidelines that retreated significantly from the positions staked out in the "Nine No-Nos." *Id.* at 1122–23.

would elicit enforcement agency scrutiny and avoided using patents for collusive ends. Few major antitrust cases involving price fixing and patents came before the Supreme Court from the 1970s to 2000s, until the eyes of the antitrust world turned to pay-for-delay agreements in the pharmaceutical context between makers of branded and generic drugs in Actavis.[10]

In this Article, we offer a different conjecture. Focusing on the rampant price fixing in the chemical industry from 1980 to present as a case study,[11] we contend that patents probably still do play a significant role in price fixing—a role that has gone unnoticed by enforcers. Our extensive examination of serial collusion in the chemical industry and our empirical evidence of patenting practices by collusive chemical firms leads us to this conclusion. Instead, patents are probably an important device to help manage and maintain cartels, especially among serial colluders, as described in greater detail below.

In a recent article on price fixing, we coined the term "serial colluder" to designate multi-product firms that have participated in many cartels, involving a range of participants, and initiated at different dates.[12] Several chemical firms meet this definition because of their participation in at least thirty different chemical cartels spanning at least three decades.[13] Our earlier article also addressed the business model of serial colluders and the failure of anti-cartel law to deter such behavior. In some cases, weak monitoring and high-powered incentive payments to product division managers may have fostered multiple cartels without encouragement from, or even contrary to the instructions of, upper management. This "rogue manager" explanation of serial collusion is often invoked by corporate directors seeking a story that deflects blame away from them. A more troubling explanation for serial collusion is that price fixing is an integral part of the business

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[10] Pay-for-delay cases involve agreements between producers of branded, patented pharmaceutical products and generic entrants that keep a competing—and allegedly infringing—generic product from entering the market. GAVIL ET AL., *supra* note 8, at 1161–79. These cases present difficult characterization questions, and courts have struggled to decide whether these agreements are per se illegal instances of price fixing, per se lawful and socially desirable uses of patents, or, as the Supreme Court recently concluded in *FTC v. Actavis*, something in a middle ground that should be evaluated under the rule of reason. 570 U.S. 136 (2013); Michael A. Carrier, *The Rule of Reason in the Post-*Actavis *World*, 2018 COLUM. BUS. L. REV. 25 (2018).

[11] William E. Kovacic et al., *Serial Collusion by Multi-Product Firms*, 6 J. ANTITRUST ENF'T 296 (2018) [hereinafter *Serial Collusion*]; Robert C. Marshall, *Unobserved Collusion: Warning Signs and Concerns*, 5 J. ANTITRUST ENF'T 329 (2017) [hereinafter *Unobserved Collusion*]. In this Article we refer to these works as our "prequel papers."

[12] Note that a firm could be a recidivist but not a serial colluder, and that a serial colluder does not need to be a recidivist.

[13] *Serial Collusion*, *supra* note 11, at 301–13.

model of certain firms, and high-level managers advocate for and assist with collusion throughout the firm. We believe serial colluders in certain industries have run "portfolios of cartels." In support of this "business model" explanation, in previous work we presented various kinds of indirect evidence that serial colluders in the chemical industry have indeed run a portfolio of cartels.[14] Unaddressed in that previous work is an examination of how serial colluders may use patents and patent licensing schemes to initiate or maintain a cartel.

In Section I of this paper, we find that serial colluders increased patenting during the duration of their cartels, which is consistent with the theory that these firms use new patents to support cartelization. The magnitude of this increase is above and beyond incremental increases in patenting over time. We also find that "core" serial colluders (but not other major serial colluding chemical firms) increased patenting on products that they did not produce but that were being cartelized by their fellow colluders, which is consistent with the view that serial colluders engage in reciprocal practices across distinct markets.[15] On the whole, our analysis of patenting practices for serial colluders in the chemical space suggests ongoing use of patents to initiate or maintain cartels, a practice that may apply to other industries with serial colluders as well.

Finding that the empirical data support our hypothesis of serial colluders using patents to create and maintain cartels, we next probe in Sections II and III reasons for why this conduct might evade agency enforcement and effectively help to coordinate cartels. Unlike the older cartels that openly used patents to directly restrain output, modern serial colluders running a portfolio of cartels potentially use patents in ways that are indirect and less likely to be noticed by private plaintiffs and government enforcers. We then explore how cartel participants in the modern era (excepting pay-for-delay cases like *Actavis*) appear to use patents to deter entry into cartelized markets, facilitate intrafirm communications and actions in support of collusive conduct, and communicate with other serial colluders about their portfolio of cartels under the guise of discussing their portfolio of patent licenses.

For the remainder of the Article, we discuss how the existing antitrust jurisprudence regarding patents and price fixing requires major upgrades to account for the dramatic modern improvements in our understanding of the economics of collusion. In older cases, judges recognized that firms could use patent licenses

[14] This evidence will be reviewed in Section III.B.

[15] A firm is identified as a non-producer if the relevant European Commission Prohibition Decision (EC decision) did not identify the firm as a producer. If the firm produced the product exclusively for internal consumption or made the product but only sold it outside of the European Union, then we would still label the firm as a non-producer.

directly to restrict output, raise prices, or boost competitors' marginal costs,[16] but they may not have appreciated the many indirect ways that patents can increase cartel stability and profitability. As discussed in greater detail below, patents provide an avenue for ongoing communication among rivals about output and pricing. Patent pools and cross-licensing arrangements are especially useful for organizing cartels across product types. Furthermore, licensing regimes may permit a firm to organize supportive resources within the firm without raising legal compliance concerns.

Anticipating these benefits to cartel formation and maintenance, this Article goes on to suggest that serial colluders may engage in strategic patenting. That is, they procure patents to advance cartel goals rather than to promote innovation. We present data on global patent procurement by price fixers in the chemical industry that is consistent with this view. Importantly, firms managing a portfolio of cartels can use patents in a reciprocal way to stabilize cartels across markets where not all firms participate as producers in each market. Within the network of chemical cartels, for example, we see evidence that certain firms use patents to promote cartels in markets for products they *do not* produce. Firms may use the threat of a patent lawsuit to punish deviators and discourage outsiders from attempting to enter a cartelized market. They may also use patent licenses to audit licensee sales and monitor compliance with cartel rules. One firm might perform such a service for other firms in the collusive network with the expectation that the non-participant would get similar help managing their own portfolio of cartels from other serial colluders in the future.

Further, in this Article, we probe deeply into the ways serial colluders can coordinate their patent practices to enhance cartel profits and stabilize their cartels. Our previous work on serial collusion documented that modern anti-collusion enforcement has not adequately deterred massive, prolonged multi-market price-fixing schemes.[17] We also explained how various forms of reciprocity among serial colluders increased their cartel profits and made cartels more resilient.[18] We expand on this topic with respect to the use of patents for cartelization, which we touched on only briefly in previous work.

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[16] See Section III.A's discussion of *Standard Oil Co. (Indiana) v. United States*, 238 U.S. 163 (1931), *Hartford-Empire Co. v. United States*, 323 U.S. 386 (1945), and *E. Bement and Sons v. National Harrow Co.*, 186 U.S. 70 (1902).

[17] *Serial Collusion*, *supra* note 11, at 297–301.

[18] Serial colluders can respond to shocks that might destabilize their cartels by adjusting rewards to members via subcontracting agreements, sales of plants or divisions from one member to another, or even by coordinated entry into a market by one firm and exit by another. *Id.* at 330–34.

This Article also describes gaps in existing antitrust enforcement and scholarly analysis of patenting practices. Recognition of serial collusion helps us to identify further flaws in the conventional treatment of patent licenses that allegedly facilitate price fixing. As one example, case law favors vertical patent licenses by applying rule of reason analysis to restrictions that could earn per se condemnation if organized as horizontal licenses.[19] Such deference stems partly from worries that anti-collusion enforcement could weaken returns to patents and discourage research and innovation, as well as concerns that there may be legitimate reasons for suppliers, manufacturers, retailers to coordinate some activities. Yet, past practice of serial colluders show that firms can and do evade per se condemnation by simply organizing a middle man to stand as an upstream patent pool organizer. Thus, we reject such deference for vertically organized patent licenses in the context of serial colluders that are managing a portfolio of cartels, because what appears to be a vertical relationship is often part of the network of connections among serial colluders. Similarly, the leading scholarly commentary on patents and price fixing suggests that socially desirable licenses can be sorted from socially harmful licenses by determining whether significant rents flow to the licensor.[20] This test may be effective in the context of an isolated cartel affecting a single market.[21] As we explain in Section IV, this test has little or no value in the context of serial collusion where the firms are managing a portfolio of cartels.

Finally, in this Article, we provide additional policy recommendations tailored to the abuse of patents by serial colluders. Our earlier work lays out various reforms to anti-collusion policy that could mitigate the harms of serial collusion. In Section V, we go further and explain how certain patent-related behaviors by firms that do not participate directly in cartelizing a particular market can be used to infer collusion in that market (when the outsider is part of a network of serial colluders). We also discuss penalties and liability that antitrust and patent agencies should impose on firms that use their patents to facilitate collusion by others. Specifically, we argue for generous application of the patent misuse defense to render unenforceable patents used to facilitate price fixing.[22] Entry would be easier and

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[19] ABA SECTION OF ANTITRUST LAW, *Antitrust Issues Involving Intellectual Property*, ANTITRUST LAW DEVELOPMENTS, vol. 2, ch. 11, at 1107–10 (8th ed. 2017) [hereinafter ANTITRUST LAW DEVELOPMENTS] (discussing treatment of customer, territorial, and field of use restrictions).

[20] Priest, *supra* note 3.

[21] *Id.*

[22] *See infra* Section V; *see also* Daryl Lim, *Revisiting the Patent Misuse Doctrine: Its Potential Contribution to Maintaining Incentives for Innovation*, *in* INNOVATION SOC'Y & INTELL. PROP. 188 (Josef Drexl & Anselm Kamperman Sanders eds., 2019) [hereinafter *Revisiting Patent Misuse*] (setting out the patent misuse doctrine and discussing possible procompetitive applications in antitrust law).

patent-based cartel punishments would be eliminated if cartel patents are left unenforceable. Finally, we identify possible adjustments in the institutional arrangements by which the federal antitrust enforcement agencies address the use of patents and patent licensing to facilitate collusion.

This Article is organized as follows. Section I presents empirical evidence that serial collusion is a serious problem, that serial colluders in the chemical industry use the patent system intensively in ways that suggest strategic patenting, and that their patenting behavior is consistent with their use of patents to enhance multi-market price fixing. Section II considers the evolution of antitrust doctrine and policy related to patent assertion and licensing as collusive devices. Notwithstanding existing strictures, this section reviews how patent practices can facilitate cartelization. Section III turns to the role that patents can play in supporting serial collusion. Section IV discusses the modernization of doctrines related to patents and price fixing in response to the threat of serial collusion. Section V offers policy recommendations and additional concluding comments.

I
SERIAL COLLUSION AND PATENTS: CASE STUDY IN THE GLOBAL CHEMICAL INDUSTRY

Serial collusion in the chemical industry dates back to the 1880s and has reappeared in most decades since then.[23] German chemical firms have been prominent price-fixers and often cartel ring-leaders, but they have been joined by chemical firms from the United States, England, France, Belgium, the Netherlands, Canada, Switzerland, South Korea, and Japan.[24] Dozens of different chemical

[23] *Serial Collusion*, *supra* note 11, at 312–13. *See also* Diarmuid Jeffreys, HELL'S CARTEL: IG FARBEN AND THE MAKING OF HITLER'S WAR MACHINE (2010) (documenting the role that German chemical industry cartels played to support Nazi Germany's war mobilization efforts in the 1930s and German military production during World War II); Heinrich Kronstein, *The Dynamics of German Cartels and Patents. I*, 9 U. CHI. L. REV. 643 (1942) [hereinafter *Dynamics of German Cartels*] (discussing cartelization in Germany from late nineteenth century through mid-twentieth century and analyzing role of patents in facilitating cartelization).

[24] The firms listed in Figure 1, *infra*, were based in Germany, England, France, Belgium, and the Netherlands during the periods of collusion. American, South Korean, and Japanese firms participated in the lysine cartel; American, Swiss, German, Canadian, and Japanese firms participated in the vitamins cartel; American, Swiss, German, and Dutch firms participated in the citric acid cartel, Dutch, Japanese and French firms participated in the sodium gluconate cartel; and American, German, and Japanese firms participated in the sorbates cartel. DEP'T JUST., Appendix A: Antitrust Division Selected Criminal Cases, April 1, 1996 through September 30, 1999, https://www.justice.gov/atr/selected-criminal-cases-antitrust-division (last accessed June 8, 2021).

products have been affected by price fixing at some point.[25] Historically, some of these collusive agreements were regional; others were global. Some were short-lived; others spanned decades. This history, and the specific role of patents to instituting and maintaining cartels in the global chemicals market, is described below.

A. Historical and Modern Cartelization of the Global Chemical Industry

Patents played a significant role in chemical cartels during the first half of the twentieth century.[26] Margaret Levenstein observes that "[d]uring most of the 30 years preceding World War I, bromine producers in the United States and Europe colluded, pooling output, dividing up markets, and raising prices."[27] In the period leading up to World War II, German chemical firms engaged in a variety of practices that Heinrich Kronstein has called "monopolizing by patents."[28] One technique employed by the "combine" of chemical companies was to direct the research arm of each participant to procure as many patents as possible, to use them for strategic ends.[29] From his study of patents and cartelization in 1920s Germany, Kronstein reported that "[m]ore and more the chemical industry began to apply for patents on practically everything. The research laboratories of the few remaining chemical works, connected among themselves by cartel and working agreements, systematically studied entire fields and closed them by a large number of patents."[30] In fields such as plastics and pharmaceuticals, "[e]ach publication in any chemical review or each patent application of any applicant in any country was given to the staff of the research laboratory to find anything that could be patented, no matter if the patent was a patent of evasion or supplement or protection against other

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[25] *Serial Collusion*, *supra* note 11, at 308 fig.5, 312–13.

[26] WYATT WELLS, ANTITRUST AND THE FORMATION OF THE POSTWAR WORLD 12–26 (2002) [hereinafter FORMATION OF THE POSTWAR WORLD]. In discussing the durability of German cartels in the steel and chemicals sector from the 1880s to World War II, Wells observes that German cartel participants were also "adept at cloaking domestic and even international cartels in the guise of patent agreements, the violation of which also entailed considerable legal risks." *Id.* at 13. *See also* GEORGE W. STOCKING & MYRON W. WATKINS, CARTELS IN ACTION: CASE STUDIES IN INTERNATIONAL BUSINESS DIPLOMACY 363–517 (1946) [hereinafter CARTELS IN ACTION] (recounting the role that patent licensing practices played in the formation and operation of chemical industry cartels involving German firms and, in many instances, foreign producers).

[27] Margaret C. Levenstein, Do Price Wars Facilitate Collusion? A Study of the Bromine Cartel Before World War I, 33 EXPLS. ECON. HIST. 107, 107 (1996).

[28] *Dynamics of German Cartels*, *supra* note 23, at 664.

[29] Stocking and Watkins share this view with respect to the chemical patent practices of I.G. Farben. *See* CARTELS IN ACTION, *supra* note 26, at 373 n.16.

[30] *Dynamics of German Cartels*, *supra* note 23, at 664.

inventors."[31] This phenomenon Kronstein described resembles the pattern of recent patenting behavior in the chemical sector we document below—where patenting activity by cartel participants increases dramatically during the period of illegal collaboration for the purpose of consolidating market share for existing firms and keeping out entrants.[32]

A second method documented by Kronstein and other researchers involves the extensive use of patent licensing agreements among major U.S. and foreign chemical producers and their subsidiaries to establish effective networks for global cartelization.[33] Kronstein reports that in the decades leading up to World War II, "[t]he participation of an American enterprise in a world cartel chiefly through the device of patent exchange became very common."[34] In 1946, George Stocking and Myron Watkins reported "that a division of market territories for products coming within the scope of [cartel] patents and secret processes in a given field usually entail[ed] a complete division of territories for all related products."[35]

A third method of cartelization involved the use of multiple licensing arrangements to cartelize entire domestic markets. In the late 1930s, the DOJ successfully challenged Ethyl Gasoline Company for creating an elaborate system of licensing arrangements for the production and use of tetra-ethyl lead to stabilize prices for motor fuel.[36] In another prominent American example of the technique applied outside the chemical sector, in the 1940s, the DOJ prosecuted United States Gypsum for using minimum price terms in patent licenses to cartelize the gypsum wallboard industry.[37] For about a decade, Gypsum had granted licenses with largely

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[31] *Id.* Kronstein used the term "patent of evasion" to describe patents that sought to work around an existing patent to "accomplish[] the same result as a previous patent of another patentee without infringing it." *Id.* at 664 n.65.

[32] *See id.*

[33] *Dynamics of German Cartels*, *supra* note 23, at 668–71.

[34] *Id.* at 669.

[35] CARTELS IN ACTION, *supra* note 26, at 428. American firms in the dyestuffs cartel used patent licenses to stabilize their cartel. *Id.* at 509. Dupont and Nobel used patent licenses to facilitate the explosives cartel. *Id.* at 439. General Electric engaged its foreign counterparts in similar agreements to cartelize the production of light bulbs, as did Standard Oil of New Jersey in the hydrogenation of coal into petroleum. *Dynamics of German Cartels*, *supra* note 23, at 669–70.

[36] Ethyl Gasoline Co. v. United States, 309 U.S. 436 (1940). The Supreme Court observed that Ethyl "has established the marketing of the patented fuel in vast amounts on a nationwide scale through the 11,000 jobbers and, at the same time, by the leverage of its licensing contracts resting on the fulcrum of its patents, it has built up a combination capable of use, and actually used, as a means of controlling jobbers' prices and suppressing competition among them." *Id.* at 457.

[37] United States v. U.S. Gypsum Co., 333 U.S. 364 (1948).

identical price restrictions to nearly all of the industry's numerous firms.[38] In upholding the government's challenge to Gypsum's licensing terms, the Supreme Court observed, "the industry is completely regimented, the production of competitive unpatented products suppressed, a class of distributors squeezed out, and prices on unpatented products stabilized."[39]

The rash of chemical industry cartelization has continued to modern times. In the three decades since 1980, the European Commission (EC) prosecuted chemical producers for collusion in 32 separate markets.[40] Notable American antitrust cases brought against chemical producers during this period ended cartels in the markets for lysine, citric acid, and vitamin C.[41] Since 2010, the Korean Fair Trade Commission (KFTC) fined participants in a chemical additives cartel.[42] Today, the EC is investigating an ethylene cartel,[43] and a massive investigation of serial collusion by generic drug companies is ongoing in the United States.[44] Whereas the

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[38] *Id.* at 371–86.

[39] *Id.* at 400. In later years, the DOJ twice prosecuted firms in the U.S. gypsum industry of price fixing. In *United States v. United States Gypsum Co.*, 438 U.S. 422 (1978), the defendants defeated charges of price fixing based on price information exchanges within the industry. More recently, three American drywall manufacturers settled charges of price fixing in 2012 and 2013. *See* Press Release, Berger & Montague, P.C., $125 Million Settlement Reached in Drywall Price-Fixing Lawsuit, MKTS. INSIDER (Jan. 3, 2018, 4:40 PM), https://markets.businessinsider.com/news/stocks/125-million-settlement-reached-in-drywall-price-fixing-lawsuit-1012446943.

[40] The chemical industry is a good candidate for stable price-fixing agreements. In many markets there few producers, products are usually homogeneous, and the long history of cooperative pricing fosters trust among colluding firms.

[41] The citric acid cartel is discussed in John M. Connor, *What Can We Learn from the ADM Global Price Conspiracies?* (Purdue Univ. Dep't Agri. Econ., Staff Paper #98-14, Aug. 1998), https://www.researchgate.net/publication/227645450. The lysine cartel is discussed in John M. Connor*, "Our Customers are Our Enemies": The Lysine Cartel of 1992–1995*, 18 REV. IND. ORG. 5, 10 (2001) [hereinafter *Lysine Cartel*]. The Vitamin C cartel is discussed in Mitsuru Igami & Takuo Sugaya, MEASURING THE INCENTIVE TO COLLUDE: THE VITAMIN CARTELS, 1990-1999 (Mar. 7, 2017), http://economics.mit.edu/files/12734.

[42] *See, e.g., 2014 Year-End Criminal Antitrust and Competition Law Update*, GIBSON DUNN (Jan. 8, 2015), https://www.gibsondunn.com/2014-year-end-criminal-antitrust-and-competition-law-update/#_ftnref431 (imposing sanctions and fines against five producers of chemical additives for plastic products due to price and quantity collusion between 2002 and 2013).

[43] Margaret Volkova, *Celanese Reserves USD88 Million Related to European Commission Ethylene Cartel Investigation*, MKT. REP. CO. (Dec. 26, 2019), http://www.mrcplast.com/news-news_open-363613.html.

[44] DEP'T JUST., *Antitrust Division Update 2020: Generic Drugs*, https://www.justice.gov/atr/division-operations/antitrust-division-update-2020/generic-drugs (last updated June 23, 2020).

scope of these investigations has *not* focused on what role patents may have played in helping to facilitate these cartels, we suspect that patents did play a role.[45] We explore this conjecture by examining the patenting behavior of colluding firms before, during, and after agency enforcement to explore whether these firms may have pursued patents for strategic ends.

B. Empirical Analysis of Serial Collusion in the Global Chemical Markets, 1980s to Present: The Role of Strategic Patenting to Facilitate Cartelization

Our analysis of strategic patenting in the global chemicals markets starts with the information on serial collusion in chemical markets displayed in Figures 1 and 2. The companies listed in the rows are all European chemical producers,[46] except for the Swiss consulting firm Fides/AC Treuhand. The columns list the different chemicals that the EC found to be cartelized in the period 1980 to present, from EC Prohibition Decisions (EC decisions) listed in Appendix A. Subsequent graphs replace the chemical names with the number listed below each chemical, as identified in Appendix A. The grey color in a box indicates that the firm participated in a cartel for that chemical market, as determined from EC decisions as well. All of these decisions are listed in Appendix A by chemical name. These cartels had different start dates, end dates, and durations; some cartels operated for as long as 30 years.[47] The duration of each cartel is displayed in Figure 2.[48]

Next, for each of the chemical producers subject to EC decisions listed in Figure 1, we studied patenting activity near to the time of the relevant cartel.[49] We

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[45] One exception is lysine. *Lysine Cartel*, *supra* note 41, at 10. Archer Daniels Midland (ADM) entered the lysine market even though Ajinomoto held patents on manufacturing techniques. Connor's account of testimony at the ADM price fixing trial indicates that "Ajinomoto believed that ADM had stolen its patented lysine microorganisms, and the trial transcript makes clear that ADM did attempt to steal lysine secrets from Ajinomoto." *Id*. He adds that "Ajinomoto had filed a patent-infringement suit against ADM concerning the amino acid threonine (which Ajinomoto won)." *Id.* at 12 n.10.

[46] American, Japanese, and Korean chemical firms also were involved in price fixing during this period. *See Lysine Cartel*, *supra* note 41, at 7–12 (discussing membership of lysine cartel).

[47] An EC decision might not always reveal the true start date of a cartel. When firms admit to guilt as part of negotiations with the EC, they have an incentive to bargain to shorten the reported cartel duration so as to reduce fines and damages from follow-on civil litigation. Thus, the start date reported in an EC decision may be the result of a negotiation between the Commission and the cartelists.

[48] This figure is reproduced from *Serial* Collusion, *supra* note 11, at 308 fig.5.

[49] In 2017, one of us (Marshall) acknowledged the difficulties of analyzing unobserved, explicit collusion:

first counted global patent applications[50] that were ultimately granted for each of the firm-participants to a cartel during that cartel's active period,[51] determined from the relevant EC decision and labeled as the "plea period." We then tallied patenting in the 10 years before and after the plea period in order to analyze trends in patenting for these firms. Since the length of the plea periods varied, the patent applications during the plea period were rescaled to ten-year periods.[52] The results of these patent tallies—"pre-plea," "plea," and "post-plea"—are reflected in three columns in Figure 3. Further explanation of how these patents were tallied and organized appears in Appendix B.

> Before moving forward, allow me to note that we do not know the extent and scope of unobserved explicit collusion. At one extreme, all previously existing explicit collusion may have been detected and no continuing or new explicit collusion may exist. At another extreme, detected explicit collusion may be just the tip of the iceberg. Namely, there may be vast amounts [of collusion] continuing and newly forming throughout the world. Unlike some other illegal activities, measuring the scope and magnitude of unobserved explicit collusion suffers from truncation, which creates classically difficult inference problems.

Unobserved Collusion, *supra* note 11, at 330.

[50] We counted patent applications as opposed to granted patents because there is a significant delay between patent applications and grants. The count of applications that matured into grants helps us identify the immediate response of firms to the formation of a cartel.

[51] Appendix B provides a detailed description of how we assembled these numbers. This appendix should enable the reader to fully reproduce everything we report here.

[52] For example, if a plea period was 5 years, then the patent applications for each firm were multiplied by two. If the plea period ran for 30 years, the patent applications for the plea period were multiplied by one-third.

Figure 1: European Chemical Firm Cartel Involvement by Product Market, from EC Decisions 1980 to Present

Company \ Product Market	1 Bitumen	2 Butadiene Rubber	3 Calcium Carbide	4 Candle Waxes	5 Cartonboard	6 Chloroprene Rubber	7 Choline Chloride	8 Citric Acid	9 Fatty Acids	10 Food Flavour Enhancers	11 Heat Stabilizers	12 Hydrogen Peroxide 1984	13 Hydrogen Peroxide 2006	14 Lysine	15 Methacrylates	16 Methionine	17 Methylglucamine	18 Monochloroacetic Acid	19 Organic Peroxides	20 Polyethylene	21 Polypropylene	22 Potash	23 PVC	24 Rubber Chemicals	25 Soda Ash	26 Sodium Chlorate	27 Sodium Gluconate	28 Sorbates	29 Synthetic Fibers	30 Vitamins	31 Woodpulp	32 Nitrile Butadiene Rubber	Row Sum
Akzo Nobel			■				■				■		■					■	■					■			■	■						9
Fides/Treuhand					■				■		■							■	■	■	■		■			■					■			9
BASF							■													■	■	■	■		■					■				7
Bayer		■				■		■												■				■					■				■	7
Solvay												■	■								■	■	■		■					■				7
Arkema/ Atofina											■		■		■			■	■							■								6
Degussa			■									■	■		■	■			■															6
Hoechst																		■		■	■		■						■	■				6
Shell	■	■		■																■	■		■											6
Elf Aquitaine											■		■		■			■								■								5
ICI															■					■	■		■						■					5
Rhone Poulenc/Aventis																■	■				■								■	■				5
Atochem												■								■	■		■											4

Figure 2: European Chemical Firm Cartel Involvement by Firm, from EC Decisions 1980 to Present

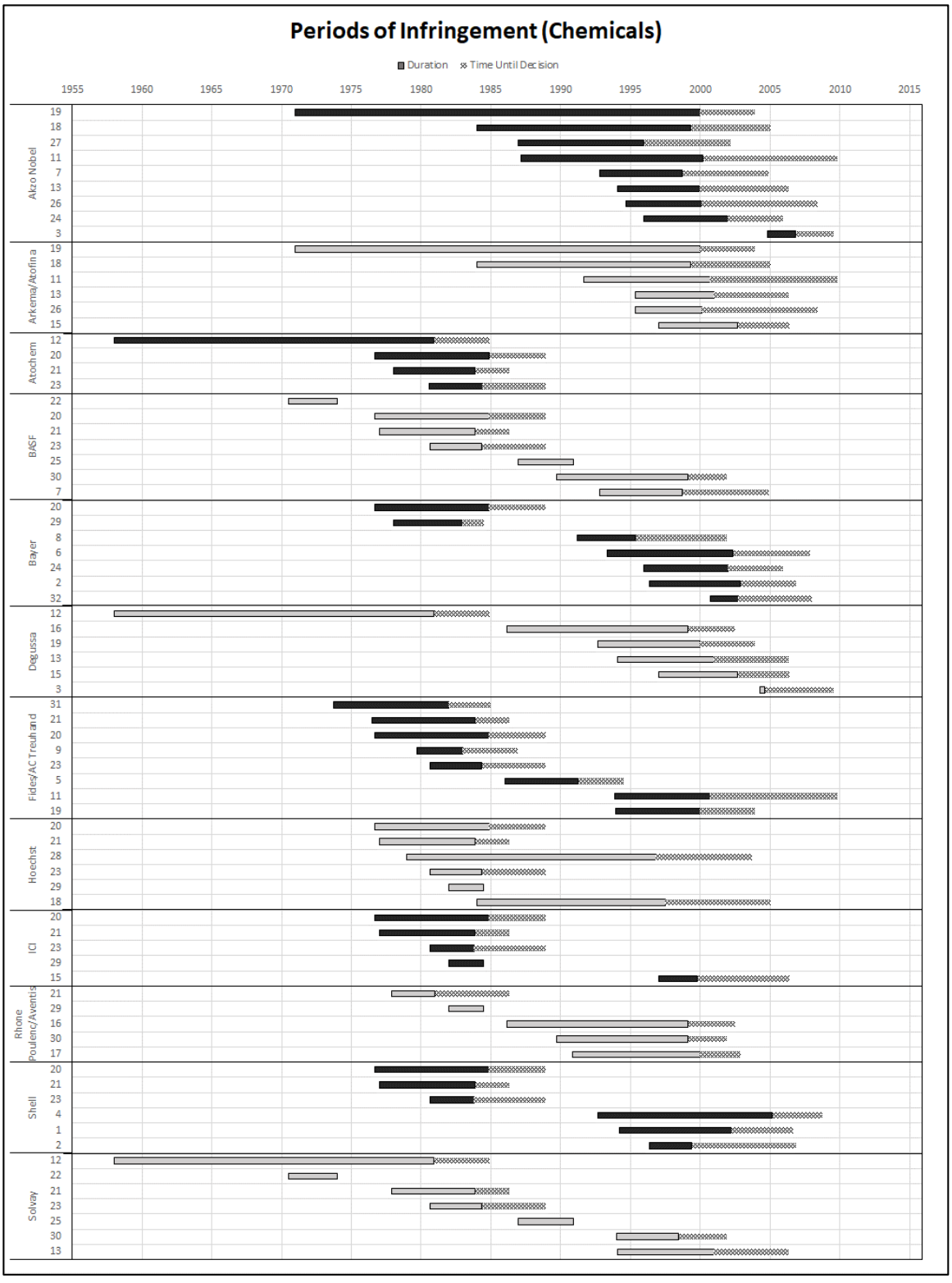

Figure 3: Empirical Findings Regarding Patenting by Large Multi-Product Chemical Firms that Regularly Participate in Cartels

	Producers of Cartel Chemical			*Non-producers of Cartel Chemical*		
Firm	Pre-plea	Plea	Post-plea	Pre-plea	Plea	Post-plea
Akzo	105	158	128	207	414	389
BASF	246	523	824	1037	1639	1527
Bayer	490	610	541	523	753	653
Solvay	157	223	303	107	175	267
Degussa	189	280	461	109	190	331
Shell	154	262	416	289	185	153
ICI	283	257	214	119	74	41
Arkema (AAA)	291	326	586	119	115	149
Hoechst	168	458	891	557	439	131
RP	23	89	38	277	276	253
Aventis	4	62	36	55	148	246
Total	**2110**	**3248**	**4438**	**3399**	**4408**	**4140**
% Change, Pre-plea to Plea		54%			30%	
% Change, Plea to Post-plea			37%			-6%

Figure 4: Patenting Practices of "Core" Serial Colluders, as Compared to "Non-core" Serial Colluders

	Producers of Cartel Chemical			*Non-producers of Cartel Chemical*		
Firm	Pre-plea	Plea	Post plea	Pre-plea	Plea	Post-plea
"Core" Serial Producers	1187	1794	2257	1983	3171	3167
% Change, Pre-plea to Plea		51%			60%	
% Change, Plea to Post-plea			26%			0%
"Non-core" Serial Colluders	923	1454	2181	1416	1237	973
% change pre-plea to plea		58%			-13%	
% change plea to post-plea			50%			-21%

As noted above, Figure 3 displays the tallies of the number of patents that firms applied for in three time periods: "pre-plea," "plea," and "post-plea." Patents were organized by filing date and only tallied if a patent was ultimately granted. For each firm, patents awarded in these periods were sorted into two groups: on the left side, chemical patents awarded to cartel members, aggregated across enforcement actions ("Producers of Cartel Chemical"); on the right side, patents associated with a firm who was not party to the cartel or a producer of the cartel product, as adjudged by review of the same enforcement actions ("Non-producers of Cartel Chemical"). We relied on EC reports to determine if a firm was a seller of a chemical and was not prosecuted as a member of the cartel for that chemical.[53] The bottom of Figure 3 displays totals of patents awarded across the three relevant time periods for each firm. We also calculated the percentage changes in patenting for each firm and overall across the pre-plea to plea time frames and plea to post-plea time frames. The trends that this data reveal is analyzed in greater detail below.

Figure 4 reorganizes the same data from Figure 3, sorting firms into two buckets: "core" serial colluders and "non-core" serial colluders.[54] "Core" serial colluders include Akzo, BASF, Bayer, Solvay, and Degussa (ABBSD). The remaining six firms (Shell, ICI, Arkema, Hoechst, RP, and Aventis) were marked as "non-core" serial colluders.

From review of the data in Figure 3, we find that there was a surge in patenting by cartel members on chemicals covered by the cartel *during the plea period*. In the plea-period, the adjusted total number of patent applications by the chemical firms which the EC deemed to have participated in a cartel for a given product was over 3,200 patents, as compared to close to 2,100 patents in the pre-plea period. The total number of patent applications was 54% higher for serial colluders in the plea period than in the pre-plea period, reflecting a surge in patenting activity. This trend continued in the post-plea period, where the number of patent applications by serial colluders rose to close to 4,400 patents, 37% higher in the post-plea period than in

[53] More precisely, we have no information that these firms are producers. The EC prohibition decisions do not name them—an omission that may only mean that the firm had no sales for the product in the European Union. A "non-producer" could make the product entirely for internal consumption. In addition, a "non-producer" could be making the product and not selling any of its output in the Europe Union. We address some of these classification distinctions in Section III.C.

[54] We call Akzo, BASF, Bayer, Solvay, and Degussa the "core" serial colluders because they are the only serial colluders who engaged in the anomalous behavior of increased patenting of products that they did not produce but which were cartelized by others. Also, these are the most frequent colluders, active in at least seven cartels, except for Degussa, which was active in six. Finally, BASF and Bayer are the two main descendants of the I.G. Farben conglomerate of Germany.

the plea period. Appendix B provides firm-specific details corroborating these results.

Is a 54% increase in patenting activity between the pre-plea and plea periods large enough to raise suspicions about suspect motivations for patenting? Finding a good benchmark for patenting activity is quite difficult. Trying to benchmark cartel participant patenting activity against others in the industry is not a perfect solution, as other chemical firms are potentially involved in collusion across other product types or their behavior may be influenced by the cartel firms, even if they are not formal members of the cartel. For example, patenting activity by Japanese chemical firms does not appear to be very different than that of the European producers listed in Figure 1, but that could simply reflect the use of patents by Japanese and European firms to define exclusive territories as part of coordinated conduct.[55] Nevertheless, the fact that patenting for serial colluders increased more across the pre-plea to the plea periods as compared to the plea to post-plea periods may be a good indicator of suspect motivations for patenting. If innovation was accelerating at an increasing rate, then we would expect for the results to be the opposite. Further, it is important to remember that the plea periods for these cartels all differ in time; thus, a surge in innovation over some specific time period is very unlikely to explain the results. Rather, it seems that serial colluders deliberately increased patenting during plea periods at a rate untethered to innovation improvements, for reasons further discussed below.

Another interesting trend emerges from review of producer versus non-producer patenting during the relevant pre-plea, plea and post-plea periods. If there was no coordinated activity among non-cartel and cartel members, one would not expect any spike in patenting for non-producers in the relevant periods above and beyond innovation improvements. And yet, the data suggest that non-producer firms to some degree may strategically be seeking patents during the relevant time periods as well. The "core" serial colluders, Akzo, BASF, Bayer, Degussa, and Solvay (ABBDS), generated over 4,400 patents related to chemical products that they themselves did not make but that their other regular co-conspirators did make and cartelized markets for. Notably, core serial colluder patent applications for cartelized products that they did not make increased by 60% from the pre-plea to the plea period; a spike in patenting similar to that for producing firms actually party to the

[55] Another potential benchmark might be university patent applications. That possibility is diminished by the Bayh-Dole Act of 1980, 35 U.S.C. §§ 200-212 (1980), which created great incentives for universities and others receiving federal grants to seek patent applications. Enactment of Bayh-Dole means that the rapid increase for these institutions is almost surely just a result of the change in the regulatory environment.

cartel at issue. By contrast, as shown in Figure 4, patent applications for non-core serial colluders in cartelized products that they did not make fell by 13% from the pre-plea to plea periods and fell by 21% from the plea to post-plea periods. This suggests the ABBDS firms garnered patents that could be used in a reciprocal fashion to support cartels operated by their compatriots.

Of course, we cannot entirely reject the possibility that these patterns of patenting are due to non-collusive motivations. As noted above, alternative explanations are industry-wide or firm-specific innovation improvements. Some jumps or falls in patenting could also be random occurrences. Yet, several facts cast doubt upon such explanations. First, the firms at issue regularly participate in cartels with one another across a broad array of chemical products.[56] Second, as described in greater detail below, patents are very useful tools to facilitate cartel conduct.[57] Third, the fact that the increase in patent applications by cartel members from the pre-plea to the plea period is greater than the increase from the plea to the post-plea period strongly suggests an incremental value of patents for these firms above and beyond protecting intellectual property. Fourth, a surge in patent applications by the core serial colluder firms on products that they do not make but for which their frequent co-conspirators are engaged in a cartel strongly suggests that at least this subset of core serial colluders use patents to facilitate cartel conduct across products. Finally, it is noteworthy that the plea periods for the 32 cartels that we analyze have different start and end dates. Thus, the data we report across Figures 3 and 4 are unlikely to be driven by some industry-wide innovation surge over a specific time period. Also, the finding of a patent surge for non-producers from the pre-plea to the plea period pertains to only the five most active cartel firms and not the other six. This implies that surges in patenting are not being driven by some industry-wide phenomenon.

Having identified certain suspect patenting practices by serial colluders in the chemical industry, we next explain that this behavior is rationally related to instituting and maintaining a cartel. Before doing so, we lay some groundwork for how antitrust law approaches collusive schemes involving patents and patent licensing. Then, we describe competitive pressures that might drive firms to seek out patents as a means to institute and maintain a cartel.

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[56] *See* Section III.B.

[57] *See* Section II.A.

II
PATENTS, COMPETITION, AND COLLUSION: THE EVOLUTION OF ANTITRUST DOCTRINE AND POLICY

Most antitrust scholars agree that the patent system has procompetitive effects when it works as intended.[58] Patents give inventors incentives to create new technology by strengthening their ability to earn profits that cover the cost of inventing.[59] Patents achieve this end by giving their owners the right to exclude others from making, using, and selling the patented technology during the patent term. In return, patent owners must disclose their invention to the public; thus, sharing the knowledge that they created.[60] This knowledge will enter the public domain at the end of the patent period.

The right to exclude—the patent's vital legal trait—is not an unmixed social blessing. This right may slow the diffusion of new technology and sometimes leads to market power in a patented product. These social costs must be balanced against the social gains arising from patents' innovation incentives and knowledge disclosure function. Moreover, patents do not completely bar other firms from using the patented technology. Importantly, these firms are free to utilize the invention if they obtain a license from the patent owner. When patent owners and other inventors or manufacturers can come to an agreement to license the patented technology during the patent term, society gains doubly from the speedy diffusion of new technology and royalty payments that reward inventors.

As a general matter, patent owners enjoy considerable discretion to draft patent licensing agreements that they desire. Antitrust law usually allows said license agreements to restrict licensees' output, fields of use, or freedom to market covered products.[61] Antitrust law also tolerates license royalty provisions that raise the

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[58] FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, ch. 1 (Oct. 2003) [hereinafter TO PROMOTE INNOVATION].

[59] FREDERIC M. SCHERER & DAVID R. ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 621–30 (3d ed. 1990); Stanley M. Besen & Leo J. Raskind, *An Introduction to the Law and Economics of Intellectual Property*, 5 J. ECON. PERSPS. 3 (1991).

[60] This bargain—exclusivity in return for disclosure—is a basic foundation for the U.S. process through which patent rights are granted. CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION 62–67 (2012); ROBERT P. MERGES, PATENT LAW AND POLICY: CASES AND MATERIALS 247–302 (7th ed. 2017).

[61] Weimin Wu, *Managing Cartels Through Patent Pools*, 64 ANTITRUST BULL. 457, 457–73 (2019). *See also*, Priest, *supra* note 3, at 314 ("Under the guise of patent license, a cartel can gain supracompetitive profits without employing any detectable restriction on price. A cartel can agree on some other aspect of the sale of the product to achieve the same result.").

marginal cost of licensees.[62] Relative to the absence of licensing, these restraints on competition during the patent's term are tolerated on the ground that such restrictions tend to promote technology diffusion and more competitive markets after patent expiration.[63]

In some instances, antitrust law also permits agreements among actual or potential rivals to determine collectively how a group of firms will exploit their patent rights. The creation of the Manufacturers' Aircraft Association in the early twentieth century provides an example of a socially beneficial use of cross-licensing agreements and a patent pool to coordinate patent licensing covering complementary patented technologies. At the advent of airplane technology, Orville and Wilbur Wright, i.e., the Wright brothers, and, separately, Glenn Curtiss, had patent rights covering fundamental airplane technology.[64] No one, including the Wright Brothers and Curtiss, could avoid patent infringement when making a commercial airplane unless they had permission from the three patent owners.[65] For years, Curtiss and the Wrights were locked in patent litigation that held up knowledge transfer and caused the American airplane industry to lag behind developments in Europe. Eventually, the patent owners resolved their dispute in response to pressure from Franklin D. Roosevelt, then the Assistant Secretary of the Navy, to expedite preparation for the United States's entry into World War I.[66] As a result, Curtiss and the Wright brothers' fundamental patents (and many improvement patents) were contributed to a patent pool called the Manufacturer's Aircraft Association. The pool became a vehicle for airplane patent owners to coordinate their patent licensing, but in this case, cooperation improved social welfare as compared to no licensing at all.[67]

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[62] ANTITRUST LAW DEVELOPMENTS, *supra* note 19, at 1094–118.

[63] HANDBOOK OF THE LAW OF ANTITRUST, *supra* note 3, at 525–28.

[64] DAVID MCCULLOUGH, THE WRIGHT BROTHERS 249–53 (2015) (describing patent litigation between the Wright brothers and Glenn Curtiss, all early aviation pioneers); LAWRENCE GOLDSTONE, BIRDMEN: THE WRIGHT BROTHERS, GLENN CURTISS, AND THE BATTLE TO CONTROL THE SKIES (2014) (same).

[65] Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations,* 84 CAL. L. REV. 1293, 1341 (1996) ("[W]here different firms hold patents on the basic building blocks of the industry's products, they will have to cross-license to produce at all.").

[66] *Id.* at 1356–57 ("In several cases where the government was concerned that technology useful to the military was not being developed because of a logjam of conflicting property rights, the lurking threat of the eminent domain power contributed to the formation of patent pools.").

[67] G. R. Simonson, *The Demand for Aircraft and the Aircraft Industry, 1907-1958,* 20 J. ECON. HIST. 361, 363–64 n.9 (1960).

However, patent license terms that maximize value to the licensor and licensee may also cause unacceptable harm to third parties.[68] For example, antitrust may block a patent license agreement that diminishes competition in markets for technology outside the scope of the patent.[69] Antitrust may also block license agreements aimed at thwarting entry to challenge patents that are likely invalid, or the use of such patents to divide a market among competitors.[70] Both of these results are discussed in greater detail in Section II.A below.

The tricky question raised in the following section is how courts should distinguish legitimate restrictions on competition that appropriately award inventors for their efforts from illegitimate restrictions that harm competition without significantly promoting invention. To address this inquiry, we sketch the evolution of antitrust enforcement policy as it has applied to patent-related practices that could support collusive arrangements. In doing so, we present some of the principal scenarios of alleged collusion that have appeared in antitrust decisions involving patents, especially in cases that present complex patent enforcement and licensing practices. We later propose some ways for settling this line-drawing question in Section IV.

A. Patents and Collusion in Antitrust Policy

From the earliest decades of antitrust law, antitrust policy in some eras has viewed the patent system warily and has given careful attention to the possibility that patent licensing and pools could facilitate collusion and the monopolization of entire industries.[71] Perhaps more than at any time in American history, these concerns crystalized during the proceedings in the late 1930s and early 1940s of the

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[68] TO PROMOTE INNOVATION, *supra* note 58.

[69] DEP'T JUST. & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY 8–9 (Jan. 12, 2017), https://www.justice.gov/atr/IPguidelines/download [hereinafter DOJ/FTC IP GUIDELINES].

[70] *Id.*

[71] Walton Hamilton's monograph on "Patents and Free Enterprise" for the Temporary National Economic Committee in 1941 recounts the longstanding concern among antitrust specialists that patent rights, unless properly constrained, would undermine competition. TEMP. NAT'L ECON. COMM., 76TH CONG., INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER: PATENTS AND FREE ENTERPRISE (Comm. Print 1940) (Walter Hamilton) [hereinafter Hamilton, PATENTS AND FREE ENTERPRISE]. In a section titled "The Peril to Free Enterprise," Hamilton observed that, "[i]n their concern with trade practices, the Federal Trade Commission and the Department of Justice have been plagued with a legalistic conception of a patent as a sacrosanct area in the economic realm." *Id.* at 159. Hamilton cautioned that a rebalancing of the interests of the patent system and the antitrust regime was necessary: "If presently the patent is not brought into accord, free enterprise can survive only on the fringes of a closed economy." *Id.* at 163.

Temporary National Economic Committee (TNEC) and its "Investigation of Concentration of Economic Power."[72] The final TNEC report described the patent system and its operation in scathing terms:

> No one can read the testimony developed before this committee on patents without coming to a realization that in many important segments of our economy the privilege accorded by the patent monopoly has been shamefully abused. . . . It [patenting] has been used as a device to control whole industries to suppress competition, to restrict output to enhance prices, to suppress innovation, and to discourage inventiveness.[73]

The TNEC report reflected the work of researchers who had documented how patent licensing arrangements had facilitated the cartelization of global markets.[74] The acute suspicion with which U.S. antitrust policy sometimes has treated patent licensing arrangements almost surely flows out of findings in law enforcement initiatives and academic studies from this era that patent licensing helped to cartelize sectors critical to the World War II mobilization effort.[75] The TNEC proceedings also lent support to existing efforts by Thurman Arnold, then the Assistant Attorney General for Antitrust, to challenge domestic and international cartels that used patent licenses as coordination mechanisms.[76] Much of what we know about the early use

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[72] TEMP. NAT'L ECON. COMM., 77TH CONG., INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER: FINAL REPORT AND RECOMMENDATIONS OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE (Comm. Print 1941) [hereinafter TNEC FINAL REPORT]. On April 29, 1938, President Franklin D. Roosevelt asked Congress to conduct a study of economic concentration in the United States. *Id.* at 11–20. In June of 1938, the President approved a joint resolution of Congress establishing a Temporary National Economic Committee to conduct the inquiry. *Id.* at 691–93. The significance of the TNEC proceedings is examined in Albert A. Foer, *Putting the Antitrust Modernization Commission into Perspective*, 51 Buff. L. Rev. 1029, 1032–36 (2003).

[73] TNEC FINAL REPORT, *supra* note 72, at 36.

[74] *See* Hamilton, PATENTS AND FREE ENTERPRISE, *supra* note 71, at 165 ("In peace or at war the international cartel poses its problem. A corporation barricades its monopoly by securing grants in all the dominant nations. If concerns here and abroad lay claim to rival technologies, the conflict is usually resolved by a private understanding. . . . The consumer is denied the protection of competition; and an agreement between gentlemen which vaults over frontiers becomes the actual regulation of commerce with foreign nations.").

[75] FORMATION OF THE POSTWAR PERIOD, *supra* note 26, at 96–107.

[76] *Id.* at 83–89. By the late 1930s, the DOJ had given high priority to investigating the use of patents as collusive and exclusionary mechanisms. ELLIS W. HAWLEY, THE NEW DEAL AND THE PROBLEM OF MONOPOLY 368–70 (1966) (describing DOJ efforts to scrutinize "the use of patent laws to create and perpetuate monopolistic strongholds."). Arnold testified on behalf of the DOJ Antitrust Division before the TNEC body at the close of its proceedings. TNEC FINAL REPORT,

of patent licensing as a collusive device comes from government cases initiated in the 1930s and from the TNEC proceedings.

In addition to agency reports and congressional hearings, government litigation in the mid-twentieth century reflected a larger effort to bring antitrust law to bear on collusive, patent-based schemes. During this time period, the DOJ prosecuted a variety of antitrust cases in which patent practices provided crucial means for executing improper collusive schemes.[77] We highlight three factual scenarios involving allegations of illegal concerted action involving patents in litigated cases: patent pools, cross-licenses, and price restrictions.[78] The illustrative cases below do not expressly address the special anticompetitive possibilities presented by patenting activity and patent practices in the context of serial collusion by multi-product firms, yet their fact patterns and analysis are consistent with some of the serial collusion concerns we address in Sections III and IV.

Scenario 1: Patent Pools and Cross-Licensing

Some antitrust cases have challenged patent pools on the ground that the contested pooling arrangements facilitated industry-wide coordination of output and pricing. One notable illustration is *Standard Oil Co. (Indiana) v. United States*.[79] In the case, several petroleum refiners held patents on a new catalytic cracking process that enabled refiners to extract a larger amount of higher valued products (e.g., gasoline) from a barrel of crude oil.[80] To avoid litigation over their competing claims,

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supra note 72, at 98–138. At several points, he emphasized how the DOJ was working to prosecute cartels in sectors that supplied vital means for the wartime mobilization. *Id.* at 99 (testimony of Thurman Arnold stating that "expenditures for national defense have imposed the immediate task on the Antitrust Division of breaking up combinations which are restricting production in national-defense industries or which are causing the Government to pay artificial prices for its defense materials.").

[77] For notable examples of government antitrust cases in this period that attacked patent practices as illegal agreements under Section 1 of the Sherman Act, 15 U.S.C. § 1 (1980), or as conspiracies to monopolize under Section 2 of the Sherman Act, 15 U.S.C. § 2 (1980), *see infra* notes 82–88, 97–101, 121–22 and accompanying text.

[78] A separate body of cases, not treated in this paper, has focused on patenting behavior as a form of illegal, single-firm misconduct. The leading patent-antitrust cases of this category are analyzed in F. M. Scherer, *Technological Innovation and Monopolization* (John F. Kennedy Sch. of Gov't, Harvard Univ., Faculty Research Working Papers Series, No. RWP07-043, Oct. 2007) [hereinafter *Technological Innovation and Monopolization*].

[79] 283 U.S. 163 (1931).

[80] Catalytic cracking represented an important advance in refining technology. Before cracking became commonplace, refineries relied mainly on distillation units that separated hydrocarbons by boiling crude oil and using fractionation towers to separate components of different densities and boiling points. *The Petroleum Industry: Hearings on S. 2387 and related bills Before the*

the firms pooled their patents, cross-licensed to each other, and agreed to share royalties received from licenses under the patents in a fixed proportion. The DOJ claimed the arrangement enabled the refiners to eliminate competition among the patentees over royalty rates. Applying a rule of reason test, the Supreme Court upheld the participants' cross-licensing and royalty division practices. The Court wrote that the challenged practices often are necessary to prevent infringement litigation from blocking technical progress and concluded that the royalty division mechanism could not adversely affect prices because gasoline produced from the use of the patented cracking technology constituted only 26 percent of all gasoline output.[81]

Two features of the *Standard Oil (Indiana)* decision are interesting for our purposes. First, the Court took an expansive view of the benefits of the settlements that supported the patent pool and seemed less sensitive to, or unaware of, their anticompetitive possibilities, including their tendency to suppress challenges to the validity of weak patents. For serial colluders, the aura of legitimacy that surrounds patent settlements might increase the attractiveness of such agreements as a means to create or reinforce the structures vital to cartel success. Second, the *Standard (Indiana)* decision notes that pooling and settlements may be inevitable and essential to achieving economic progress where many firms engage in patenting related to a specific technology. This raises the question, which we discuss below, of whether cartel members might strategically strive to obtain as many patents as possible as one way to create a nexus of conflicting rights that only can be resolved by agreement among rivals who own these rights. In other words, intensive patenting can create the condition that necessitates pooling and related settlements, and these arrangements can provide useful cartel administration infrastructure.

Hartford-Empire Co. v. United States provides a second, important illustration of the competitive concerns that can arise in pooling and cross-licensing arrangements.[82] This case dealt with the use of patents to implement price fixing by glass manufacturers. In the first half of the twentieth century, glass manufacturing was a competitive and technologically progressive industry. Process innovation

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Subcomm. on Antitrust and Monopoly of the S. Comm. on the Judiciary, 94th Cong., Part 3, at 2143–44 (1975) (testimony of Frederic M. Scherer regarding vertical integration in the petroleum industry).

[81] By treating distillation and cracking as fungible, the Court underestimated the significance of cracking. Because it gave refiners important cost advantages, cracking likely constituted a distinct relevant market. Seen that way, the share of output covered by the challenged patent arrangements would have been over 50 percent (instead of a 26 percent share of all gasoline output).

[82] 323 U.S. 386 (1945).

during this period allowed for automation of most manufacturing activities. However, the industry moved toward collusion when two key players, Hartford and a Corning subsidiary named Empire, settled patent litigation and reached a cross-license agreement in 1916. Subsequently, Hartford and Owens (another glass manufacturer) settled patent litigation in 1924, then jointly bought up most remaining glassmaking patents from other manufacturers. With Corning, Hartford and Owens at the core of the patent cross-licensing agreements, most manufacturers were organized into a cartel that relied on product market division. Corning enjoyed an exclusive license to make certain kinds of blown glass, Owens-Illinois had the exclusive right to make pressed glass using the suction process, and Thatcher held the exclusive right to make milk bottles.[83] The licenses for fruit jars went to Ball and Owens-Illinois, and eventually to Hazel-Atlas. Hazel-Atlas resisted the manufacturers' cartel for several years but joined in 1932 to settle patent litigation.

Making its case, the DOJ accused the several glass manufacturer defendants of conspiring to fix prices and monopolize the market for glass making. At the time of the suit, 96% of U.S. glass output was made using glass machinery licenses: Hartford owned more than 600 patents, Corning owned more than 100, Hazel owned more than 70, Owens owned more than 60, and Lynch owned 12.[84] All of these patents were merged into a pool that effectively permitted defendants to control industry output and pricing.[85] On certiorari, the Supreme Court upheld the district court's ruling that the patent licensing agreements violated the Sherman Act.[86] The remedy required the defendants to offer a reasonable royalty on their patents going forward and blocked future use of patent license terms that could facilitate collusion.[87]

Analyzing the result in *Hartford-Empire*, it is easy to see the risk of collusion created by aggressive patent acquisition and enforcement coupled with licensing terms that allocate product markets. This result also differs from that of the aircraft manufacturing patent pool, described in the Curtiss and the Wright brothers example above. Whereas the glass patent pool and airplane patents both tied up a significant portion of the relevant industry, the airplane patents covered fundamental technologies and represented blocking patents as to each other. By contrast, the glass patent pool covered relatively pedestrian inventions. Thus, the Court's finding of anticompetitive effect and imposition of required licensing at reasonable rates is a

[83] *Id.* at 396–400
[84] *Id.*
[85] *Id.* at 398.
[86] *Id.* at 401–02.
[87] *Id.* at 413–14.

sensible result in *Hartford-Empire*. Our assessment of *Hartford-Empire* would be different if we were convinced that key patents in the pool were technologically significant and mutually blocking.[88]

The *Hartford-Empire* case facts also suggest ways in which the benefits of patent licenses to cartels are magnified when the colluding firms pool their patents and establish an independent entity to administer the pool. A vertical licensor-licensee relationship between an upstream and downstream firm is less likely to be subjected to antitrust scrutiny[89] because vertical agreements are subject to a more permissive standard of review that considers procompetitive justifications from firm coordination.[90] By contrast, agreements among horizontal competitors to fix prices, set output levels, divide territories, or allocate customers are generally treated as per se illegal, as they are thought to have a greater potential to cause social harm.[91] Yet, the disparate treatment of vertical and horizontal agreements can be questionable

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[88] Our sentiment here parallels recent policy in the DOJ and FTC that looks favorably at pools containing only "standard essential patents." By definition, such patents cover significant and complementary technology related to computers and communications. The DOJ issued business review letters "that endorse a policy of *ex ante* price disclosure at VITA (an SSO that promotes the VMEbus computer architecture) and the IEEE. The VITA policy requires IP holders to commit to a 'price cap' (i.e. a maximum royalty rate and most restrictive set of licensing terms), which can be amended downwards, while the IEEE policy allows firms to disclose their most restrictive licensing terms on a voluntary basis." Timothy Simcoe, *Can Standard Setting Organizations Address Patent Hold-up? Comments for The Federal Trade Commission* 13 (2011) (internal citation omitted), http://people.bu.edu/tsimcoe/documents/working/Simcoe-FTC-SSO-Comments-v2.pdf (prepared comment for 2011 FTC conference on the topic of tools to prevent "hold-up" issues created by patents. *See also Tools to Prevent Patent "Hold-up": IP Rights in Standard Setting*, FED. TRADE COMM'N, https://www.ftc.gov/news-events/events-calendar/2011/06/tools-prevent-patent-hold-ip-rights-standard-setting (last accessed May 15, 2021) (with links to download all submitted comments at the 2011 FTC conference, including that of Timothy Simcoe).

[89] Herbert Hovenkamp & Christopher R. Leslie, *The Firm as Cartel Manager*, 64 VAND. L. REV. 813, 842 (2011) [hereinafter *Cartel Manager*] (noting that vertical communication is less likely to attract the attention of anti-cartel enforcers).

[90] Douglas H. Ginsburg et al., *Antitrust and Intellectual Property in the United States and the European Union*, *in* THE INTERPLAY BETWEEN COMPETITION LAW AND INTELLECTUAL PROPERTY—AN INTERNATIONAL PERSPECTIVE 99, 103 (Gariella Muscolo & Marina Tavassi eds., 2019); *see also* Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877, 907 (2007) ("Vertical price restraints are to be judged according to the rule of reason.").

[91] Ginsburg et al., *supra* note 90, at 105–06; *see also* United States v. U.S. Gypsum Co., 333 U.S. 364, 388–89 (1948) (condemning arrangement by which rivals pooled patents to produce gypsum and agreed to take a license setting royalties by a common formula and fixing the downstream price of gypsum products); United States v. Nat'l Lead Co., 332 U.S. 319, 325–28 (1947) (banning patent cross-licensing scheme that divided global markets).

when the upstream pool manager is working for the downstream licensees who hope to achieve a cartel in their market. In these cases, the upstream actor may merely be coordinating horizontal dealing in a "hub-and-spoke" arrangement without providing procompetitive benefits to the market.[92] Nevertheless, it is hard for courts and enforcers to distinguish desirable pool managers who offer one-stop licensing of a vast portfolio of patents from those who simply work to promote a licensees' cartel.[93]

There are several other ways that patent pools can facilitate cartels. These are not directly addressed in the *Hartford-Empire* decision, but they emerge as implications that cartel members—especially serial colluders—might derive from

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[92] Federal antitrust agencies have challenged a number of these hub-and-spoke arrangements in settings that did not involve patents. Interstate Circuit, Inc. v. United States, 306 U.S. 208 (1939); United States v. Apple Inc., 791 F.3d 290 (2d Cir. 2015); Toys "R" Us, Inc. v. FTC, 221 F.3d 928 (7th Cir. 2000).

[93] The Organization for Economic Cooperation and Development (OECD) Competition Committee has identified this concern when describing FTC enforcement experience in the 1990s:

> The main concern regarding cross-licensing and pooling arrangements is that they can be used to cover up a collusive agreement by mechanisms such as the joint marketing of pooled intellectual property rights with collective price setting or coordinated output restrictions that do not contribute to an efficiency-enhancing integration of economic activity among the participants. Such anticompetitive effects are more likely to occur when the IP rights being cross-licensed or pooled comprise substitute technologies, i.e. the IP rights' holders are potential competitors in a horizontal relationship. . . . A contemporaneous example can be observed in the [United States], where the FTC challenged a pool of patents relating to the manufacture and use of lasers employed in performing eye surgeries in 1998. The two companies comprising the pool were the only firms whose laser equipment had obtained the marketing approval from the U.S. Food and Drug Administration for performing the surgery. Through the pool, Summit and VISX relinquished the right to license their patents unilaterally, but each received the right to prohibit the pool from licensing [to] any third party. The pool issued no third-party licences [sic] over its six-year existence. In addition, the pool agreement required the payment of a minimum fee for each procedure performed with its laser equipment, i.e. the pool set a price floor for the "per-procedure fee" that each company charged ophthalmologists using its equipment. The FTC alleged that the pool eliminated competition between the pool members in the sale or leasing of the laser equipment and in the licensing of related technology. The FTC's allegations concerning the pool were settled through consent orders that dissolved the agreement.

OECD, DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS COMPETITION COMMITTEE, *Licensing of IP Rights and Competition Law* 25–26 (June 6, 2019), https://one.oecd.org/document/DAF/COMP(2019)3/en/pdf [hereinafter *Licensing of IP Rights*].

the glass cartel experience. One benefit is that combining the patent portfolios of the members creates a bigger stick to punish deviators and deter entry.[94] A second advantage is that buyer resistance to higher cartel prices may be reduced if sellers in the cartel can deceive buyers and attribute price increases to the royalties imposed by the pool, which supposedly are out of sellers' control.

Scenario 2: Price Restrictions

A second distinct category of antitrust case law has wrestled with the question of whether a patentee may control the price at which its licensees can sell a product making use of the patented technology. In the early years of the Sherman Act, the Supreme Court in *E. Bement & Sons v. National Harrow Co.* took the position that a patentee may enforce minimum price clauses in its licenses.[95] The Court reasoned that because it had no obligation to license its patent, the patentee had the right to condition the grant of a license upon the licensee's agreement to sell the patented good at or above a designated price. Thus, the Court permitted an explicit price restraint so long as it was incorporated into a patent licensing agreement.

In *United States v. General Electric Co*., the Supreme Court rejected a DOJ challenge to a patent licensing agreement between General Electric (GE) and Westinghouse that enabled Westinghouse to produce and sell incandescent lamps covered by GE's patents.[96] The DOJ attacked a licensing provision that required Westinghouse to set prices for its lamps at the same levels that GE set for its own distributors. The Court reasoned that the restriction was a reasonable method for GE to achieve an appropriate return on its investment in developing its lamp technology. The Court did not consider other less benign motivations, such as the use of the licensing provision to support coordination between the two firms. And, if GE's patents were infirm, the license could help ensure that the company's chief rival (Westinghouse) would not contest their validity. The pricing term thus could assist the two companies in coordinating the output and pricing of electric lamps.

On many subsequent occasions, the DOJ has brought cases to challenge the rule of *General Electric*.[97] The agency has succeeded in limiting the rule; however, it has not convinced the Supreme Court to repudiate it. In *United States v. Masonite*

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[94] About 15% of chemical patents are traded. Carlos J. Serrano, *The Dynamics of the Transfer and Renewal of Patents*, 41 RAND J. ECON. 686, 693 (2010).

[95] 186 U.S. 70 (1902).

[96] 272 U.S. 476 (1926).

[97] These efforts are recounted in HANDBOOK OF THE LAW OF ANTITRUST, *supra* note 3, at 541–54; UNITED STATES, REPORT OF THE ATTORNEY GENERAL'S NATIONAL COMMITTEE TO STUDY THE ANTITRUST LAWS 233–36 (Mar. 31, 1955).

Corp.,[98] the DOJ persuaded the Supreme Court to strike down licenses where the patentee had set the price at which its licensees sold products making use of its patent. The Court treated the arrangement as a traditional horizontal price-fixing conspiracy and emphasized that, unlike the circumstances of *General Electric*, Masonite did all of the manufacturing for its licensees, which distributed the patented product at the price set by Masonite. Later in the same decade as *Masonite*, the DOJ again invited the Supreme Court to overrule *General Electric*. In *United States v. Line Material*,[99] the DOJ challenged a cross-licensing agreement where the holders of a "basic patent" and an "improvement patent" licensed their technologies to each other and imposed a price limitation of the type that the Court had approved in *General Electric*. The defendants argued that the cross-licensing arrangement was necessary to overcome a commonplace patent blocking problem. In upholding the DOJ's complaint, the Court distinguished *General Electric* on the ground that the two patentees had engaged in a "combination" and that such combinations violated Section 1 of the Sherman Act.[100] The erosion of *General Electric* continued in *United States v. New Wrinkle, Inc.*,[101] where the Supreme Court barred a price restraint contained in the license of pooled patents assigned to a holding company. Unlike in *Line Material*, the patents in questions were substitutes and not complements. The Court distinguished *General Electric* on the ground that the licensing mechanism was a holding company that acted on behalf of the contributors to the patent pool.

In sum, patent holders remain able to set prices for their licensees' products making use of the patent, but they are mostly limited to the facts of *General Electric* if they try to do so. This provides uncertain protection to firms seeking to invoke the shelter of *General Electric*.[102] That said, patent holders remain able to set royalty rates in their licensing agreements that functionally allow them to retain a good deal of control over market output and pricing.

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[98] 316 U.S. 265 (1942).

[99] 333 U.S. 287 (1948).

[100] This distinction has mystified generations of commentators. *See, e.g.*, WARD S. BOWMAN, JR., PATENT AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL 195 (1973) (critiquing the Court's efforts in *Line Material* to distinguish *General Electric*, stating "A more arbitrary and unprincipled per se rule would be difficult to construct.").

[101] 342 U.S. 371 (1952).

[102] *See* HANDBOOK OF THE LAW OF ANTITRUST, *supra* note 3, at 543 ("Analytically deficient, as it is, it is not surprising that the status of *General Electric* is clouded by the criticism which it has evoked and the stinginess with which it has been construed. Though in some sense the case remains law, one cannot rely on it in counseling . . . . The alacrity with which courts have distinguished *General Electric* and the fact that since 1926 no majority of the Supreme Court has been ready to affirm it serve warning that even narrowly read, the case provides no basis for planning a licensing program.").

B. Patent Practices as Sources of Cartel Stability Though Not Always a Total Solution for Cartel Coordination

The government's investigation of patent practices and the records of prosecuted cases illuminate the capacity of licensing terms to enhance cartel stability. In many historical cases, patents played a simple role in price-fixing agreements: licenses set caps on or restricted output by means of territorial, customer, or field-of-use restrictions. In some cases, the licenses specified prices or restricted price-setting.[103] In these examples, patents were helpful tools to enable firms to form and maintain a cartel, although they were often also violative of antitrust law.

Unexplained, however, is why prosecuted cartels would put in place pricing, allocation, and enforcement structures with co-conspirators if they can suppress rivalry through legally enforceable patent licenses alone. Presumably, it could be the case that many unobserved cartels are run only or mainly with patent licenses. Thus, enforcement cases might be skewed toward fact sets where firms adopt more explicit coordinating conduct. But this still begs the question as to why we see so many prosecuted colluders implement cartel structures with measures that extend well beyond patent licenses. We offer three possible explanations below.

First, agreements that are designed to encumber interfirm rivalry will be inherently incomplete. Specifically, many unanticipated circumstances will arise that will cause colluding firms to enter into discussions to reaffirm cartel structures and ensure compliance with the agreement. Incomplete contracts are not unique to cartel agreements,[104] but said agreements are not legally enforceable. Thus, the incompleteness issues that arise are likely to be more extensive than for a legally enforceable contract. Because patent licenses are legally enforceable, they would seem to be a partial solution to this problem. This may explain, at least in part, their prevalence in cartel agreements. Yet, like any other contract, the incompleteness of even patent license agreements requires discussion by cartel members regarding unforeseen circumstances.

Second, patent licenses in mature product markets or industries are probably best used for coarse components of the cartel structures. For example, European and Japanese chemical firms may license to each other with the intent of creating a geographic division across their two markets. But patent license agreements are unlikely to have enough specificity to, say, delineate price increases twice a year by

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[103] *See also* Christopher R. Leslie, *Trust, Distrust, and Antitrust*, 82 TEX. L. REV. 515, 604–05 (2004) (describing the use of patent licenses to stabilize price-fixing agreements).

[104] Jean Tirole, *Incomplete Contracts: Where Do We Stand?*, 67 ECONOMETRICA 741 (1999).

licensees as well as articulate the rationale that will be offered to buyers regarding the justifications for these price increases.

Third, diffusing buyer resistance is crucial to the success of a cartel. For example, as cartel participants restrain output and drive up prices, buyers will attempt to lure cartel members into offering lower prices for a greater volume of business. This may lead to cheating on the cartel agreement. In this and many other ways, buyers can resist price increases, and it would be a difficult task to write a fully contingent license agreement that anticipated all such attempts. In practice, many communications between cartel members are about thwarting buyer resistance.

Overall, patents can facilitate cartel formation and stability. In some cases, however, cartel meetings and structures may still be necessary. In other cases, it is possible that experienced colluders, who make nearly the entirety of industry output for a product, can accomplish the suppression of rivalry primarily through use of patent licenses where ongoing discussions about license terms are nothing more than disguised cartel meetings.

C. Patents and the Evasion of Antitrust Scrutiny

As introduced above, past enforcement experience suggests a number of ways in which patent practices can assist cartel members in avoiding detection and prosecution. In general, patent licenses provide a cloak of apparent legitimacy to the interaction of competitors that otherwise would raise regulators' suspicions. Patent licensing also presents an opportunity for cartel members to speak frankly about inputs and prices, create cartel evasion penalties, and pass off coordinating conduct to internal actors as legitimate business activity.

In a non-collusive setting, the owner of a patent on a valuable invention ordinarily can refuse to license its new technology.[105] To avoid this holdup problem, the law gives the patent owner a measure of protection from antitrust law to encourage licensing.[106] Certain field-of-use, territorial, or customer exclusivity

[105] Ginsburg et al., *supra* note 90, at 107–08.

[106] A policy paper prepared by the OECD Competition Committee Secretariat has identified the competitively ambiguous nature of such licensing practices:

> Field-of-use, territorial or customer exclusivity raise antitrust concerns mainly if there is a horizontal relationship among licensors, among licensees, or between the licensor and its licensee(s). At the same time, . . . it is widely accepted that such restraints may serve procompetitive ends. It follows that a finding of whether such

provisions that might raise regulatory flags outside of the patent licensing context may be permitted. Yet, colluding firms can mimic the practices of non-collusive patent licensors to achieve their anticompetitive goals.[107] Even outside of the patent context, these types of restraints on trade may have been the goal of collusive firms. Seeking licensing arrangements to achieve these ends, then, provides protection from antitrust enforcement without societal benefit.

Further, the processes for negotiating and enforcing licensing agreements can afford valuable advantages to cartel members. In order to reach an agreement on licensing terms, parties may be willing to share information about input costs and pricing that would otherwise be impermissible for rivals to share.[108] The meetings in which parties negotiate licensing terms are facially legitimate and thus do not have to be kept secret, though the terms agreed upon usually are kept secret.[109]

Patent licensing schemes may also be part of a larger cartel maintenance strategy. Licensors often impose audit provisions to ensure licensees cannot evade

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> clauses infringe competition law depends on the balancing of pro- and anticompetitive effects.

OECD, *Licensing of IP*, *supra* note 93, at 19.

[107] The same OECD policy paper observes:

> Licensing arrangements can nonetheless pose competitive risks. Foremost among these is the risk of cartelisation [sic], which can arise whenever the agreement is between actual or potential competitors in a given market. Collusion can take place in the market for products manufactured using the licensed technology or in the market for the licensed technology itself. In the market for products manufactured using the licensed technology, cartel agreements between licensees can be implemented by ostensibly vertical distribution agreements, e.g. by inducing licensors to impose resale price maintenance and thus fixing prices at the licensee level. Vertical price fixing may also contribute to the stability of a cartel arrangement at the licensor level by making the licensors' retail prices more transparent and stable.

Id. at 15.

[108] As Professor Priest noted in his groundbreaking paper on patent licensing as a means for collusion, U.S. patent laws have been interpreted to give licensors "broad authority to set licensee output, to allocate licensee territories, and even to fix minimum licensee prices." Priest, *supra* note 3, at 309. These interpretations give actual or potential rivals a legitimate reason to exchange sensitive information that could raise serious antitrust concerns outside the setting of patent licensing.

[109] *Cartel Manager*, *supra* note 89, at 842 (suggesting that the risk of cartel detection increases as communication between competitors increases).

paying royalties that are sometimes calculated as a percentage of sales or a fee based on output.[110] A collusive patent licensor can use this audit mechanism to detect and discourage cheating on cartel rules. Licenses may also have termination or penalty provisions that could be invoked by a licensor to punish a firm that deviated from cartel rules.[111]

In addition to the benefit of having output restrictions that are legally enforceable, patent licenses may serve a valuable internal function to avoid raising compliance concerns with in-house counsel or a firm's board of directors. Specifically, each cartel firm can "explain" to counsel and its sales force that restrictions on where to sell, how much to sell, and pricing are part of patent license agreements with rivals as opposed to revealing a cartel.[112] Clever cartel managers have the opportunity to coordinate multiple licenses with fellow colluders to induce

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[110] *See* RUSSELL L. PARR, ROYALTY RATES FOR INTELLECTUAL PROPERTY 187–96 (2007) (describing mechanisms for auditing and monitoring of fulfillment of royalty terms in licensing agreements for patents and other forms of intellectual property).

[111] *See* Ian Ayres, *How Cartels Punish: A Structural Theory of Self-Enforcing Collusion*, 87 COLUM. L. REV. 295, 318 (1987). Professor Ayres analyzes the behavior of General Electric and Westinghouse in the early twentieth century light bulb industry and describes:

> [C]onsider the opportunities for including binding punishment threats in sham patent licenses. Such opportunities are illustrated in the General Electric/Westinghouse light bulb license. In 1912, General Electric granted to Westinghouse patent licenses for the manufacture and sale of light bulbs. The license required Westinghouse to maintain the price that General Electric charged for bulbs and to pay a royalty of two per cent [sic] of net sales—which rose, however, to 10 per cent [sic] if Westinghouse's net sales exceeded 15 percent of General Electric-Westinghouse total net sales.
>
> George Priest has suggested that the license agreement might have been used to fix price: "A royalty of 2 per cent indicates either that the patent was trivial and the parties were simply price-fixers, or that General Electric was distributing patent rents in return for an agreement to fix price and limit output." The increasing royalty is especially relevant to the issue of punishment. For if General Electric's patent were invalid and the license agreement were entered solely to facilitate collusion, then the escalating royalty would punish price-chiseling. Westinghouse would be deterred from giving secret price cuts in order to increase its output beyond the 15 percent market share that triggered the punishment royalty, which was five times higher.

Id. at 318.

[112] Aggressive sales representatives often cause fights within cartels, as through making excess sales, they can cause a firm to cheat on cartel rules. Absent the patent license, evidence that a firm openly punished an aggressive sales force could be used as evidence of price fixing.

desired output restrictions while hiding the operation of the cartel in plain sight, even from fellow employees. Outside counsel can be used to draft the licenses without raising ethical concerns, as they are less likely to know the industry well enough to recognize the collusive purpose of these agreements. And the board of directors will avoid knowledge of illegal activity that would typically require a board's response.

III
ECONOMICS OF EXPLICIT COLLUSION WITH EXTENSION TO SERIAL COLLUDERS' PATENT ACTIVITY[113]

In the previous section, we suggested that past antitrust enforcement experience yields insights about how patent licensing practices can provide valuable means for effective cartel management—for example, by providing instruments to formulate and adjust collusive agreements, by increasing opportunities for communication in contexts that generally do not attract suspicion, and making the punishment of cheaters and deterrence of entrants more credible. In the following sections, we take care to distinguish how encounters across multiple markets makes collusion easier and more effective as compared to single market collusion. In particular, we lay out how patents play new roles or are more effective in facilitating cartelization in the serial collusion context as compared to the single market setting. First, we review the economics of explicit collusion, starting with the basics and recalling our analysis from our earlier work regarding serial colluders, and then extend that analysis to include the use of patents by serial colluders.

A. Basics of the Economics of Explicit Collusion

Under what circumstances does an industry have a proclivity for explicit collusion?[114] A proclivity for collusion indicates that there are characteristics of the industry that result in a potential substantial payoff from explicit collusion by participant firms. Michael Porter's Five Forces Model (PFF) provides a compelling way to understand this proclivity.

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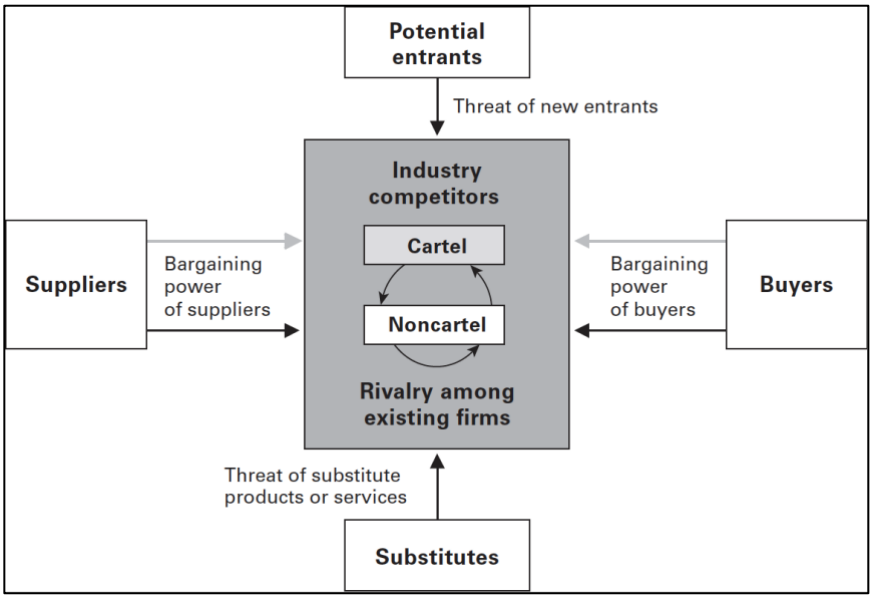
[113] The arguments and analyses in this section are largely drawn from George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964) and ROBERT C. MARSHALL & LESLIE M. MARX, THE ECONOMICS OF COLLUSION: CARTELS AND BIDDING RINGS (2012) [hereinafter ECONOMICS OF COLLUSION].

[114] A definition of "industry" offered by Michael Porter in 1979 is a "group of competitors producing substitutes that are close enough that the behavior of any firm affects each of the others either directly or indirectly." Michael E. Porter, *The Structure within Industries and Companies' Performance*, 61 REV. ECON. & STATISTICS 214, 215 (1979).

Figure 5: Adapted Graphic of Michael Porter's Five Forces[115]



PFF identifies the forces that impact the profitability of an industry. The center force is interfirm rivalry. Going clockwise from the top, other forces include the threat of new entry, bargaining power of buyers, possibility of substitute products, and bargaining power of suppliers. The following conditions imply that the perimeter forces are conducive to high profits for the industry: little threat of entry, limited bargaining power of buyers, few close substitute goods, and limited bargaining power of suppliers. If these conditions are met, then the primary detriment to the profits of the industry will be interfirm rivalry. This implies that an agreement among producers to suppress interfirm rivalry can be quite profitable, provided that the agreement anticipates the primary challenges of explicit collusion: members cheating on the cartel scheme and external actors making adjustments to cartelization of the market.[116]

First, for explicit collusion to be effective, the agreement must mitigate secret deviations by the cartel members. Each member will want to cheat on the agreement by secretly selling to buyers at prices that somewhat undercut the cartel and at a greater volume than they would otherwise sell. To avoid this difficulty, the cartel firms must adopt structures addressing challenges on three fronts: pricing, allocation, and enforcement.[117] A pricing structure provides for the coordinated elevation of

[115] ECONOMICS OF COLLUSION, *supra* note 113, at 94 fig.5.1. Reprinted with permission of MIT Press.

[116] *Id.* at 5–22.

[117] ECONOMICS OF COLLUSION, *supra* note 113, at 105–138.

prices or restriction in quantities by the members of the cartel. An allocation structure provides for an agreed upon division of the collusive gain. An enforcement structure provides for the accurate monitoring of prices and/or quantities by the members of the cartel as well as the specification of the negative consequence for intentionally cheating on the cartel agreement.

Second—external actor adjustment. Let's return to PFF and consider what effects a successful cartel will have on the market. Even if the perimeter forces in PFF were not a threat to the profitability of the relevant market before explicit collusion, as a cartel elevates profits, perimeter forces may place a greater strain on cartel participants: increased profits will lure new entrants, spur buyers to be more aggressive in bargaining on price, and induce buyers to seek out substitute products. Increased industry profits may also induce suppliers with bargaining power to use that power to extract some of the incremental profits of the cartel through higher factor input prices.[118] In addition, if the cartel is not all-inclusive of firms in the market, then the non-cartel firms will seek to undercut cartel pricing and increase their own market shares, thereby freeriding on the protective pricing umbrella of the cartel and cutting away at its price stability.

B. The Comparative Advantage of Serial Colluders in Cartel Management

All effective cartels confront these internal challenges. First-time colluders lack experience on how to deal with these issues and thus may settle for only modest profit elevation from their cartels. Further, cartel firms that make only a single product or that are only colluding in a single product market will be forced to address these issues within the stovepipe of that single market cartel. However, large multi-product firms that are, and have been, managing a portfolio of cartels are in a fundamentally better position to implement and maintain their cartel. There are several reasons that serial colluders stand at an advantage:

- Serial colluders are experienced at initiating and managing cartels. This experience matters in terms of the effectiveness of any cartel, as well as keeping it clandestine from buyers and avoiding detection by enforcement authorities.[119]

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[118] *Id.* at 151.

[119] Modern antitrust policy relies heavily on leniency and other innovations in detection. Antitrust enforcement authorities seem to perceive that such measures have greatly impaired explicit collusion. In our view, the enforcement community's confidence in the effectiveness of leniency underestimates the adaptability and ingenuity of cartel firms. In particular, we find serial colluders to be enormously creative in addressing a myriad of cartel issues and using enforcement

- Serial colluders have lots of cartel-specific internal human capital embodied in senior managers who have run successful cartels in the earlier parts of their careers. Senior managers who are experienced at initiating and managing cartels are familiar with how to address the issues associated with the consequent relative weakening of the perimeter forces from effective explicit collusion. Senior managers with cartel-specific human capital have existing relationships with their counterparts at other serial colluders.

- Serial colluders have gained an understanding about which firms are likely to be reliable, trustworthy partners in collusive schemes, thus can choose effective cartel partners with limited risk of cartel defection.

- Serial colluders may have acquired experience by virtue of past law enforcement inquiries about how to anticipate and respond to antitrust investigations and lawsuits, thereby lessening the threat of agency enforcement.

By contrast, first time colluders, and/or smaller firms that are managing a single cartel do not enjoy these advantages.

In support of the comparative advantage that serial colluders enjoy when architecting or enforcing a cartel, we present three strands of evidence from the chemical industry. First, serial colluders in the chemical industry are familiar with common facilitating practices, such as organizing cartel activity through a neutral middleman. Each of the serial colluders in the chemical industry has used the services of Fides/AC Treuhand to facilitate the explicit collusion structures in at least one of the cartels that they participated in. Knowledge of the cartel facilitation services provided by Fides/AC Treuhand, and the ability to access those services, is inconsistent with the rogue division manager scenario and consistent with the portfolio of cartels/business model scenario. First-time cartel participants might not be aware of market actors like Fides/AC Treuhand, thus may take on excess costs and risks to stand up a cartel.

Second, serial colluders in the chemical industry are familiar with cartel exit and re-alignment strategies. In the midst of several chemical industry cartel periods, some firms exited by selling their product division to another firm that would continue to participate in the cartel. To exit a cartel when high profits are being earned and antitrust liability already exists is inconsistent with the rogue division

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"innovations" to their advantage, if it is at all possible to do so. *See, e.g.*, Leslie M. Marx et al., *Antitrust Leniency with Multiproduct Colluders*, 7 AM. ECON. J. 205 (2015).

manager scenario and consistent with the management of a portfolio of cartels. In particular, this conduct suggests that firms may be exiting one cartel and having their entry into other cartels accommodated.

Third, serial colluders in the chemical industry are familiar with mechanisms to punish troubling fringe parties in order to preserve cartel profits. Firms have applied for amnesty to signal to smaller cartel participants across their portfolio of cartels that they will not tolerate deviant conduct.[120] Again, this is inconsistent with a rogue division manager scenario and consistent with a serial colluder running a portfolio of cartels.

In sum, the chemical industry example suggests that serial colluders stand at an advantage to their peers when it comes to maintaining and managing a cartel. This advantage is only magnified in the multi-product context. Next, we discuss how patents and patent licensing fit into cartel maintenance.

C. Serial Colluders Using Patents to Manage Their Portfolio of Cartels

How do patents and patent licensing help a serial colluder manage a portfolio of cartels? When viewed solely in the context of a single cartel, a surge in patent activity from the pre-plea to the plea period can create a substantial entry barrier for non-cartel firms regardless of whether the cartel firm is a serial colluder. By comparison, the surge in patent activity by non-producing serial colluders is a phenomenon that may play a unique role in the context of serial collusion. At a high level, patent licensing strategies can assist cartels in making investments that sustain the structures necessary for the success of a collusive scheme. The investments that serial colluders might make to enhance industry-wide profits are likely to occur to a much fuller extent when serial colluders generate patents and patent licenses across a range of products. By contrast, firms might underinvest in such activities if they treat each cartel as a stovepipe. Thus, where serial colluders are managing a portfolio of cartels, we would expect that there will be much more investment in these profit enhancing actions.[121]

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[120] If firms A and B participate in cartels in both markets 1 and 2, and if firm B defected from the cartel agreement in market 2, then firm A could punish firm B, by disclosing the market 1 cartel to enforcement authorities and applying for amnesty. Firm B would likely suffer from sanctions resulting from enforcement in market 1. Firm A might take this step if collusive profit in market 1 is small compared to collusive profit in market 2, especially if firm A thinks firm B and other potential defectors will be deterred from further cheating in market 2. *Serial Collusion*, *supra* note 11, at 334–36.

[121] Our analysis on this point is informed in part by review of judicial decisions that describe how successful, long-lived, single object collusive schemes have used patent licenses to establish

Additionally, serial colluders, being experienced at cartel activity and wanting to facilitate the management of a portfolio of cartels, likely see other advantages from a surge in patent activity in products that they make. These potential advantages are best understood when viewed through the lens of PFF and the three cartel structures:

- *Serial colluders can use patents and patent licenses to keep smaller cartel participants "in line."* A smaller cartel participant will often chisel on the cartel's allocation structure as it tries to incrementally increase its share of the collusive gain. Serial colluders can restrain this conduct by generating a large number of patents, licensing to the smaller cartel firm, and then controlling it through the terms of that license agreement. Note that the smaller firm may be colluding with the serial colluders in a few other products, and the license agreement could cover a range of products where the serial colluders have leverage over the smaller cartel firm.

- *Serial colluders can use patents and patent licenses to coerce non-cartel rivals to join a cartel or to drive them out of the market*. A smaller firm that does not want to join a cartel can be a substantial irritant to serial colluders. Serial colluders can surge patents in a number of products made by the smaller firm, where membership in the cartel is essential for the smaller firm to obtain the relevant patent license agreements. Note that for serial colluders, leverage may come from patents obtained in products made by the smaller firm but not a product in which the serial colluders have a cartel.

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broad, durable control over an industry, and thus motivated cartel participants to invest more heavily in activities that increase the effectiveness of their illegal collaboration. One sees a breadth of vision and ambition that is missing in one-shot collusion scenarios. For example, in 1943, the DOJ brought civil charges against National Lead and DuPont for conspiring to restrain trade and monopolize the market for titanium dioxide. In *United States v. National Lead Co.*, the Supreme Court upheld the trial court's finding that the defendants "have utilized their patents which relate to the manufacture and use of titanium pigments and compounds to control and regulate the manufacture and sale of titanium pigments and compounds in the United States [and] . . . have done so throughout the rest of the world." 332 U.S. 319, 328 (1947). The Court endorsed the trial court's conclusion that the defendants' patents "through the agreements in which they are enmeshed and the manner in which they have been used, have, in fact, been forged into instruments of domination of an entire industry." *Id.* The Court also endorsed the trial court's additional finding that the exchange of patents between National Lead and DuPont "bec[ame] an instrument of restraint, available for use and used, to continue the mastery of the market" which the two firms "achieved by means of the illegal international agreement." *Id.*

- *Serial colluders can use patents and patent licenses to encumber entry and thwart capacity expansion by non-cartel firms*. In contrast to single product colluders, serial colluders can attack a potential entrant on several different product fronts.[122] Serial colluders may also bar expansion for existing firms looking to implement a new technology or process as part of its expansion strategy.

- *Serial colluders can use patents and patent licenses to create a fictitious competitor, leading buyers to believe that the competitive process is policing the market*. A serial colluder may invite a frequent co-conspirator to enter a product market so that production in that market now appears to be a duopoly. To do so, the original monopolist could offer to license its patent technology to the "new entrant." This entry may put the minds of regulators and buyers at ease, because now there appears to be "competition." And, new entrants may stay out of the market instead of trying to compete for smaller portions of market share.

- *Serial colluders can use patents related to substitute goods to limit the proliferation of these goods*. Serial colluders can potentially identify substitute products and generate a large number of patents that relate to these products in order to prevent substitute product manufacturers from being effective competitors. Serial colluders can also use patents to stymie expansion in the substitute product space.

- *Serial colluders can use patents on the processes to make factor inputs for a cartelized product to thwart the bargaining power of suppliers, regardless of any intent to manufacture or sell upstream inputs*. Serial colluders can generate patents on factor inputs and use these patents as leverage to secure better terms from suppliers. In this way, serial colluders can mitigate supplier bargaining power and deter new entry.

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[122] A number of cases involving single-object colluders have identified how cartel members use patent infringement cases to deter entry. For example, in *United States v. Singer Manufacturing Co.*, 374 U.S. 174 (1963), a Swiss firm assigned its American patent to an American licensee (Singer) to facilitate a lawsuit against an alleged infringing Japanese producer. The DOJ contended that the licensing agreement between the Swiss and American firm sought to prevent Japanese imports from entering the United States. *Id.* at 176–78, 189. The Supreme Court agreed and concluded that it was unreasonable for Singer and its Swiss counterpart to cooperate in seeking to forestall a rival's entry into the U.S. market. *Id.* at 195–97.

- *Serial colluders can use patent licenses to implement intrafirm cartel restrictions by, for example, each cartel firm instructing its sales force to emphasize "price before volume" so as to be in compliance with the terms of patent license agreements*. How does a cartel firm comply with the cartel structures while not broadly informing its employees that the firm is a member of a cartel? Patent license agreements with other cartel firms provide a marvelous avenue for alleviating this issue. Consider for example the change in incentives for the sales force of a cartel firm from the pursuit of market share strategy before entering the cartel to a "price before volume" strategy at the inception of the cartel. Through adopting a "price before volume" term in a patent licensing agreement, managers responsible for running a cartel do not have to disclose the cartel to other employees. Instead, they can simply inform the sales force that new patent licensing agreement mandates incremental constraints on what the sales force can do to pitch new accounts. Other constraints can be similarly adopted through patent agreements, such as terms that state specific territories or customers are off limits to a sales force. Simply put, new incremental patent licensing agreements can be used to solve intrafirm communication issues without raising internal compliance red flags.

- *Serial colluders can use their patent portfolios to facilitate discussions regarding cartel issues*. It ordinarily would be highly risky for senior managers at rival firms to meet to discuss cartel issues like output, pricing, or cheating by other cartel participants. However, there is at least a pretense of legality when managers at rival firms meet to discuss their patents and patent licensing agreements, permitting colluders to use these negotiations to facilitate cartel communications. Further, as a given firm looks over its portfolio of cartels, it might be having issues with a specific firm that is a member of several of their cartels, but this firm's involvement is not as ubiquitous as that of their serial colluding co-conspirators. Resolving the cartel issues associated with this smaller cartel participant can potentially be addressed across a number of cartels. For example, a serial colluder may want to suggest that another serial colluder exit a specific cartel by ceasing production of the product, allowing the expansion of the smaller cartel firm, and compensate the exiting serial colluding firm by accommodating their entry or expansion in another cartelized product. The discussion of this kind of reorganization of cartel conduct within the cartel portfolio of each firm can be done with apparent legality through the discussion of patent licenses as well.

- *Non-producing serial colluders can use patent license agreements to reduce the price they pay for the cartel product of other serial colluders*. Serial colluding non-producers are likely aware of the portfolio of cartels that other serial colluders are operating. A non-producer may be a purchaser of the product made by the cartel firms, but the non-producer wants to pay non-cartel prices for the product. It may be difficult for cartel firms to justify within their firm, as well as to third parties, why a specific firm received special pricing on a product when others were paying a considerably higher price. Patent licenses by the non-producer can resolve this issue. Specifically, the non-producer will nominally pay the cartel firms the higher cartel price, but their net price will be a non-cartel price as a consequence of the licensing payments made by the cartel firms to the serial colluder non-producer.

- *Serial colluders can use patents to redirect potential entrants by surging patents in some cartel products but not others*. Although patents can be used as an entry deterrent by almost any cartel firm, serial colluders can surge patents in a number of products that redirect entry ambitions of smaller firms in a direction that better suits the collusive profits of the serial colluders. Suppose a smaller potential entrant has the potential capacity to enter the market for products 1, 2, 3, 4, and 5 and believes ex ante that entry is equally profitable in each of these products. Suppose serial colluders have all of these products in the portfolio of cartels, but the serial colluders realize that entry would have the most serious negative impact on cartel profits for products 1, 2, 3, and 4. Then the serial colluding firms would surge patents in products 1, 2, 3, and 4, while leaving product 5 without a surge of patent activity. Essentially, the serial colluders are inviting the entry effort to be directed at product 5.[123] This kind of activity by serial colluders that are managing a portfolio of cartels can be undertaken with apparent legality as part of discussions regarding patent activity and patent licensing. Note that if the cartel had issues managing product 5 because of a difficult, smaller cartel member who was regularly cheating on the cartel agreement, then leaving product 5 relatively exposed to a threat of entry might be an effective punishment for that firm.

- *Serial colluders can use patent licenses to organize coordination via a neutral third party, like several chemical industry participants did with Fides/AC*

[123] The scenario described is consistent with the behavior of German chemical companies in the 1920s and 1930s, as described in Kronstein's study of cartelization in Germany before World War II. *Dynamics of German Cartels*, *supra* note 23, at 664–71.

Treuhand. Although we have already noted that patent licensing is unlikely to replace the myriad of communications and actions needed to manage a given cartel on a regular basis, patent licensing does have the potential to implement cartel structures. Suppose two serial colluders are the sole makers of a product. The two cartel firms recognize the need to monitor one another but neither firm wants the other in their production facility, talking to their employees, and potentially trying to recruit away top talent. A serial colluder non-producer with patent license agreements with each firm, where the license agreements contain audit provisions, may provide a solution to the monitoring dilemma. The two cartel firms would thus benefit from an outside facilitator to assist with a number of cartel activities, in much the same way that Fides/AC Treuhand provided such assistance to many cartels.

IV
MODERNIZING ANTITRUST DOCTRINE RELATED TO PATENTS AND PRICE FIXING IN RESPONSE TO THE THREAT OF SERIAL COLLUSION

In this Section, we describe how antitrust law, outside of the pay-for-delay context, handles allegations of price fixing when patents are involved. A core objective of antitrust law is to deter and punish price-fixing cartels to allow for market output and prices to be set via competition. As we explained above, the label "price fixing" applies to naked agreements to set minimum prices; restrict output; and divide markets by customer, product, or territory. A per se rule against price fixing was advanced early in the twentieth century and solidified by the middle of the century in its current form.[124] The logic of per se condemnation for horizontal restraints—such as price fixing, output restrictions, and the allocation of geographic sales territories or customers—is that these types of behavior harm competition in the vast majority of cases without offering redeeming procompetitive benefits.[125] The threshold inquiry for courts in analyzing agreements challenged as illegal trade

[124] William E. Kovacic, *The Future Adaptation of the Per Se Rule of Illegality in U.S. Antitrust Law*, 2021 COLUM. BUS. L. REV. (forthcoming 2021) [hereinafter *Future Adaptation*]. The principal landmark case defining this development in the courts is *Socony-Vacuum Oil Co. v. United States*, 310 U.S. 150 (1940), which held that agreements to set prices were subject to summary condemnation without regard to their actual market effects. *Id.* at 223–24 & n.59.

[125] *Future Adaptation*, *supra* note 124. *See also* N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5 (1958) ("This principle of per se condemnation not only makes the type of restraints which are proscribed by the Sherman Act more certain to the benefit of everyone concerned, but it also avoids the necessity for an incredibly complicated and prolonged economic investigation into the entire history of the industry involved, as well as related industries, in an effort to determine at large whether a particular restraint has been unreasonable—an inquiry so often wholly fruitless when undertaken.").

restraints is to characterize the conduct as either suitable for summary condemnation or worthy of a more elaborate reasonableness assessment.[126] However, because patent licensing often serves benign or procompetitive purposes, the characterization process can be more difficult when patent licenses are inserted into the fact pattern.[127]

From 1900 to 1950, a number of cases challenging patent licensing arrangements as horizontal price fixing came before the courts. Some treated the contested arrangements leniently.[128] In 1926, in an extreme decision recounted above,[129] the Supreme Court permitted General Electric to use a patent license to impose price limitations on its rival (Westinghouse) for the sale of light bulbs making use of its patented technology.[130] Some scholars describe the *General Electric* rule as approaching total immunity from per se illegality: "*GE* does not authorize rule of reason treatment for price-fixing arrangements. Rather, it creates what amounts to an immunity for restraints that fall within its domain, and generally leaves naked price fixing falling outside that domain to per se condemnation."[131]

Over time, the Supreme Court developed a more nuanced approach as it gained more experience with questionable patent licenses and apparent price fixing not closely related to innovation. Courts have tended to accord fuller rule of reason treatment to restrictions imposed by individual licensors upon individual licensees, even though the restrictions set the licensee's prices or output levels, or limit the licensee's sales territories or customers to which it can sell.[132] It appears that patent

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[126] *Future Adaptation*, *supra* note 124. *See also* Broad. Music, Inc. v. Columbia Broad. Sys., Inc., 441 U.S. 1, 19–21 (1979).

[127] Behavior with cognizable, plausible efficiency justifications ordinarily receives a more elaborate inquiry, as part of a "quick look" or fuller rule of reason analysis, to test its actual or likely competitive effects. *Future Adaptation*, *supra* note 124. *See also* Calif. Dental Assoc. v. Fed. Trade Comm'n, 526 U.S. 758, 769–71, 779–81 (1999). Despite the complexities of some patent licensing scenarios, the courts have indicated that the presence of patent licenses does not preclude per se condemnation for efforts by rivals to set prices or output levels, or to allocate sales territories or customers. Ginsburg et al., *supra* note 90, at 105–06; DOJ/FTC IP GUIDELINES, *supra* note 69, at 17.

[128] *See supra* Section II.A (describing Supreme Court decisions that gave permissive treatment to licensing arrangements with arguably horizontal price-fixing effects).

[129] United States v. Gen. Elec. Co., 272 U.S. 476 (1926).

[130] Some commentators have concluded that the Court treated GE's behavior as "essentially unilateral." HERBERT HOVENKAMP ET AL., IP AND ANTITRUST: AN ANALYSIS OF THE APPLICATION OF ANTITRUST PRINCIPLES TO INTELLECTUAL PROPERTY LAW 31–39 (3d ed. 2019) [hereinafter IP AND ANTITRUST].

[131] *Id.*

[132] *See supra* Section III.A (describing the narrowed interpretation of *General Electric* in subsequent Supreme Court decisions).

owners have the most leniency to create licensing agreements that may restrain competition when they appear to be acting individually to advance their own self-interest to recover their investment costs, and not as part of a larger plan with multiple rivals to cartelize a sector. Hovenkamp and his colleagues observe that, "the courts have generally been tolerant of horizontal output limitations in intellectual property licenses, at least when the restriction was imposed by the licensor on each licensee individually and there was no proof of an output limitation agreement among the licensees themselves."[133] Firms lose the protection of *General Electric*, and per se condemnation is more likely, where multiple rival firms have imposed the licensing restriction or participated in pooling arrangements,[134] or the patent license is determined to be a pretense for collusion—e.g., if the patent covers minor or irrelevant technology, the patent is invalid, or there is a cheap and easy substitute technology not covered by the patent.[135] This imprecise set of rules governing the patent license and antitrust intersection creates two major analytical challenges for courts in cartel enforcement cases: (1) when should a license be characterized as mainly horizontal, and (2) how does an antitrust court know if licensed patents are weak and the license is a pretense?

A. Priest's Approach to Evaluating Competitive Effects in Patent Licensing: A Patentee / Licensee Rents Analysis

George Priest's still-influential commentary on patent licensing, published 40 years ago, recounted the intricate pattern of how industries sometimes shift away from healthy competition in prices and innovation toward collusion.[136] It may be hard to detect this transition because patent licenses provide good cover for collusive agreement. Priest responded to this challenge by developing a test rooted in economic theory to determine whether a patent license is pro or anticompetitive, through analyzing relative rents in patent licensing agreements. Priest also criticized some of the alternative tests that had been used by courts, which focused on intent information and patent strength. While Priest's approach is attractive for offering a unified treatment of liability and may be useful in the single market context, his

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[133] IP AND ANTITRUST, *supra* note 130, at 32–33.

[134] In cases such as *Hartford Empire*, the courts have found output restrictions illegal in the context of patent pools, or cross-licenses, and in cases in which it appeared that the licensees sought the restrictions. *See* Section II.A.

[135] *Id.* "*GE* is limited to cases where the patentee licenses [to] a manufacturer to manufacture the patented product and the patent covers all or a 'significant' proportion of the resulting product." IP AND ANTITRUST, *supra* note 130, at 31–35.

[136] Priest, *supra* note 3.

analysis did not account for the properties of serial collusion. As demonstrated below, the approach is unlikely to be useful in the serial collusion context.

Priest approached the two questions posed above regarding antitrust enforcement in the patent license context by focusing on the flow of patent-based rents and designing what we call a "rents test."[137] Priest reasoned that if a patent is strong and the patent owner acts in his own self-interest, then he likely captures most of the value from his patent licenses. On the other hand, if the patent is weak and the patent owner acts in part at the behest of the licensees to help them organize a cartel, then the flow of licensing rents to the licensor would be relatively modest.[138] When subject to antitrust review, Priest argued that the former type of agreements should be permitted but the latter should be struck down. Priest discounted the use of intent information in more traditional analysis undertaken by courts for being unreliable, and information about the importance of the patented technology, i.e., patent "strength," as too costly and difficult for courts to evaluate.

Yet, while Priest's approach is useful for evaluating collusion in a single market context, his proposed framework fails to consider the competitive dynamics and collusive schemes of serial colluders. We argue that when the focus shifts to

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[137] Priest also looked at price changes in response to the introduction of the patent license. Eswaran explains that Priest "proposes that if the cross-licensing of competing patents ends up raising the prices of the products, the arrangement should be rendered illegal." Mukesh Eswaran, *Cross-Licensing of Competing Patents as a Facilitating Device*, 27 CAN. J. ECON. 689, 704 (1994). Eswaran adds "[This test] is unlikely to be effective in practice. Firms contemplating cross-licensing could easily contrive a drastic but temporary increase in prices prior to the agreement and lower [them] slightly after the agreement becomes formal . . . ." *Id.*

[138] Professors Joseph F. Brodley and Maureen A. O'Rourke offer this interpretation of Priest's approach:

> Priest would confirm the cartel diagnosis by examining changes in price, output, and market share, particularly in response to variations in manufacturing costs. Stability of market shares, output, and price tend to indicate a cartel. A cartel manager would try to hold prices and market shares stable, and maintain a price umbrella over less efficient firms to avoid the disruptions and shocks that can undermine the cartel. On the other hand, a patent monopolist will seek to induce competition at the licensee level, which leads to changing market shares, fluctuations in price as manufacturing costs increase or decrease, and exit of less efficient firms.

Joseph F. Brodley & Maureen A. O'Rourke, *Patent Settlement Agreements*, 16 ANTITRUST 53, 56 (2002) [hereinafter *Patent Settlement Agreements*].

serial collusion, Priest's rents test fails, and other possible frameworks that consider patentee and licensee intent and patent strength deserve more consideration.

We illustrate the general approach suggested by Priest with the following hypothetical. Suppose firms A and B compete vigorously in market 1, enjoying equal market share and equal efficiency, but neither is reaping any economic profit. Suppose now firm A achieves a drastic invention and gets a patent that would allow it to drive firm B out of market 1.[139] Firm A, acting as a monopolist, can sell to half of the original market for a profit of 5 or sell to the entire market for a profit of 8.[140] Alternatively, firm A could cooperate with firm B and boost the total profit to 10.[141] Suppose the firms agree to both use the new invention and continue selling to their current customers, and firm B agrees to pay a lump sum patent royalty of 4 to firm A. Then, firm A gets a profit of 5 from selling to its half of the market plus 4 from the royalty, and firm B gets a profit of 5 from selling to its half of the market minus 4 from the royalty. The relatively large royalty payment from B to A reflects the market power created by A's patent.

Now consider a similar hypothetical in which firm A's invention is trivial and the patent license is simply a tool to divide the market. By assumption, firm A derives no market power from the patent because it has no ability to exclude firm B. That said, through use of a patent licensing agreement, the firms could divide the market with each firm limiting their sales to their current customers. Let's assume the total monopoly profit with the old technology is 6 and thus each firm gets a profit of 3 from the collusive agreement.[142] Now, however, the license payment would be trivial, and each firm would earn half of the monopoly profit in market 1.

Comparing the two hypotheticals, Priest would note that a license associated with a legitimate patent leads to a significantly higher royalty payment of 4, and dissimilar profits of 9 and 1 for firms A and B, respectively. By contrast, when the license is used purely for collusion, the royalty payment from B to A is trivial, and the profits of the two firms are the same at 3. Priest describes this sort of investigation into the rent split across patent licensing participants as a valuable test for

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[139] Economists use the term "drastic" for process innovations that reduce marginal cost so much that a firm using a drastic innovation can cut its price low enough to drive out competitors, and in some cases still enjoy the benefits of a monopoly price. *See* JEAN TIROLE, THE THEORY OF INDUSTRIAL ORGANIZATION 390–92 (1988).

[140] Here, we are assuming that firm A's cost of production jumps up if its output rises above 5.

[141] We assume total cost is lower and profit is greater if A and B share production and A's facilities are not strained by an increase in output above 5.

[142] We assume that the joint monopoly profit of 6 is less than the joint monopoly profit of 10 that flowed from the drastic process innovation.

distinguishing "good" from "bad" patent licenses in terms of their likely competitive effects and social utility.

While Priest's approach makes sense if we consider one market in isolation, it fails when firms compete in more than one market and use patent licenses to control both markets. We start with a hypothetical similar to our first, in which firm A achieves a drastic invention in market 1, but now firm B also achieves a drastic invention in market 2. Firm A and firm B compete in both markets. Once again, we assume that the inventors can use their patents to achieve a monopoly in their respective markets, but in the multi-market context, it would be more efficient for the two firms to license to their competitor and share the markets equally.[143] As before, firm B could make a license payment of 4 to firm A for the invention it needs in market 1. Similarly, firm A could make a license payment of 4 to firm B to use the invention it needs to compete in market 2. Of course, since the two license payments are a wash, the firms could instead simply grant royalty-free cross licenses to each other. So, this result already looks quite dissimilar to the single market context, as the rent split across patent participants appears de minimis but actually reflects a mutual exchange for value. By contrast, if we suppose instead that the two inventions are both trivial and the firms are simply using the patents to implement a collusive cross-license, they could also set the royalties at zero, divide the markets, and equally share in the monopoly profit in markets 1 and 2. This result on the surface looks the same as the mutual exchange for value, but the competitive effects and social benefits of the two exchanges are starkly different.

In sum, while Priest's rents test may be a valuable tool for evaluating patent licensing in the single market context, it is less helpful in the serial colluder context. When two markets or products are involved, we can no longer look to the amount of patent royalties or the resulting profitability of the two firms from a licensing agreement to determine whether the license is likely to be procompetitive or collusive. Instead, mutual exchanges for value and collusive dealing may look very similar; small exchanges in royalties may reflect a mutual exchange or a pretextual, sham deal to divide a market or customers.[144]

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[143] As before, we assume that sharing the market equally leads to more efficient production because firms avoid straining their production capacity.

[144] Moreover, the Priest approach may induce enforcement agencies and courts to mistakenly characterize a horizontal licensing agreement as vertical. Suppose firm B offers a patent license that facilitates collusion in market 1 by firms A and C, while A and B rely on a patent license from C to help them collude in market 2, and B and C rely on a patent license from A to help them collude in market 3. When there is a risk of serial collusion, it may be dangerous to accept at face

B. Reevaluating the Traditional Approach to Analyzing Competitive Effects in Patent Licensing: An Intent-Based Analysis or Analysis of Patent Strength

The traditional approach used by courts to rein in the anticompetitive effect of licensing deals often relies on evidence of downstream licensees' intent to control license terms, or evidence that the patent covers a minor technology or is likely invalid or uninfringed.[145] Courts may also try to analyze the strength of a patent from objective information about the patented technology, such as through testimony from expert witnesses and other sources. As previously noted, Priest distrusts intent evidence because he considers it unreliable,[146] and he disapproves of an inquiry into the merits of a patent in the context of an antitrust trial—he argues this inquiry is too difficult.[147] Subsequent commentators, especially in the *Actavis* context, also worry about error costs from undertaking this analysis. They fear that aggressive enforcement against cartels implemented via patent licenses will chill research and development, and that those costs are greater than the social costs of under-deterred collusion.[148]

It is certainly true that intent evidence is noisy and that courts and parties will face increased costs in terms of time and resources from placing greater reliance on whether defendants had knowledge of patent weakness or undertaking an on the merits inquiry into the strength of patents. Yet, we perceive that courts and commentators have exaggerated the potential harm of chilling research and development from these inquiries and ignored their value in identifying price

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value the claim that a patent license is vertical just because the licensor does not produce the product made by the licensees.

[145] *See* IP AND ANTITRUST, *supra* note 130, at §§ 31.21, 31.26, 33.15, and 33.38; MacGregor v. Westinghouse Elec. & Mfg. Co. 329 U.S. 402, 407 (1947) ("If it be determined on remand that the patent is invalid, there is no question but that, as MacGregor contends, the price-fixing agreement violates the anti-trust laws."). In the patent settlement context, Hovenkamp observes that antitrust courts avoid the difficult question of whether a patent is valid and infringed by instead asking whether it is "'obviously' invalid or very weak." Herbert Hovenkamp, *The Rule of Reason and the Scope of the Patent*, 52 SAN DIEGO L. REV. 515, 541 (2015).

[146] Priest, *supra* note 3, at 312–13.

[147] *Id.* at 309, 333.

[148] *See, e.g.*, Melissa J. Hatch & Robin Sumner, *United States: A Turducken Task: How* Actavis *Invites Relitigation of Patent Merits*, (Dec. 12, 2013), https://www.mondaq.com/unitedstates/patent/280776/a-turducken-task-how-actavis-invites-relitigation-of-patent-merits; Adam Mossoff, et al., *How Antitrust Overreach is Threatening Healthcare Innovation*, FEDERALIST SOCIETY: REGULATORY TRANSPARENCY PROJECT (Jan. 28, 2019), https://regproject.org/wp-content/uploads/RTP-Intellectual-Property-Working-Group-Paper-Drug-Patents.pdf.

fixing.[149] Furthermore, "[c]ourts regularly litigate patent issues within antitrust cases that involve allegations of sham litigation or allegations that a patent was procured by fraud. Courts also regularly conduct 'mini-trials' in legal malpractice cases involving patent issues such as when a patent is invalidated due to a lawyer's alleged incompetence."[150] Thus, courts appear to have the institutional competence to manage a trial within a trial if need be.

C. Charting a Way Forward to Evaluating Patents in Antitrust Suits: Rigorous Analysis in the Serial Collusion Context

We admire the elegance of the Priest test in the context of isolated cartels, but we also believe that Priest overstates the costs of asking antitrust courts to probe the quality of patents, patent licenses, and patent assertions that might be used to foster collusion. Such inquiries are essential for detection of collusion in settings where serial collusion is possible and the Priest test is apt to be ineffective. Moreover, rigorous antitrust review of patents does not threaten innovation to the extent that detractors warn.

Commentators who favor deferential antitrust review of patent licensing often exaggerate the importance of patents as a source of innovative incentive,[151] and underplay patents' potential for competitive harm. Surveys of most research and

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[149] For a discussion of the costs and benefits of analysis of intent in price fixing cases, *see* Ronald A. Cass & Keith N. Hylton, *Antitrust Intent*, 74 S. CAL. L. REV. 657, 666–70 (2001). Michael Carrier acknowledges that intent inquiries create both false positives and false negatives but is critical of "blind deference to the patent system." Michael A. Carrier, *Unraveling the Patent-Antitrust Paradox*, 150 U. PA. L. REV. 761, 764 (2002).

[150] Joshua B. Fischman, *The Circular Logic of Actavis*, 66 AM. U. L. REV. 9, 140–41 (2016). For non-patent trials addressing patent strength, see, for example, *Gunn v. Minton*, 133 S. Ct. 1059, 1065 (2013) (legal malpractice); *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965) (Section 2 claims involving fraud in procuring a patent); and *Professional Real Estate Investors, Inc. v. Columbia Pictures, Inc.*, 508 U.S. 49 (1993) (sham copyright suit and Sherman Act Sections 1 and 2 claims).

[151] Empirical evidence suggests that patent incentives have little impact on innovation with the exception of pharmaceuticals, biotechnology, medical instruments, "and possibly specialty chemicals." Bronwyn H. Hall & Dietmar Harhoff, *Recent Research on the Economics of Patents*, 4 ANN. REV. ECON. 541, 548 (2012). *See also* Michael A. Klein, *Secrecy, The Patent Puzzle and Endogenous Growth*, 126 EUROPEAN ECON. REV. 1, 1 (2020) [hereinafter *Patent Puzzle*]. Klein summarizes findings of various empirical studies that find weak or no connection between the strengthening of patent regimes and increases in innovation, noting that empirical studies "find strong evidence that strengthening the patent regime increases . . . patenting!" *Id.* Klein adds: "First, firms routinely decide not to patent their innovations. Surveys of European and U.S. firms find that the average propensity to patent is between 30–55%. Second, firms widely consider secrecy to be a more effective appropriation mechanism than patents." *Id.* at 2.

development managers rate patents as the fourth or fifth most important method of appropriating value from inventions, the exception being the pharmaceutical context where patents rank first. Further, most patents cover minor and relatively obvious inventions. About 60% of the patents granted on chemicals are not renewed to their full term, suggesting the advances achieved in these patents may not be significant.[152] This is no surprise; many patents are obtained for reasons other than blocking imitation, like gaining bargaining power in lawsuits, license negotiations, or impressing investors.[153] In addition, there are other means to protect intellectual property outside the patent system. Trade secrecy is the favored method of obtaining value from process inventions in the chemical industry and other sectors.[154] And of course, the risks to innovative incentives must be balanced against the social costs of serial collusion, which has not been adequately deterred thus far.

Further, a more rigorous evaluation is especially important in the serial collusion context. There is good reason to believe that the patent portfolios built by serial colluders like those in the chemical industry contain many weak patents, patents that are likely invalid, and/or patents covering technology that is unlikely to be commercialized. Presumably, when firms compete in industries like the chemical industry, they have an incentive to challenge weak patents for invalidity in

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[152] Carlos J. Serrano, *The Dynamics of the Transfer and Renewal of Patents*, 41 RAND J. ECON. 686, 693 (2010).

[153] Wesley M. Cohen et al., *Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not)* 25 (Nat'l Bureau of Econ. Rsch., Working Paper No. 7552, 2000) [hereinafter *Intellectual Assets*] ("One broader use of patents observed particularly in chemical (apart from drugs) and other discrete product industries is their combination to build patent fences around some patented core invention. Such fence building involves the patenting, though not licensing (nor necessarily even commercializing), of variants and other inventions that might substitute for the core innovation in order to preempt rivals from introducing competing innovations."). *See also Patent Puzzle*, *supra* note 151, at 2 ("When firms do patent, it is often for reasons other than protecting their innovation from imitation as typically assumed. . . . In particular, patents are increasingly used strategically for their 'blocking' effect on rival innovations.").

[154] Cohen and co-authors observe: "With regard to the protection of new processes, … [s]ecrecy is commonly the dominant mechanism, as in the chemicals industries, semiconductors and others." *Intellectual Assets*, *supra* note 153, at 6. They summarize research describing "how chemical firms will sometimes protect an innovation by applying for one or more patents on different elements of an innovation, while keeping other elements secret." *Id.* at 7. They find:

> "for product innovations, several industries apply for patents for more than two-thirds of their innovations, including chemicals (nec), drugs, mineral products, and medical equipment. In contrast, there are also many industries that applied for patents on fewer than 15% of their product innovations, including food, textiles, glass, steel and other metals."
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> *Id.* at 16 n.36.

opposition proceedings in Europe and Japan, inter partes review at the U.S. Patent and Trademark Office (USPTO), and declaratory judgment proceedings in U.S. federal courts. Yet, these kinds of challenges tend to disappear when competitors cooperate in serial cartels.[155] The colluding firms are likely to move in the opposite direction by settling patent litigation or validity challenges.[156] These agreements may then include no-challenge clauses in patent licenses that discourage parties from monitoring patent quality and challenging weak patents.[157] As a result, weak patents and collusive schemes proliferate, blocking entry for new competitors and expansion by existing rivals.

V
POLICY RECOMMENDATIONS

There is strong deference in the law to the protection of intellectual property and monopoly rents associated with innovation. Sophisticated cartels can capitalize on this deference. Our finding that patents increased from the pre-plea to the plea period and then again from the plea to the post-plea period for chemical firms that have been found to have regularly participated in cartels implies that firms are using patents to enhance the profits of their conspiracies. These patent surges may be facilitating cartel structures or may be harming both non-cartel firms and potential entrants. The surge in patents from the pre-plea to the plea period by non-producers that are among the most active cartel firms also suggests a sophisticated use of patents to enhance the portfolio of cartels that these firms may be running.

In an earlier article, we presented four principal policy recommendations to address the phenomenon of serial collusion.[158] First, antitrust enforcement agencies

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[155] Jay Pil Choi, *Patent Pools and Cross-Licensing in the Shadow of Patent Litigation*, 51 INT'L ECON. REV. 441, 458–59 (2010) ("[patent pools] can have the effect of sheltering invalid patents from challenges" and contribute to an environment in which there is a "serious lack of private incentives to weed out patents of suspect value through litigation.").

[156] The existence of a cartel that is made possible (or facilitated) by a patent license discourages licensees from inventing around or challenging the patent. *See* United States v. Masonite, 316 U.S. 265, 281 (1942). As noted above, many patent-licensing/price fixing cases in the first half of the twentieth century involved settlement of patent litigation. *Supra* Section I.A.

[157] *Licensing of IP Rights*, *supra* note 93, at 23 ("A no-challenge clause imposes direct or indirect obligations not to challenge the validity of the licensor's intellectual property right. Such clauses may conflict with the overriding interest of ensuring that IP rights are lawful. Invalid intellectual property rights should be eliminated because [they] stifle[] innovation rather than promoting it. Since licensees are often the parties with the greatest technical ability and economic incentive to challenge improperly granted IP rights, it is appropriate to impose limitations on no-challenge clauses.").

[158] *Serial Collusion*, *supra* note 11.

should work with cartel participants to carry out *cartel reconstructions* to help enforcement agencies learn how each cartel worked, who was responsible, and what other markets might be affected. Second, antitrust agencies should engage in *more extensive monitoring* of serial cartel offenders, with the monitoring obligation imposed in sentencing, settlement, or plea agreements. Third, existing leniency programs should be supplemented with *bounty programs* that give company insiders monetary rewards for informing on cartels. One major aim of such rewards would be to peel small firms away from cartels. Fourth, we would mandate *adjustments in merger review* for transactions involving a serial colluder. The revised merger control regime would mandate review of mergers from a coordinated effects perspective whenever a serial colluder notifies an enforcement agency regarding a merger for review.

In the balance of this paper, we supplement our previous recommendations with proposals that emerge from our study of patent practices and serial collusion. Presented below are a number of policy recommendations that, if implemented, would improve the ability of the competition policy system to detect and deter harmful collusive schemes that draw upon patent practices for their effectiveness.

Expanding Registration and Notification Obligations

Actavis and other pay-for-delay cases have renewed our awareness of how patent settlements can serve anticompetitive ends. In July 2002, the Federal Trade Commission (FTC) issued a study that documented branded drug producers' use of patent infringement settlements to delay market entry by producers of generic equivalents.[159] The following year, Congress passed the Medicare Prescription Drug, Improvement, and Modernization Act, which included a requirement that the parties to such settlements provide the FTC with a copy of their agreement.[160] Implementation of this provision has enabled the Commission to monitor and study pay-for-delay agreements. The notification mechanism has enhanced the FTC's ability to track industry trends and to identify possible targets for law enforcement intervention.[161]

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[159] FED. TRADE COMM'N, GENERIC DRUG ENTRY PRIOR TO PATENT EXPIRATION: AN FTC STUDY (2002), https://www.ftc.gov/sites/default/files/documents/reports/generic-drug-entry-prior-patent-expiration-ftc-study/genericdrugstudy_0.pdf.

[160] Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, §§ 1111-1118, 117 Stat. 2066 (Dec. 8, 2003) (creating patent settlement notification mechanism).

[161] Press Release, FED. TRADE COMM'N, FTC Staff Issues FY 2017 Report on Branded Drug Firms' Patent Settlements with Generic Competitors (Dec. 3, 2020), https://www.ftc.gov/news-events/press-releases/2020/12/ftc-staff-issues-fy-2017-report-branded-drug-firms-patent.

For patent settlements, the pay-for-delay notification obligation is the exception, not the norm. As Joseph Brodley and Maureen O'Rourke explain, antitrust agencies do not enjoy ready access to most patent settlement agreements:

> Antitrust scrutiny of patent settlements is further constrained because patent settlements are not disclosed to enforcement agencies. To be sure, the Patent Act requires filing of interference settlements and collateral agreements with the Patent and Trademark Office (PTO). But it appears doubtful that the PTO can police disclosure of collateral agreements and, under the Third Circuit's decision in *United States v. FMC Corp.*, the Department of Justice lacks standing to enforce compliance. . . . [D]efendants in settlement cases benefit from two legal presumptions that, while legitimate in themselves, impede antitrust challenge: a patent is presumed valid, and courts have frequently declared that patent settlements are to be encouraged.[162]

To close this gap, we would envision as an initial step that Congress would enact legislation that gives the FTC authority to establish a reporting system that mandates the disclosure to the FTC of patent settlements in infringement cases. The reporting mechanism could be modeled upon the system, described immediately above, for reverse payment settlements in the pharmaceutical sector. The legislation would give the FTC authority to define categories of transactions subject to the reporting requirement. Relevant criteria for establishing the reporting obligation might include the size of parties to the licensing arrangement, whether licensing practices in a sector had previously been the subject of antitrust proceedings, and other factors deemed relevant based on the experience of antitrust agencies examining the patent system and commercial licensing practices.[163]

A more ambitious program of disclosure would require the notification to the federal antitrust agencies of a larger body of patent licensing agreements. We would support the adoption of a new statute that delegated to the FTC the authority to

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[162] *Patent Settlement Agreements*, *supra* note 138, at 53.

[163] As suggested in this paper, federal antitrust agencies have accumulated considerable knowledge about patent-antitrust issues in the course of conducting investigations, prosecuting cases, and performing studies. Many of these activities are described in William E. Kovacic, *Intellectual Property Policy and Competition Policy*, 66 N.Y.U. ANN. SURV. AM. L. 421 (2011); William E. Kovacic, *The Importance of History in the Design of Competition Policy Strategy: The Federal Trade Commission and Intellectual Property*, 30 SEATTLE U. L. REV. 319 (2007); and William E. Kovacic & Andreas P. Reindl, *An Interdisciplinary Approach to Improving Competition Policy and Intellectual Property Policy*, 28 FORDHAM INT'L L.J. 1002 (2004).

promulgate rules that define the reporting obligation.[164] A model for this process would be the machinery used to delimit the merger reporting obligation imposed by the Hart-Scott-Rodino Antitrust Improvements Act of 1976.[165] Under this statute, Congress established a mandatory pre-merger reporting program and delegated its implementation through rulemaking and other administrative actions to the FTC. By this mechanism, we envision the creation of a dataset that enables the federal antitrust agencies to observe larger patterns of patenting activity. This data would also expand agency knowledge of patent licensing behavior to inform the development of cartel cases, as well as guide the investigation of mergers and single-firm conduct.[166]

Expanding "Super Plus Factors" to Cover Strategic Patent Surging

In earlier work, we introduced the concept of a "super plus factor."[167] Plus factors are economic actions and outcomes, above and beyond parallel conduct by oligopolistic firms, that are largely inconsistent with unilateral conduct but largely consistent with explicitly coordinated action.[168] When the conduct or outcome leads to the strong inference of explicit collusion, then the plus factor is referred to as a super plus factor.[169] We suggest that if there is a surge of patents by firms in an industry that have a history of colluding with one another, and there is no such surge by firms in the industry that have no history of explicit collusion, and each serial colluding firm is effectively refusing to license any producer outside of the group of historical cartel participants, then this conduct should be treated as a super plus factor. In addition, if a serial colluder that is a non-producer has a concurrent surge in patent activity and licenses only to other serial colluders, then this activity should be treated as a super plus factor pertaining to the involvement of the non-producer in the cartel.

This application of super plus factors to the serial collusion context can be expanded to further conduct as well. Suppose firm B and C operate a series of cartels

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[164] Among other tasks, the rulemaking deliberations would identify the scope of information that various reporting thresholds might elicit and the burden associated with compliance.

[165] Hart-Scott-Rodino Antitrust Improvements Act of 1976, Pub. L. No. 94-435, Sec. 201, §7A, 90 Stat. 1383, 1390-91 (codified at 15 U.S.C. §18a (2012)).

[166] As with a reporting mechanism for the settlement of infringement disputes, the design of the reporting system for patent licenses would draw upon the substantial experience of the federal antitrust agencies in dealing with patent-antitrust issues. *See supra* note 157.

[167] William E. Kovacic et al., *Plus Factors and Agreement in Antitrust Law*, 110 MICH. L. REV. 393 (2012) [hereinafter *Super Plus Factors*].

[168] *Id.*

[169] *Id.* at 396–97.

together and B has unintentionally sold beyond its agreed upon market share for product 3, while C has undersold. A transfer needs to occur from B to C to correct the imbalance in sales for product 3. This re-balancing can be directly handled in cash in the license agreement in product 2, where B is licensed by C.[170] Looking at cartels in a stovepipe without considering the portfolio of cartels run by each firm, this transfer would be completely invisible to enforcement authorities—it is part of a private license agreement and does not involve the product in question (product 3). Broadening of the interfirm transfer super plus factor we identified previously to multiple products for serial colluders would be useful in this scenario as well.[171] This is another way in which closer examination of patent licensing by serial colluders that interact in multiple product markets can inform the identification of conduct that suggests the existence of a collusive agreement.

Expanding Patent Misuse to Apply to Related Patents

The patent misuse doctrine states that a patent used to facilitate an antitrust violation cannot be enforced.[172] The doctrine creates a desirable pathway for new firms to enter markets that had been cartelized with threats of patent assertion. Courts should use their discretion and recognize that the defense is good even for patents owned by serial colluders who did not produce in the market in question so long as other members of the network of serial colluders were found liable for collusion in that market.[173] This may be significant because, as we observed in Section I, non-producers often obtain many patents on products in cartelized markets, and they may use those patents in various ways to facilitate collusion. Thus, any patent covering the cartel product, or some other product that was used to facilitate the collusion, should be subject to a misuse defense by any new entrant or non-colluding firm that wants to use the "innovation." Some may argue that this would thwart genuine innovation in the product, but we argue that the cartel firms forfeit the monopoly protection of patent laws when they use patents to further anticompetitive conduct.

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[170] C sues for breach of the product 2 license, or threatens to do so, and B settles for the amount needed to "true up" the product 3 cartel.

[171] *Super Plus Factors*, *supra* note 167, at 423 n.117 ("It is a relatively simple matter for firms in an oligopoly to engage in contractual relationships with regard to a broad range of activities, many of which are completely meaningless from a productivity standpoint, and to use allegations of contract breach, and ensuing settlements, to legitimize cartel side payments.").

[172] This principle is embodied in the existing law of patent misuse. *Revisiting Patent Misuse*, *supra* note 22.

[173] Such an approach also would appear to involve the exercise of the U.S. Patent and Trademark Office of its existing power to rescind patents related to a patent for which the patentee made misstatements in its application. *Id.*

Greater Agency Investigation of the Role of Patents in Serial Cartels.

Today, EC decisions rarely mention patents when describing firm conduct at issue in prohibition decisions. For the 32 chemical cartels enumerated in Appendix A, patents are hardly mentioned in the corresponding EC decisions.[174] This is a remarkable omission given the historically significant role of patents in price-fixing agreements. Perhaps given scarce enforcement resources, the EC chose not to investigate cartel use of patents and focused instead on the low-hanging fruit of amnesty applicants' disclosures about price targets and customer and market share agreements. Going forward, European, U.S., and other global cartel investigators need to learn whether and what role patents play in instances of serial collusion. We note that in recent merger inquiries, the EC's Directorate for Competition has taken a greater interest in patenting and patent portfolios as focal points in merger analysis.[175] This indicates a greater willingness by enforcement agencies to undertake the laborious process of mapping out patent portfolios and, perhaps, licensing arrangements, as foundations for building cases beyond challenges to mergers. This is a helpful step forward.

Liability for Cartel Facilitators

A serial colluder that is facilitating collusion in a product that they do not make should be found liable in civil and criminal actions for collusion, just like producers.[176] In addition, they should be subject to civil liability from private litigants in class actions and individual suits. Liability and the determination of damages in such cases should be rooted in, at a minimum, a but-for theory of harm: but-for the facilitating conduct of the defendant, what would the producers have been able to accomplish through their collusion? Thus, the cartel facilitators' marginal harm should be traceable to them in future lawsuits. Cartel facilitators, like Fides/AC Treuhand, have already been penalized for participation in European cartels even though Fides/AC Treuhand is not a producer of any chemical product.[177]

Creation of an Anti-Cartel Research Program Focused on Serial Collusion and the Role of Patents in Cartel Maintenance

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[174] Just four of the cases listed in Appendix A—Food Flavor Enhancers, Hydrogren Periodide (2006), Organic Peroxide, and Polypropelene—mention patents.

[175] Bayer/Monsanto, Case M.8084, Merger Procedure Regulation 139/2004 (Mar. 21, 2018).

[176] This comports with existing U.S. doctrine which have used a "hub-and-spoke" model to impose civil and criminal liability on hold vertically-related firms that facilitate the operation of a price-fixing cartel. *See supra* note 92 (collecting cases).

[177] *Unobserved Collusion*, *supra* note 11, at 330. *See also* Heat Stabilisers in Appendix A at 188-190.

In this Article, we have focused mainly on the use of patents to facilitate serial collusion in the chemical industry, but our findings are relevant to the study and prosecution of collusion in a number of other important economic sectors. The electronics and auto parts industries, for example, have also been racked by serial collusion in recent years, and these are both patent-intensive industries.[178] Electronics is much like chemicals in that the pattern of anticompetitive behavior goes back a century. It would be worthwhile to study cartels in these industries and try to identify what role patents played. We would also propose using the research and information-gathering authority of the FTC, under Section 6(b) of the FTC Act, to study patent licensing. Such a study would seek to test some of the conjectures set out in this Article and determine, as noted above, whether a mandate that firms register patent licenses with antitrust agencies might be appropriate.[179]

CONCLUSION

Over a century ago, federal antitrust enforcement began to give careful attention to the possibility that patent licensing practices could enable rival producers to organize and manage price-fixing cartels. In modern enforcement practice and scholarly debate about antitrust policy, patent licensing practices have received comparatively little attention as instruments of cartel management. Compared to other possible focal points for anti-cartel enforcement, patent licensing arrangements can create difficult analytical complexities. A lesson from the earlier generations of antitrust-patent cases is that the use of patents by alleged price-fixers is often abstruse. Enforcers and courts may need to work harder to understand the

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[178] "The German chemical company BASF participated in 21[price-fixing agreements] with 17 of those ending in the current millennium. The French cement company Lafarge SA participated in 21 with 16 of those ending in the current millennium. The German pharmaceutical company Bayer AG participated in 20 with 5 of those ending in the current millennium. The Japanese conglomerate Hitachi Ltd. participated in 20 with 18 of those ending in the current millennium." *Serial Collusion*, *supra* note 11, at 22 n.22. Marvao describes the problem of serial collusion "in the manufacture of transport and electrical equipment." *Id.*

[179] The Final TNEC Report contained the following recommendation regarding the notification to the government of patent licenses:

> *Recording of transfers and agreements*.–We recommend that any sale, license, assignment, or other disposition of any patent be evidenced by an instrument in writing and that the same be required of any condition, agreement, or undertaking relating to any sale or disposition of any such patent; and that in any such case a copy of such written instrument be filed with the Federal Trade Commission within 30 days after execution.

TNEC FINAL REPORT, *supra* note 72, at 37.

technology, patent practices, and industry context specific to a case.[180] As it is, enforcement is often a demanding endeavor in terms of resources, time, and expertise needed to prosecute a case.[181] It is a daunting challenge for an enforcement agency to assemble a narrative that gives a court confidence that anticompetitive effects predominate in the face of benign or procompetitive effects often associated with patent licenses. In short, cases at the intersection of antitrust and patent law can be intimidating, and it takes a patient, determined, and properly resourced government prosecutor to execute them successfully.

We believe the gains from focusing greater attention on patent licensing warrant the effort to deal with the analytical complexities. Licensing arrangements can provide attractive means for serial colluders to cloak illegal collaboration under the guise of seemingly legitimate activity, in which direct interaction among competing firms might seem normal and unremarkable from an antitrust standpoint. As antitrust systems seek to deter collusion through more powerful detection mechanisms and stronger sanctions, one cannot underestimate the ingenuity and perseverance that producers will deploy to devise counter measures and strategies

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[180] Till, *supra* note 2, at 309–310:

> While patent licensing arrangements are theoretically preferable to pure monopoly situations, often these agreements contain provisions designed to restrict competition. Increasingly these arrangements have become more sophisticated as the Justice Department's Antitrust Division has sought to confine the exercise of monopoly to the patent itself. In this effort, the government has generally secured the support of the courts. But the cases instituted by the Department of Justice have involved only a small number of industries. It is therefore impossible to say whether, in the many not investigated, blatant restrictions are still fully spelled out in licensing arrangements or whether they have simply been driven underground. In both cases, a comprehension of the restrictions contained in a license agreement requires knowledge, often extensive knowledge, of the operation of the industry and its trade practices.

[181] *See* Priest, *supra* note 3, at 365:

> The problem of detecting illegitimate arrangements . . . is more difficult than merely identifying those particular practices that might be employed by both cartels and patent licensors. . . . The most telling example is where a group of firms appoints a licensor and, foregoing explicit price, output, or territorial restrictions, authorizes the licensor to charge each member firm a royalty with the understanding that at later date the royalties exacted will be rebated in full. It would be impossible to detect a cartel agreement of this nature without a detailed investigation into the relationships between the licensees and the licensor, because the behavior of each licensee will appear irreproachable; each can set price exactly equal to its apparent marginal cost which will include the royalty.

that permit the accomplishment of their collusive objectives. Licensing arrangements that are either invisible to external observers or seem innocuous at first glance can provide means to this end.

We also believe the burdens associated with the analysis suggested here may be manageable. There are opportunities today for the antitrust enforcement community, especially U.S. enforcement agencies, to apply the substantial body of learning that they have accumulated regarding the operation of the intellectual property system and the use of patents in commerce. Intensified examination of the possibilities for patent licensing to facilitate coordination by serial colluders would build upon a significant foundation of enforcement experience and research. Such a program would complement other major efforts to apply competition policy to high technology sectors and industries that rely heavily upon the application of patents and other intellectual property rights.

For roughly half a century, from the 1920s through the 1970s, U.S. antitrust policy adopted a highly skeptical view of many patent licensing practices. This skepticism has attenuated over the past forty years, as antitrust enforcement agencies and courts disavowed the hostility toward the same doctrines and enforcement policy statements. The rebalancing that has taken place ought not to obscure the fact that some of the concerns of the enforcement community were not illusory. Our proposals seek to give effect to the sound understandings of the earlier era and bring the force of modern learning to bear upon the special problem of serial collusion.

APPENDIX A

EC Chemical Product Decisions and Cartel Firms

1. Bitumen: Case COMP / 38.456 – Bitumen - NL, September 13, 2006
    a. Shell
2. Butadiene Rubber: Case COMP/F/38.638 – Butadiene Rubber and Emulsion Styrene Butadiene Rubber, November 29, 2006
    a. **Bayer**, Shell
3. Calcium Carbide: Case COMP/39.396 – Calcium carbide and magnesium based reagents for the steel and gas industries, July 22, 2009
    a. **Akzo Nobel**, *Degussa*
4. Candle Waxes: Case COMP/39181 – Candle Waxes, October 1, 2008
    a. **Shell**
5. *Cartonboard: IV/C/33.833 - Cartonboard, July 13, 1994
    a. Fides/AC Treuhand
6. Chloroprene Rubber: COMP/38629 - Chloroprene Rubber, December 5, 2007
    a. **Bayer**
7. Choline Chloride: Case COMP/E-2/37.533 – Choline Chloride, Comm'n Decision, December 9, 2004
    a. *Akzo Nobel, BASF*
8. Citric Acid: Case COMP/E-1/36.604 – Citric Acid, Comm'n Decision, 2002 O.J.(L239) 18. December 5, 2001
    a. Bayer
9. *Fatty Acids: IV/31.128 — Fatty Acids, Comm'n Decision, December 2, 1986
    a. Fides/AC Treuhand
10. Food Flavor Enhancers: Case COMP/C.37.671 – Flood Flavour Enhancers, Comm'n Decision 2004 (L 75) December 17, 2002
    a. <None from those listed in Figure 5>
11. Heat Stabilizers: COMP/38589 – Heat Stablisers, November 11, 2009
    a. Akzo Nobel, *Arkema/ Atofina, Elf Aquitaine,* Fides/AC Treuhand
12. *Hydrogen Peroxide: IV/30.907 — Peroxygen products, November 23, 1984
    a. Atochem, Solvay, Degussa
13. Hydrogen Peroxide: Case COMP/F/38.620 – Hydrogen Peroxide and Perborate, May 3, 2006
    a. *Akzo Nobel, Arkema/Atofina*, **Degussa**, *Elf Aquitaine, Solvay*
14. Lysine: Case COMP/36.545/F3. Amino Acids, June 7, 2000
    a. <None from those listed in Figure 5>
15. Methacrylates: Case No COMP/F/38.645 — Methacrylates, May 31, 2006

a. *Arkema/Atofina*, **Degussa,** ICI, Elf Aquitaine

16. Methionine: Case C.37.519 – Methionine, Comm'n Decision, 2002 (L 255) 1. July 2, 2002
    a. *Degussa*, **Rhone Poulenc/Aventis**
17. Methyglucamine: Case COMP/E-2/37.978 – Methylglucamine, Comm'n Decision, November 27, 2002
    a. Rhone Poulenc/Aventis
18. Monochloroacetic Acid: Case COMP/E-1/.37.773– MCAA, Comm'n Decision, January 19, 2005
    a. *Akzo Nobel, Arkema/Atofina, Elf Aquitaine*, Fides/AC Treuhand, Hoechst
19. Organic Peroxides: Case COMP/E-2/37.857 – Organic Peroxyde, Comm'n Decision, December 10, 2003
    a. **Akzo Nobel**, *Arkema/Atofina*, Degussa, Fides/AC Treuhand,
20. *Polyethylene: IV/31.866, LdPE, December 21, 1988
    a. Atochem, BASF, Bayer, Dow, Enichem, Fides/AC Treuhand, Hoechst, ICI, Repsol, Shell
21. *Polypropylene: IV/31.149 – Polypropylene, April 23, 1986
    a. Atochem, BASF, Fides/AC Treuhand, Hoechst, ICI, Rhone Poulenc/Aventis, Shell, Solvay
22. *Potash: IV/795 – Kaliand Salz/Kali Chemie, December 21, 1973
    a. BASF, Solvay
23. *PVC: IV/31.865, PVC, December 21, 1988
    a. Atochem, BASF, Enichem, Fides/AC Treuhand, Hoechst, ICI, Shell, Solvay
24. Rubber Chemicals: Case COMP/F/38.443 – Rubber Chemicals, Comm'n Decision December 21, 2005 (summary at 2006 (L 353) 50)
    a. **Akzo Nobel (through Flexsys)**[182]**,** *Bayer*
25. *Soda Ash: Case COMP/33.133-B: Soda-ash, December 19, 1990
    a. BASF, Solvay
26. Sodium Chlorate: Case COMP/38.695 – Sodium Chlorate, June 11, 2008
    a. **Akzo Nobel**, Arkema/Atofina, Elf Aquitaine
27. Sodium Gluconate: http://europa.eu/rapid/press-release_IP-01-1355_en.htm?locale=en#file.tmp_Foot_1, March 19, 2002
    a. Akzo Nobel

[182] See the cited EC decision at para 13, "The holding company for Flexsys is Flexsys Holding B.V. of which Akzo Nobel Chemicals International B.V. holds 50%, the remaining 50% being held by Solutia Inc and Solutia Europe N.V. together."

28. Sorbates: Case COMP/E-1/37.370 – Sorbates, Comm'n Decision October 1, 2003
    a. *Hoechst*
29. *Synthetic Fibers: IV/30.810 - Synthetic fibres, July 4, 1984
    a. Bayer, Hoechst, ICI, Rhone Poulenc/Aventis
30. Vitamins: Case COMP/E-1/37.512– Vitamins, Comm'n Decision, 2001 O.J. (L6) November 21, 2001
    a. *BASF*, **Rhone Poulenc/Aventis,** *Solvay*
31. *Woodpulp: IV/29.725 - Wood pulp, December 19, 1984
    a. Fides/AC Treuhand
32. Nitrile Butadiene Rubber: COMP/38.628 - Nitrile Butadiene Rubber, January 23, 2008
    a. *Bayer*

APPENDIX B[183]

I. GOOGLE PATENTS ADVANCED SEARCH INSTRUCTIONS

FIELD	*INPUT*
Synonym	CL="[product keyword]" Product keywords are listed below (see "Product Keywords" section) *Claims search (CL=):* ▪ *Restricts search to claims of patents* ▪ *Increases relevance of resulting patents by limiting results to patents in which the product is a notable input or process patents for the product* *Note:* ▪ *To search the union of multiple search terms, separate each "synonym" with OR* ▪ *To search the intersection of multiple search terms, separate each "synonym" with AND*
Date	Choose "filing" from the dropdown list Enter years from January 1 to January 1 of the next year (i.e. 1984-01-01 – 1985-01-01) *Note:* ▪ *Pre-plea years: 10 years prior to the start of the earliest starting year of a firm's plea period in the corresponding EC decision* ▪ *Plea years: the earliest starting year of a firm's plea period in the corresponding EC decision to the latest ending year of a firm's plea period in the corresponding EC decision* ▪ *Post-plea years: 10 years after the latest ending year of a firm's plea period in the corresponding EC decision*
Inventor	Leave blank
Assignee	Firm search terms, university search terms (see "Assignee Search Terms" below) *Note:* ▪ *To search the union of multiple search terms, separate each "synonym" with OR* ▪ *To search the intersection of multiple search terms, separate each "synonym" with AND*
Patent Office	Do not change (this generates a global search)
Language	Do not change
Status	Choose "grant" from the dropdown list
Type	Choose "patent" from the dropdown list
Sort by	Relevance *Note: This option can be changed only after the search results are displayed.*

[183] This Appendix was prepared by our three research assistants: Katherine Bartuska, Naira Batoyan, and Hope Bodenschatz, at the direction of the authors of the paper. Any errors are the responsibility of the authors of the paper.

II. PRODUCT SELECTION

Focusing on the firms of Akzo, BASF, Bayer, Solvay, and Degussa as producers and non-producers, if the pre-plea or the plea period has more than an average of two patents per year than chemical product was included. Otherwise, the product was excluded.

III. PRODUCT KEYWORDS

PRODUCT	*SEARCH TERM(S)*
1. Bitumen	"bitumen"
2. Butadiene Rubber	"butadiene rubber" OR "polybutadiene"
4. Candle Wax	"candle waxes" OR "paraffin waxes" OR "slack waxes" OR "candle wax" OR "paraffin wax" OR "slack wax"
6. Chloroprene Rubber	"chloroprene rubber" OR "chlorobutadiene rubber" OR "polychloroprene" OR "neoprene"
8. Citric Acid	"citric acid"
11. Heat Stabilizers	"heat stabilizers" OR "heat stabilizer" OR "heat stabilisers" OR "heat stabiliser" OR "thermal stabilizers" OR "thermal stabilizer" OR "thermal stabilisers" OR "thermal stabiliser" OR "tin stabilizers" OR "tin stabilizer" OR "tin stabilisers" OR "tin stabiliser" OR "epoxidised soybean oil" OR "epoxidized soybean oil" OR "ESBO"
12. Hydrogen Peroxide 1984	"hydrogen peroxide" OR "hydrogen peroxides" OR "sodium perborate"
13. Hydrogen Peroxide 2006	"hydrogen peroxide" OR "hydrogen peroxides" OR "sodium perborate"
15. Methacrylates	"methacrylates" OR "methacrylate"
16. Methionine	"methionine"
17. Methylglucamine	"methylglucamine" OR "meglumine"
18. Monochloroacetic Acid (MCAA)	"monochloroacetic acid" OR "MCAA" OR "sodium monochloroacetate" OR "SMCA"
19. Organic Peroxides	"peroxides" OR "peroxide" OR "peroxy" AND –hydrogen *Note: when performing a claims search, do not use CL= before -hydrogen*
20. Polyethylene	"polyethylene" OR "LdPE"
21. Polypropylene	"polypropylene" OR "polypropene"
23. PVC	"PVC" OR "polyvinyl chloride"
24. Rubber Chemicals	"anti-degradants" OR "anti-degradant" OR "antidegradants" OR "antidegradant" OR "accelerators" OR "accelerator" OR "rubber chemicals" OR "rubber chemical" OR "antioxidants" OR "antioxidant" OR "antiozonants" OR "antiozonant" OR "retarder" OR "retarders" OR "peptizer" OR "peptizers"

25. Soda Ash	"sodium carbonate" OR "soda ash"
29. Synthetic Fibers	"polyamide textile yarn" OR "polyamide carpet yarn" OR "polyester textile yarn" OR "polyamide staple" OR "polyester staple" OR "acrylic staple" OR "synthetic fibers" OR "synthetic fibres" OR "synthetic fiber" OR "synthetic fibre"
30. Vitamins	"vitamin A" OR "vitamin C" OR "ascorbic acid" OR "vitamin E" OR "vitamin B" OR "thiamine" OR "riboflavin" OR "calpan"
32. Nitrile Butadiene Rubber	"nitrile butadiene rubber" OR "nitrile rubber" OR "acrylonitrile butadiene rubber"

IV. ASSIGNEE SEARCH TERMS

Assignee names to be used in all cases, with the exception of the outstanding mergers, acquisitions, and name changes listed below.

Akzo Nobel	Atochem / Atofina / Arkema*	Aventis	BASF
Bayer	Degussa	Hoechst	ICI
Rhone Poulenc	Shell	Solvay	

*see Mergers, Acquisitions, and Name Changes below

V. MERGERS, ACQUISITIONS, AND NAME CHANGES – ALL SEARCHES

These cases are relevant in all instances, even when the firms are not in the cartel.

FIRM	*SEARCH*	
Akzo Nobel	Start year – 1993	Akzo OR Nobel
	1994 – end year	Akzo Nobel
Atochem / Atofina / Arkema	Start year – 1999	Atochem
	2000 – 2003	Atochem OR Atofina
	2004 – end year	Atochem OR Atofina OR Arkema
Bayer	Start year – 2003	Bayer
	2004	Bayer OR Lanxess
	2005	Bayer
Hoechst / Rhone Poulenc / Aventis	Search the relevant firms in separate columns for entire time period	

VI. MERGERS, ACQUISITIONS, AND NAME CHANGES – CASE SPECIFIC FOR CARTEL MEMBERS

CARTEL	*FIRM*	*SEARCH*	
3. Calcium Carbide	Degussa	1994 – 2003	Degussa OR SKW
		2004 – 2006	Degussa OR SKW OR Alzchem Hart
8. Citric Acid	Bayer	1981 – 2003	Bayer OR Haarman & Reimer
		2004	Bayer OR Haarman & Reimer OR Lanxess
		2005	Bayer OR Haarman & Reimer
12. Hydrogen Peroxide 1984	Atochem / Atofina / Arkema	1948 – 1982	Pechiney Ugine Kuhlmann
		1983 – 1990	Pechiney Ugine Kuhlmann OR Atochem
13. Hydrogen Peroxide 2006	Akzo Nobel	1948 – 1985	Akzo OR Nobel
		1986 – 1993	Akzo OR Nobel OR Eka
		1994 – 2010	Akzo Nobel OR Eka
	Solvay	1984 – 2001	Solvay
		2002 – 2010	Solvay OR Ausimont
19. Organic Peroxide	Atochem / Atofina / Arkema	1961 – 1982	Pennwalt OR Luperox
		1983 – 1999	Pennwalt OR Luperox OR Atochem
		2000 – 2003	Pennwalt OR Luperox OR Atochem OR Atofina
		2004 – 2009	Pennwalt OR Luperox OR Atochem OR Atofina OR Arkema
20. Polyethylene	Atochem / Atofina / Arkema	1966 – 1982	Aquitaine Total Organico
		1983	Aquitaine Total Organico OR Atochem
		1984 – 1994	Atochem
21. Polypropylene	Atochem / Atofina / Arkema	1966 – 1982	Aquitaine Total Organico
		1983	Aquitaine Total Organico OR Atochem
		1984 – 1993	Atochem
24. Rubber Chemicals	Akzo Nobel and Flexsys	1986 – 2011	Akzo Nobel and Flexsys are searched separately and placed in separate columns
25. Soda Ash	Solvay	1977 – 1985	Kali Chemie OR Solvay
		1986 – 2000	Solvay
26. Sodium Chlorate	Akzo Nobel	1984 – 1985	Elektrokemiska Aktiebolaget OR Akzo OR Nobel
		1986	Elektrokemiska Aktiebolaget OR Eka OR Akzo OR Nobel
		1987 – 1993	Eka OR Akzo OR Nobel
		1994 - 2010	Eka OR Akzo Nobel

DATA VALIDATION PROCEDURES USED FOR KOVACIC, MARSHALL, AND MEURER ARTICLE

VOLUME 10 EDITORIAL BOARD OF THE NYU JOURNAL OF INTELLECTUAL PROPERTY AND ENTERTAINMENT LAW (JIPEL)

As a policy of the journal, JIPEL provides readers with a short appendix that supplements authors' empirical analysis and attempts to validate a sample sets of findings, where possible. For a description of JIPEL's policy, please see the journal's Fall 2020 issue editorial on the subject.

In order to validate the authors' empirical analysis contained in this Article, journal staff reviewed the authors' patent tabulations for a subset of chemicals under the assumption that the accuracy of the coding of this subset is representative of the accuracy of the coding of all the chemicals.[1] Per the request of the JIPEL editors, the authors provided the journal a complete disaggregation of patent counts by chemical product. In its review, journal staff validated patent tabulations across all firms for three chemicals, Methacrylates, Polyethylene, and Polypropylene, which were associated with a total of 855 "results."[2] The total population of coded "results" numbered 6,121.[3] A "result" is defined as *one coded finding* for patenting by a firm on a chemical product in a single year, distinguished from "patent tabulation," which refers to the recorded *number of patents* sought for that firm / chemical / year. So, for example, BASF may have sought multiple patents related to a given chemical in a single year, but this would be considered one "result." JIPEL drew this distinction since it was interested in reviewing the potential error rate on the authors' findings by "result" as well as by patent tabulation, shown in Tables 1 and 2 below.

From this review, JIPEL staff did find slight discrepancies associated with approximately 31% of "results" across Methacrylates, Polyethylene, and Polypropylene, as shown in Table 2.[4] That said, these discrepancies tended to be in the amount of one to three patents greater or fewer than the authors' tabulated

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[1] *See, e.g.*, *Sample Size Calculator*, CLINCALC, https://clincalc.com/stats/samplesize.aspx (last visited June 1, 2021) (describing a means to calculate minimum experiment sizes for a known population size). While JIPEL and the authors both followed the Article's Appendix B to architect their patent tabulations, it is possible that the errors that affected some or all of the three chemicals reviewed by JIPEL were dissimilar to errors that affected other studied chemicals.

[2] Methacrylates, Polyethylene, and Polypropylene were associated with 286, 261, and 308 "results," respectively.

[3] The "results" from the remaining chemicals totaled 5,292 "results."

[4] In total, JIPEL found discrepancies associated with 269 "results" across the three chemicals. Dividing 269 by 855 "results" gives a discrepancy rate of approximately 31%.

findings for patenting in a particular year. Thus, on net, JIPEL's total tabulated findings did not tend to be very different than the authors' findings. As shown in Table 1 below, in all periods, the authors' counts did not exceed the JIPEL's counts. And, the findings for the total number of patenting in the pre-plea, plea and post-plea periods tended to be very close.

TABLE 1: SUM OF PATENTING ACROSS FIRMS FOR A GIVEN CHEMICAL IN EACH PERIOD, SHOWING NET DIFFERENCE ("DIFF.") IN SUMMED TOTALS BETWEEN ARTICLE AUTHORS AND JIPEL

	Methacrylates			**Polyethylene**			**Polypropylene**		
	Authors	*JIPEL*	*Diff.*	*Authors*	*JIPEL*	*Diff.*	*Authors*	*JIPEL*	*Diff.*
Pre-plea	1688	1718	30 (1.78%)	353	362	9 (2.55%)	174	174	0 (0)
Plea	931	943	12 (1.29%)	934	973	39 (4.18%)	439	445	6 (1.37%)
Post-plea	1215	1292	77 (6.34%)	1774	1831	57 (3.21%)	1065	1084	19 (1.78%)

JIPEL also disaggregated its own tabulated errors on "results" by core versus non-core producers, as shown in Table 2, to determine if errors were any likelier for one set of firms versus the other.[5] JIPEL did observe greater errors in patenting "results" for core producers, but again, the magnitude of these errors remained very small, as seen in Table 1. JIPEL did not observe any greater magnitude of errors associated with "results" for core producers versus non-core producers.

[5] The authors explain their rationale for distinguishing between "core" and "non-core" producers in Section I of the main Article.

TABLE 2: JIPEL OBSERVED ERROR COUNTS FOR REVIEWED "RESULTS," SPLIT BETWEEN ERRORS ASSOCIATED WITH "RESULTS" FOR CORE AND NON-CORE PRODUCERS[6]

	Methacrylates		**Polyethylene**		**Polypropylene**	
	"Result" count (%)	*Error count (%)*	*"Result" count (%)*	*Error count (%)*	*"Result" count (%)*	*Error count (%)*
Core producer "results" and JIPEL observed errors	130 (45.45%)	80 (61.77%)	145 (55.56%)	49 (57.65%)	140 (45.45%)	28 (52.83%)
Non-core producer "results" and JIPEL observed errors	156 (54.55%)	51 (38.23%)	116 (44.44%)	36 (42.35%)	168 (54.55%)	25 (47.17%)
Total "results" and JIPEL observed errors	286	131	261	85	308	53

In sum, JIPEL finds that the aggregate differences in the number of patents recorded by the journal staff and the authors does not materially change the magnitude or direction of the findings for any of the three chemicals examined. Based on our assumption that discrepancies in the patents tabulated for these three chemicals by the authors and the JIPEL staff are representative of the magnitude of discrepancies for all the chemicals examined by the authors in this article, JIPEL data validation supports the authors' empirical analysis.

Some theories for why these errors persist include errors from human coding or errors in Google's automated document reading, which also automatically translates patent information across languages.[7] Errors might also be due to Google's "deduplication by family" option, which was turned on for the authors' and JIPEL's searches. This option is supposed to group together equivalent inventions and hide redundant patents from view.[8] It is possible that certain patents were hidden for the

[6] As noted above, JIPEL found discrepancies associated with 269 "results" across the three chemicals, the sum of 131, 85 and 53, shown in Table 2. Dividing 269 by 855 total "results" (the sum of 286, 261 and 308, shown in Table 2) gives a discrepancy rate of approximately 31%. In Table 2, JIPEL disaggregated "results" and its error rate on "results" by core and non-core producers. Percentages in Table 2, then, reflect the distribution of core versus non-core producer "results" and errors on "results" from JIPEL's analysis. The overall discrepancy rate remains 31%.

[7] *See About Google Patents: Coverage*, GOOGLE, https://support.google.com/faqs/answer/7049585 (last accessed June 1, 2021) (describing Google's process to upload and make available for digital searching 120 million global patents).

[8] *See About Google Patents: Search results page*, GOOGLE, https://support.google.com/faqs/answer/7049588/search-results-page?hl=en&ref_topic=6390989 (last accessed June 1, 2021). In its description of its deduplication by patent family option, Google

authors' searches that were visible to JIPEL, based on JIPEL performing its searches at a different time than the authors.

describes how similarly architected searches may nonetheless lead to slightly dissimilar conclusions. *Id.* The company observes how when using deduplication by family:

> Only the highest-ranking patent from the same "simple patent family" is displayed and the other family members are removed from the results list. The simple patent family is all of the patents that share the same set of priority claims. This is usually when the same or very similar patent is filed in more than one country.

Id. This grouping is done algorithmically using what Google describes as Cooperative Patent Classification (CPC) codes. *Id.* For further description of how patent families are created for global patents that seek protection for equivalent inventions, *see DOCDB Simple Patent Family*, EUR. PAT. OFF., https://www.epo.org/searching-for-patents/helpful-resources/first-time-here/patent-families/docdb.html (last accessed June 3, 2021).

NEW YORK UNIVERSITY

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LITERARY LANDLORDS IN PLAGUETIME

BRIAN L. FRYE*

Landlord, landlord, these steps is broken down.
When you come up yourself, it's a wonder you don't fall down.[1]

The coronavirus pandemic has affected our lives in countless ways. One of its unfortunate effects was the unavoidable closure of public libraries. Many people rely on public libraries for many different things, including free access to books. When public libraries closed, many people lost access to books, especially new books.

In response, the Internet Archive created the National Emergency Library to make digital copies of books more accessible.[2] The Internet Archive's Open Library

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[1] LANGSTON HUGHES, *Ballad of the Landlord*, *in* THE COLLECTED POEMS OF LANGSTON HUGHES 402, 402 (1995).

[2] *See* Chris Freeland, *Announcing a National Emergency Library to Provide Digitized Books to Students and the Public*, INTERNET ARCHIVE: BLOGS (Mar. 24, 2020), http://blog.archive.org/2020/03/24/announcing-a-national-emergency-library-to-provide-

is a free digital lending library founded in 2006 that provides digital access to the books in its collection.[3] Currently, the Open Library holds about 4 million books, about 1.4 million of which are protected by copyright and subject to lending restrictions. The Open Library only lends digital copies of copyrighted books to one person at a time, as if it were lending the physical copy of the book.[4] The National Emergency Library suspended the waitlist for borrowing digital copies of certain copyrighted books in order to provide access to more people.

The National Emergency Library wasn't a perfect solution to the closure of many public libraries. The Open Library collection is already relatively modest in size when compared to many research libraries, and the National Emergency Library is only a small subset of the entire collection. In order to avoid competing with publishers, the National Emergency Library only included books that were more than 5 years old, which rarely have substantial commercial value. In addition, the formats provided by Open Library are less convenient and accessible than commercial ebooks.

Still, something is better than nothing. More than 100 libraries and archives signed a public statement supporting the National Emergency Library.[5] You would think everyone would applaud the Internet Archive's heroic effort to provide underserved populations with access to information during a national emergency, as an example of a charitable organization doing what charities do best: stepping up to meet a pressing need. You would be so wrong.

When the Internet Archive announced the National Emergency Library, publishers and authors went apoplectic. Publishers immediately denounced it as willful copyright infringement. Many authors followed suit, whining that the Internet Archive was a "piracy website" intent on depriving them of their rights.[6] Oh, and their rightful profits, of course.

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digitized-books-to-students-and-the-public/; *National Emergency Library*, INTERNET ARCHIVE, http://blog.archive.org/national-emergency-library/ (last visited Feb. 28, 2021).

[3] *See Open Library*, INTERNET ARCHIVE, https://openlibrary.org/ (last visited Feb. 28, 2021).

[4] *See id.* (indicating that users can borrow digital copies of copyrighted books from the Open Library by creating a free Internet Archive account).

[5] *See Public Statement: Supporting Waitlist Suspension for Books Loaned by the Internet Archive During the US National Emergency*, INTERNET ARCHIVE, (Mar. 24, 2020), https://docs.google.com/document/u/1/d/e/2PACX-1vQeYK7dKWH7Qqw9wLVnmEo1ZktykuULBq15j7L2gPCXSL3zem4WZO4JFyj-dS9yVK6BTnu7T1UAluOl/pub.

[6] *See, e.g.*, National Public Radio (@NPR), TWITTER (Mar. 26, 2020, 2:22 PM), https://twitter.com/NPR/status/1243241827475562497 (comments).

But there's no evidence showing that the National Emergency Library meaningfully impacted anyone's profits. After all, most of the books it made open-access had no meaningful commercial value, and many were out of print. Moreover, if publishers or authors wanted their books removed from the National Emergency Library, all they had to do was ask. In any case, the overwhelming majority of the Open Library's patrons use books only briefly, presumably browsing them or using them for research.[7] In other words, when Open Library users actually want to read a book, they tend to buy a copy. Ironically, ebook sales have increased substantially during the pandemic.[8]

In reality, publishers and authors object to the National Emergency Library and Open Library on "principle." The "principle" in question: Whenever someone uses a digital book, someone should pay for it. As far as they are concerned, "lost profits" means someone used a book and no one paid for it, even if the person who used the book wouldn't or couldn't have paid the retail price. Now, they don't care who pays. Indeed, they are fine with libraries paying for licenses to distribute ebooks. But they expect someone to pay.

These "principled" objections to the National Emergency Library and the Open Library are actually objections to the very idea of a library. After all, the primary purpose of a library is to provide free access to books. The horror! Every library patron is a potential paying customer, forever lost. The National Emergency Library and Open Library just make it even easier and more convenient for people to use books for free.

Unfortunately for them, people love libraries. Many who love books spent their childhood in them. So publishers and authors can't criticize libraries, as much as they wish they could. Instead, they tie themselves into knots trying to explain why libraries are good, but digital lending is bad, unless libraries pay exorbitant fees to lend digital copies of books, even though they lend physical copies for free. It makes no sense, until you realize it's just dissembling. Publishers and authors know their audience, and play to its prejudices.

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[7] Brewster Kahle, *The National Emergency Library – Who Needs It? Who Reads It? Lessons from the First Two Weeks*, INTERNET ARCHIVE: BLOGS (Apr. 7, 2020), http://blog.archive.org/2020/04/07/the-national-emergency-library-who-needs-it-who-reads-it-lessons-from-the-first-two-weeks/.

[8] Book sales increased by about 8% in 2021, and ebook and audiobook sales increased by even more. Elizabeth A. Harris, *Surprise Ending for Publishers: In 2020, Business Was Good*, N.Y. TIMES (Dec. 29, 2020), https://www.nytimes.com/2020/12/29/books/book-publishing-2020.html.

Until now. Publishers and authors have lost their patience. They are sick and tired of libraries letting consumers get the goods for free. In a recent op-ed, a Canadian publisher finally said the quiet part out loud: "For their funding, libraries rely on the traffic generated by pimping free entertainment to people who can afford it."[9] In other words, libraries lend popular books to consumers, who might otherwise have purchased them. True! What a travesty. God forbid libraries provide books people actually want to read. But libraries also lend popular books to people who can't afford them and collect books that are out of print. Anything to undercut the market for books, I guess.

At least publishers and authors have become refreshingly transparent about their demands. They want someone to pay whenever someone reads a book. They don't care who pays, so long as someone does. Consumers, libraries, charities, government, whoever. Publishers and authors have come to believe they are entitled to profit from every consumer, no matter what.

So, no more libraries. I mean, the terrible injustice of allowing people to borrow books without paying for them is obvious. Of course, it's ok if the government pays the fare, so long as it pays market rates. After all, justice means property owners collecting every penny of potential profit.

None of this should come as any surprise. As Mike Masnick memorably observed, "If they were invented today, copyright maximalist authors and publishers would *absolutely* scream about libraries and probably sue them out of existence."[10] The time is now. The National Emergency Library is just another library. The only difference is ease of access. Unlicensed digital lending is already in the crosshairs. Are regular lending libraries next?

In any case, on June 1, 2020, a group of publishers sued the Internet Archive for copyright infringement.[11] They allege that the National Emergency Library infringed the copyright in their works by lending them to more than one person at a time. Further, they allege that digital lending itself is infringing.

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[9] Kenneth Whyte, *Overdue: Throwing the Book at Libraries*, GLOBE AND MAIL (July 25, 2020), https://www.theglobeandmail.com/opinion/article-thanks-to-government-funding-libraries-are-poised-to-win-market-share/.

[10] Mike Masnick, *Publisher Decries Damn Libraries Entertaining the Masses Stuck at Home for Free*, TECHDIRT (July 28, 2020 9:33 AM), https://www.techdirt.com/articles/20200727/16343744985/publisher-decries-damn-libraries-entertaining-masses-stuck-home-free.shtml.

[11] *See* Harris, *supra* note 8.

For better or worse, the first sale doctrine provides that a copyright owner's control of a particular copy of work ends when that copy is sold.[12] Anyone who buys a copy of a book can sell, rent, or lend it, without the copyright owner's permission. That's why libraries can lend books. Copyright owners hate it, but them's the breaks.

But copyright owners argue that digital copies are actually illicit reproductions such that lending digital copies is infringement even if the lender owns a physical copy of the book.[13] On their reading, the first sale doctrine only applies to physical copies. That would mean libraries can't create a digital copy of a book without infringing, and certainly can't lend digital copies without permission. In other words, copyright owners hope and believe the transition to ebooks will put paid to libraries.

They may very well fish their wish. The pandemic has certainly hastened the trend toward ebooks, and copyright owners seem to have the courts on their side. While no court has held that digital lending without a license is infringing, it seems inevitable. If and when it happens, it will mean the transformation of libraries from public archives to knowledge pantries. It's already hard to defend libraries from the apostles of efficiency. Forcing them to pay whenever their patrons use a work will only make matters worse.

But libraries can push back. If copyright is a property right, then copyright owners are just landlords, charging people rent in order to use the works they own. Landlords are entitled to charge rent. Yet no one thinks collecting rent is an absolute moral entitlement. Render unto Caesar and all, but sometimes, something's gotta give. Why not rent? And why not copyright as well? After all, copyright infringement is all about claiming and allocating profits, nothing more. Copyright owners are just landlords, and copyright profits are just rent. The law says they're entitled to collect it. But it doesn't oblige anyone to praise or respect them for claiming their pound of flesh.

COPYRIGHT & ITS DISCONTENTS

Since time immemorial, authors and publishers have insisted that copyright is and should be a kind of property, entitled to protection and respect, just like any other kind of property.[14] In the 16th century, the Stationers Company created the idea

[12] 17 U.S.C. § 109 (2018).
[13] *See, e.g.*, Capitol Records, LLC v. ReDigi Inc., 910 F.3d 649, 652-54 (2d Cir. 2018).
[14] *See, e.g.*, Adam Mossoff, *Is Copyright Property?*, 42 SAN DIEGO L. REV. 29, 32 (2005).

of an exclusive right to reproduce a work of authorship.[15] By the 19th century, authors like Balzac and Mark Twain argued that copyright is a natural right that should exist in perpetuity.[16] The 20th century saw the triumph of the Berne Convention and its profoundly moralistic concept of copyright.[17] And who could forget the Motion Picture Association of America's infamous 2004 anti-piracy PSA, which bluntly insisted that "downloading pirated films is stealing."[18] Stealing what? Well, potential profits, obviously. Which are an odd kind of "property," indeed. But don't fight the metaphor. If we call it property, it must be justified, and trespassers must be punished, even if no one was actually harmed.

There are many good reasons to question the property metaphor when it comes to copyright. After all, the primary purpose of property is to allocate scarce goods more efficiently. Property rights enable private parties to bargain for ownership and thereby promote the efficient use of scarce goods. However, because consumption doesn't reduce supply, works of authorship aren't scarce, and so the property metaphor makes little sense. The reason for providing exclusive rights in works of authorship is to encourage people to create them in the first place, not to ensure their efficient allocation. If anything, copyright makes allocation less efficient, by imposing transaction costs. Most public domain works are widely available, but many copyrighted works are almost impossible to find.[19]

So, do we treat copyright like a property right? Most definitely. Should we? Probably not. We conceptualize copyright as a property right not because it promotes copyright policy goals, but because property is a familiar heuristic, and because we are conditioned to believe authors are entitled to own the works they produce. If the purpose of copyright is to encourage the production of works of authorship, then it makes more sense to conceptualize it as a form of competition policy. We should be asking when and why exclusive rights actually encourage authors to produce works of authorship, and structure copyright policy accordingly.

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[15] Chris Dent, *Registers of Artefacts of Creation – From the Late Medieval Period to the 19th Century*, 3 Laws 239, 243-46 (2014).

[16] *See Copyright Act: Hearing on S. 6330 and H.R. 19853 Before the J. Comms. on Patents*, 59th Cong. 116-121 (1906) (statement of Samuel L. Clemens); Honoré de Balzac, *Lettre Adressé Aux Écrivains Français du XIXe Siècle [Letter Addressed to French Writers of the 19th Century]*, 11 REVUE DE PARIS, 1834, at 62.

[17] WORLD INTELLECTUAL PROP. ORG., GUIDE TO THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS 41-44 (1978).

[18] *See* PIRACY. IT'S A CRIME. (Motion Picture Association of America 2004).

[19] *See, e.g.*, Paul J. Heald, *How Copyright Keeps Works Disappeared*, 11 J. EMPIRICAL LEGAL STUD. 829, 829-66 (2014).

But that's water under the bridge. We do think of copyright as property, and we aren't going to stop. So we might as well ask what it means. If copyright is property, then how should we think about copyright owners and the justification of their claims? Well, copyright owners let other people use their property in exchange for a fee. In other words, if copyright is property, then copyright owners are landlords, and their profits are rent.

There's nothing wrong with landlords. We need people to invest in the creation and maintenance of property, including intellectual property. If building owners are entitled to rent out housing, then copyright owners are entitled to rent out works of authorship. But there's nothing morally special about landlords, either. No one thinks that building owners are doing their tenants a favor by renting them an apartment. And no one should think that copyright owners are doing the public a favor by renting them works of authorship. The law gives property owners the right to charge rent, but that's it. So when copyright owners claim copyright infringement violates their moral right to get paid maybe we should say, "Ok, landlord," and take their claims with a grain of salt.

COPYRIGHT THEORY

There are as many theories of copyright as there are copyright scholars, and then some. If you ask two copyright scholars to explain the justification for copyright, you'll get at least three opinions. Every copyright scholar has at least one theory of copyright they accept, and a congeries of alternatives they can't abide.

Among many other things, copyright scholars disagree about whether copyright is a property right or a regulatory right. Typically, scholars who like copyright think it is a property right, and scholars who dislike copyright think it is a regulatory right. But their disagreement is metaphorical. Or rather, it is a disagreement about which metaphor should govern copyright doctrine: property or regulation.

THE ECONOMIC THEORY OF COPYRIGHT

The prevailing theory of copyright is the economic theory, which holds that copyright is justified because it solves market failures in works of authorship caused by free riding. In the absence of copyright, works of authorship are pure public goods, because they are perfectly non-rival and non-excludable. Works of authorship are perfectly non-rival because consuming a work doesn't reduce the supply of the work. Particular tangible copies of a work are rivalrous, but the intangible work of authorship itself is not. And in the absence of copyright, works of authorship are

non-excludable, because no one can stop anyone else from using the work once it is published.

Neoclassical economics predicts market failures in public goods caused by free riding. Essentially, no one will produce public goods, because no one will pay for them. Producers typically only make things that they can sell, but consumers won't buy public goods that they can consume for free. Accordingly, we should expect a shortage of public goods, because consumers won't pay the marginal cost of production.

In theory, copyright can solve that market failure by making works of authorship excludable. Copyright gives authors certain exclusive rights in the works of authorship they create, and enables them to transfer those rights to others. Or rather, copyright means that consumers have to pay to use works of authorship. So, by hook or by crook, authors also get paid, and produce more works of authorship.

The economic theory of copyright is plausible, and surely has at least some explanatory value. After all, no one would invest millions of dollars into producing a motion picture unless they expected to profit by selling it.[20] But it also has many weaknesses.

For one thing, copyright ownership simply isn't a salient incentive for many of the authors who receive it. After all, copyright automatically protects every "original work of authorship" the moment it is "fixed in a tangible medium," with a comically low bar for originality. As many commentators have ruefully observed, according to the Supreme Court, copyright appears to protect everything but telephone books and snow shovels.[21] But stay tuned for additional exceptions the next time the Supreme Court bothers weighing in on copyright.

In other words, copyright automatically protects every letter you write, every to-do list you make, every doodle you draw, every snapshot you take, every email you draft, every status update you post, every tweet you send, and every Instagram photo you share. But no one does any of those things because they want to own a copyright. They do them for the sake of themselves. The copyright is merely incidental. Indeed, most people don't even realize that they are creating a torrent of copyrighted works every day. I call this the "dark matter" of copyright, the 99.99+%

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[20] *But see, e.g.*, Collis Clark, *The Crazy Cult of The Room*, ENT. WEEKLY, Dec. 19, 2008, at 32, 33-34 (stating that the author of The Room spent $6 million to create a movie, yet everyone involved was aware of the poor quality).

[21] *See*, Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 363-64 (1991); Star Athletica, LLC v. Varsity Brands, Inc., 137 S. Ct. 1002, 1013, 1038 (2017).

of copyrighted works of authorship that no one cares about, not even their own author.[22] If the purpose of copyright is to encourage the production of works of authorship by providing an economic incentive, surely it shouldn't protect works that don't require an incentive in the first place.

For another thing, even when copyright is a salient incentive, the scope and duration of copyright protection is unrelated to the incentive required. Copyright gives all copyright owners essentially the same exclusive rights and the same term, irrespective of the incentive they needed to create the work. Copyright does protect different categories of works in slightly different ways. But if the purpose of copyright is to give authors salient incentives to create works of authorship, one would expect at least some tailoring of the exclusive rights and term, depending on the nature of the work, in the interest of efficiency. Ideally, individual authors would only receive the rights and term they actually needed in order to produce each work. While such fine-grained tailoring of copyright protection is obviously impractical, in practice we see no tailoring at all, which is peculiar, because at least some tailoring is possible. For example, there is no reason to believe that all works need the same copyright term. The current term of the life of the author plus 70 years is excessive for all works.[23] But it is comically excessive for works that will be obsolete within a matter of years, like computer programs.

Finally, it is increasingly clear that copyright isn't a salient incentive to many authors,[24] even though other things are.[25] Artists typically sell unique objects and rely on scarcity, rather than copyright. They respond to economic incentives, but not the ones provided by copyright. As in many discursive communities, the salient incentive is attribution, not exclusive rights. For example, in the "academic gift economy," scholars are delighted when someone reproduces their work or uses their idea, but only if they receive credit. In academia, citations are the coin of the realm, and academics expect to get paid.

On reflection, one begins to suspect that the economic theory of copyright shares a feature common to many theories propounded by neoclassical economics:

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[22] *See, e.g.*, Christopher Sprigman, *Reform(alizing) Copyright*, 57 STAN. L. REV. 485, 489-90 (2004).

[23] *See, e.g.*, Kristelia A. García & Justin McCrary, *A Reconsideration of Copyright's Term*, 71 ALA. L. REV. 351, 373-74 (2019) (finding that empirical studies show that most creative works earn most of their lifetime revenue in the first decade after publication).

[24] *See* Amy Adler, *Why Art Does Not Need Copyright*, 86 GEO. WASH. L. REV. 313, 322-24 (2018).

[25] *See generally* JESSICA SILBEY, THE EUREKA MYTH: CREATORS, INNOVATORS, AND EVERYDAY INTELLECTUAL PROPERTY, 9-10, 15-16 (2015).

It works perfectly in theory, but utterly fails in practice. Or rather, the economic theory of copyright beautifully explains how to create an efficient copyright policy, assuming economically rational authors and no transaction costs. But the economically rational author is a rare bird indeed, and transaction costs are omnipresent, especially because no one can confidently predict what consumers will like, let alone what they will love. Moreover, nothing suggests that the economic theory had any impact whatsoever on our actual copyright policy. On the contrary, Congress just pretended to deliberate, and then copied the Berne Convention.[26]

The dirty secret is that copyright reflects economic policy, even if it doesn't reflect the economic theory. It's just that the policy in question is driven by rent seeking, not efficiency. Copyright exists for the benefit of copyright owners – nominally authors, but actually publishers – who use it to extract rents from consumers. They always want more copyright, because you never know where a rent will materialize. And they are horrified by the very premise of the economic theory. After all, they don't want copyright to be efficient, that means less rent. They want copyright to be as inefficient as possible, because a consumer's inefficiency is a publisher's profit.

MORAL THEORIES OF COPYRIGHT

But there's more to the story. While the economic theory is prevailing among academics, judges don't take it seriously, lawyers ignore it, and the public has never heard of it. Mind you, judges are always careful to pretend that copyright reflects the economic theory. You know the drill: Congress in its infinite wisdom carefully evaluated its policy choices and made these decisions, which we are duty-bound to accept as legislative facts.[27] Similarly, lawyers deploy the economic theory, if they think it will help their case, but it's always a supplemental argument, unless they don't have anything better.

Realistically, copyright policy is justified primarily by moral intuitions about authorial ownership, based on social norms that developed in relation to economic interests.[28] The concept of authorship has existed since time immemorial. But it has meant many very different things at different points in time. Before the invention of

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[26] See H.R. REP. NO. 94-1476, 2d Sess., at 133-136 (1976) (explaining that the Copyright Act of 1976 adopted many key features of the Berne Convention, including relaxing formalities and extending duration to the author's life plus 50 years. In doing so, it copied the language of the Convention nearly verbatim).

[27] *See* Eldred v. Ashcroft, 537 U.S. 186, 205, 208, 212, 222 (2003).

[28] *See generally* Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745, 1753-1759 (2012).

the printing press, authorship only mattered if it generated patronage or prestige, because reproducing works was almost as costly as creating them. Accordingly, authorial ownership was limited to attribution. The printing press increased the value of authorship by decreasing the cost of reproduction. Suddenly, authorial ownership expanded to include reproduction. And as the economic significance of works of authorship has increased, the scope of copyright protection has increased as well.

The real problem is the public. Everyone knows the public is ignorant of and indifferent to the economic theory. Hell, the public is ignorant of and indifferent to copyright. Most people think authors are and should be entitled to control the use of the works they create, because they created them. That's it. They don't care about whether copyright provides a salient incentive to create new works. They don't care about whether copyright is efficient. They only care about what is right and what is wrong. Or rather, they only care about what they understand to be right and wrong, based on the social norms defining authorial ownership they learned and accepted.

Anyway, the public doesn't know or care what copyright says or does. It only cares about what is right. Or rather, people care about what they think is right, based on the social norms about authorial ownership and control they have internalized. Those norms have nothing to do with what the law actually says, and everything to do with social expectations. To put it another way, most people have no idea what copyright protects or prohibits. But they know a norm violation when they see one, and are always eager to punish them.

Copyright owners are plenty smart enough to recognize a good thing and take full advantage of it. And social norms about authorial ownership are about as good as it could get for them. As a general rule, the public loves authors of every stripe, and sympathizes with their interests. Whether it's novelists, musicians, or painters, fans almost reflexively condemn any perceived norm violation and are prepared to punish it. What's more, fans effectively let professionals define the ownership norms governing themselves. In other words, discursive communities are typically self-regulating, and enlist fans to enforce their rules.[29] Among other things, fans often create their own norms governing fan culture, which may themselves permit certain kinds of copyright infringement. But this is generally seen as acceptable, so long as the uses in question are non-commercial, irrespective of whether they are technically infringing.[30]

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[29] *See, e.g.*, Adler, *supra* note 24, at 342 (2018).

[30] For a Coasean justification of fan works as fair use, see F.E. Guerra-Pujol, *Of Coase and Copyrights: The Law and Economics of Literary Fan Art*, 9 N.Y.U. J. INTELL. PROP. & ENT. L. 91 (2019).

Copyright owners rely on these social norms to enforce the shadow law of copyright, which is rooted in moral intuitions, not consequentialist predictions. Despite the nominal dominance of the economic theory, copyright as actually practiced is controlled by social norms based on beliefs about the moral justification of authorial ownership and control. Members of a discursive community avoid violating those norms, for fear of censure. Violators typically repent when confronted. Infringement actions typically settle, irrespective of their merits, in part because norm violators know that juries are likely to find liability, even in the absence of actual infringement. And even judges are inclined to weigh the "good faith" of an alleged infringer when evaluating an action. Infringement actions are a sucker's game, because the dice are loaded.

COPYRIGHT AS PROPERTY

The common law loves metaphors, and copyright is no exception. For better or worse, copyright rhetoric is steeped in metaphor.[31] And the most important metaphor for copyright owners is "property." Copyright owners want copyright to be property, or at least to be conceptualized by the public as a form of property, because people not only understand how property works, but also have strong intuitions about why infringing property rights is bad.

If copyright is property, then copyright owners are entitled to determine how their works are used. As Blackstone famously observed, property is "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe."[32] Of course, what is given can always be taken away. Just as Blackstone went on to describe the countless limits on property rights, so too does the Copyright Act grant exclusive rights, only to list a congeries of exceptions.

Many scholars have resisted the property metaphor, as applied to works of authorship. They argue that exclusive rights in intangible goods have no relevant similarities to physical ownership of tangible goods. After all, people typically conceptualize property as land and things: rivalrous, tangible, and excludable. By contrast, a work of authorship has none of those qualities. It is perfectly non-rival, intangible, and partially excludable only because the law makes it so. Why should we use the property metaphor for works of authorship, if it isn't a helpful analogy for the actual, relevant qualities we want to describe? Perhaps a better analogy is to

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[31] *See, e.g.*, Brian L. Frye, *IP as Metaphor*, 18 CHAP. L. REV. 735 (2015); David A. Simon, *Analogies in IP: Moral Rights*, 21 YALE J. L. & TECH. 337 (2019).

[32] 2 WILLIAM BLACKSTONE, COMMENTARIES *329.

regulatory rights, which manage competition by determining who can participate in a market and how they can compete.

And yet, the concept of property is readily abstracted to include the exclusive rights in works of authorship provided by copyright. After all, if property is really just the nexus of contract and tort, then it can readily accommodate copyright, which is also just contract and tort, sprinkled with the pixie dust we call "creativity." The "new property" is large; it contains multitudes of rights. But is such abstraction conceptually helpful, especially if the property metaphor encourages the public to accept other metaphors that are actively misleading?

For example, copyright owners often characterize copyright infringement – or really, any unauthorized use, whether or not actually infringing – as "theft." As a rhetorical move, it makes perfect sense. People understand the concept of theft and believe it is wrong. If copyright infringement is theft, then by extension, it must be wrong as well.

But the theft metaphor neither describes what happens when the copyright in a work of authorship is infringed, nor accurately characterizes the nature of the alleged harm. When physical property is stolen, the original owner is harmed by losing possession of it. If someone steals your wallet, they have your wallet and you don't. But when someone infringes the copyright in a work of authorship, they don't deprive the copyright owner of the work or the ability to use the work. On the contrary, they are depriving the copyright owner of a potential sale of a copy of the work, or at worst, unfairly competing with the copyright owner, by selling or otherwise distributing copies of the work without permission.

Now, copyright infringement may very well be wrongful and socially harmful. But it isn't theft in any meaningful sense. And calling it theft is unhelpful and confusing. Consumers are inclined to think theft is bad, so if copyright infringement is theft, it must also be bad. Yet, when you tell consumers what copyright infringement actually entails, they find it puzzling, because it includes activities they engage in all the time, without realizing they are unwitting infringers. Making a mixtape for your friend? Copyright infringement. Playing a radio in a coffee shop? Copyright infringement. Making photocopies of an article? Copyright infringement. Posting a photograph from the internet to social media? Copyright infringement. Suddenly, people are confused. How is this theft?

COPYRIGHT OWNERS AS LANDLORDS

Nevertheless, for the purpose of this essay, I will accept the property metaphor. If copyright owners want to use it so badly, then let them own it. Let us

assume that copyright owners are indeed property owners. What kind of property do they own? If we are going to use property metaphors for copyright owners, what kind of property owners are their analogues?

The obvious answer is: landlords.[33] Landlords own real estate in order to generate a profit by renting it to others who need a place to live. Landlords don't want to use their property themselves. On the contrary, unless someone else is using their property, landlords aren't generating any revenue. Landlords don't benefit by using the property they own, they benefit from the revenue that property generates in the form of rents.

Likewise, copyright owners own copyrights in order to generate a profit by renting works of authorship to consumers. You don't need to own the copyright in a work of authorship in order to consume it, you just need the permission of the copyright owner. Copyright has economic value only because it enables copyright owners to generate revenue by renting works of authorship to people who want to consume them. If no one rents a work of authorship, then it isn't generating any revenue. Copyright owners are analogous to landlords because they own a (potentially) valuable capital asset and generate revenue by collecting rents from its consumption. Indeed, the analogy is delightfully apt because the congruence is so obvious, once observed.

There are certain differences, but they are insubstantial. Quibblers will surely object that landlords rent housing to tenants, but copyright owners sell copies of works of authorship to consumers. But as an economic matter, these are identical. When copyright owners sell a copy of a work of authorship, they are really just renting the work for the life of the copy. That may well be a long time, but if copyright has taught us anything, it's the malleability of the concept of "limited times."[34]

Moreover, in our digital era, it is increasingly the case that copyright owners do not sell copies of works at all, but rather license the right to use them. By their own insistence, when copyright owners license a digital work to consumers, it is emphatically not a sale, and we know it isn't a sale because the first sale doctrine doesn't apply.[35] Copyright owners often generate much of their revenue from

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[33] *See, e.g.*, Brian L. Frye, *Ok, Landlord: Copyright Profits Are Just Rent*, JURIST (Apr. 8, 2020), https://www.jurist.org/commentary/2020/04/brian-frye-copyright-profits/.

[34] *See, e.g.*, Eldred v. Ashcroft, 537 U.S. 186 (2003) (implying that any fixed term of years is a "limited time").

[35] *See* Capitol Records, LLC v. ReDigi Inc., 910 F.3d 649, 659 (2d Cir. 2018).

licenses, which are just rents collected from people who want to use a particular work.

Indeed, conceptualizing copyright owners as landlords collecting rent on a capital asset is entirely consistent with the economic theory of copyright. Recall, under the economic theory, copyright is justified because it encourages authors to invest in the production of works of authorship by giving them certain exclusive rights to use those works of authorship. In other words, copyright provides an incentive to create works by giving authors the right to collect rents on the works they create, or transfer them to others who will. This is directly analogous to the housing market.

After all, how does the housing market work? In a nutshell, some people can build housing, some people have capital to invest, and some people need someplace to live. The people with capital pay the people who can build housing, and either rent the housing or sell it to those who will. Likewise, authors can make works of authorship, publishers have capital, and consumers want to consume works of authorship. The publishers pay authors to create works of authorship, and rent those works to consumers. It is exactly the same model, just adapted for a different product.

Landlords and copyright owners confront different risks. But not as different as you might think. Everyone needs housing. But no one necessarily wants to rent the housing you have on offer, or wants to pay a price that will be profitable. Likewise, everyone wants to consume works of authorship. But no one necessarily wants to consume the work of authorship you happen to own, or wants to pay the price you are asking for it.

The one great advantage of copyright ownership is that intangible works of authorship don't require maintenance in the traditional sense. Landlords must continually invest in the upkeep of their property, or it will deteriorate and lose value. A work of authorship is like a diamond, impervious to the passage of time. A copyright owner who owns a valuable work of authorship need do nothing but sit idly by and watch the rents roll in. Just as jewelry may become unfashionable and lose value, so too may a work of authorship fall out of favor and stop generating rents. But a copyright owner can always just wait for the last trickle of rents to peter out, and then ignore a work, letting it sit idle on the off-chance it someday comes back into style. Sure, copyright owners may voluntarily invest in the promotion of a work, in the hope that their investment will pay off in additional revenue. But there is no obligation to do so, and copyright owners can cut bait at any time. Indeed,

publishers are notoriously indifferent to sunk costs. If a work isn't producing, forget it, they are a dime a dozen.

Yes, copyright owners face considerable risk in predicting whether a particular work will be popular and profitable. But if that is a concern, they can always invest in works that have already proven themselves. Sure, they will be more expensive, but any sure thing always is. And yet, publishers continue to invest in speculative works. Why? Presumably, because they can purchase them on favorable terms. Authors are plentiful, but capital is not. Buy low, sell high has always been a winning strategy, in publishing as elsewhere.

THE LANDLORD METAPHOR

So, what's the problem? The landlord metaphor for copyright owners seems like a strong analogy with considerable explanatory punch. It's perfectly consistent with the economic theory of copyright, and seems to explain quite nicely how copyright owners actually use their property. Who would object to it, and why?

Well, as you'll recall, the shadow theory of copyright is a moral theory. We say the economic theory is the prevailing theory, but we don't really mean it. The real reason people believe in the legitimacy of copyright is because of their moral intuitions. Or rather, different people have different moral intuitions, depending on their role in the copyright market, but all of those intuitions converge to legitimate copyright ownership as a moral value.

Authors believe that copyright ownership is justified, because they ought to be able to control and profit from the use of the works they created. As I have observed, everyone believes in the legitimacy of the kind of property they hope to own, even if they don't believe in any other kind. After all, even Karl Marx believed in literary ownership, and self-professed Marxists are happy to righteously assert copyright ownership, even as they decry every other kind of property.[36]

Why? Most authors seem to have internalized a version of the Kantian idea that a work of authorship is an expression of the author's identity and autonomy, so authors are entitled to control the use of the works they create, in order to preserve the integrity of their personhood. In practice, authorial intuitions about the legitimacy of ownership claims and expectations about the scope of control authors are entitled to exercise over the use of the works they create tends to track the social norms of the discursive community in which an author typically participates. When

[36] *See, e.g.*, Ben Mauk, *Steal This E-Book?*, NEW YORKER (May 5, 2014), https://www.newyorker.com/business/currency/steal-this-e-book.

an artist copies an advertisement, it's celebrated as witty appropriation, but when an artist copies another artist, it's decried as plagiarism. What a coincidence.

Some more cynical authors also seem to have internalized a more Lockean theory of copyright ownership, under which their right to control the use of the works of authorship they created is based on the fact they created the work in the first place. "If I made it, it's mine," as it were. The circularity of this proposition is largely ignored. After all, once a work of authorship exists, it could just as well belong to everyone. The only thing authors are really claiming is a share of the positive externalities associated with the work, not the work itself.

Copyright owners, typically publishers, have an even more cynical take on copyright ownership. From their perspective, a work of authorship is simply a capital asset, which produces revenue. They invested in the work for the purpose of claiming the revenue it generates, and that's justification enough. Copyright secures their investment, by ensuring they can compel consumers to pay and can prevent unfair competition. One need not have any particularly exalted perspective on the moral legitimacy of copyright to hold this view. Dollars and cents are enough.

The weak link is consumers, who ultimately bear all of the costs, hopefully in exchange for some of the reward. The economic theory says consumers benefit from copyright protection, because copyright encourages marginal authors to produce the works of authorship that consumers want to consume, and in the absence of copyright, cultural production would be impoverished. But the economic theory bears little relation to reality. While it tells a neat and tidy economic story, imagines the facts necessary to make that story work. In practice, the scope and duration of copyright protection, and the actual function of the markets for copyrighted works of authorship, has no relationship to marginal incentives. Nor has there ever been any effort, or even intention, of structuring copyright to reflect marginal incentives. In practice, the economic theory is pure make-believe, with no meaningful relationship to how any of this actually works.[37]

The reality is that consumers accept the legitimacy of copyright ownership because they too believe the moral stories that authors tell about the justification of copyright. Authors insist that they should be able to control how the works they create are used, and object to uses they dislike. Consumers admire authors, and despise anyone who displeases the authors they idolize. So consumers are inclined to accept the legitimacy of the justifications authors offer for copyright ownership, just as they are inclined to accept the legitimacy of anything else their idols say.

[37] *See generally* SILBEY, *supra* note 25.

When Taylor Swift complains about people doing her wrong by using her songs in ways she disapproves, the Swifties have her back. And the same is true of any other author. After all, plagiarism norms are just the most vigorous expression of the norm that authors have a moral right to control how people use the works they create.

But no one likes landlords. At best they are tolerated, and at worst, they are despised. For better or worse, among working people, "landlord" has always been a term of opprobrium, used to identify those who profit from capital, rather than from labor. Workers get wages for their labor, which landlords extract as rent.

No one wants to be called a landlord, in part because it is perceived as a sotto voce insult, and in part because it makes it harder to argue for the legitimacy of your claims to compensation. Or at least harder to make claims that people are inclined to take seriously and give moral force. As a consequence, people consciously avoid the term "landlord" and seek more anodyne alternatives. For example, the Small Property Owners Association created its delightfully cynical name explicitly in order to avoid the term "landlord."[38]

Why does this matter? Well, if consumers come to see copyright owners as landlords, they might well be inclined to take their moral claims less seriously. After all, everyone knows they have to pay rent to the landlord. But few consider it a moral obligation. You pay the rent because you need a place to live, not because you are grateful to the landlord for providing it to you. On the contrary, you expect to get what you pay for, and if the landlord starts getting grabby or fails to hold up their end of the bargain, no one is reluctant to complain or cuss them out.

I am not casting aspersions on landlords, although others might.[39] For better or worse, landlords play an important role in our economic order. We need them in order to maintain the liquidity of the housing market, and they use capital to take risks and generate profits just like any other investor.

But landlords aren't special. And if consumers come to see copyright owners as landlords, they might come to see copyright as not being special either. Or rather, works of authorship are special and valuable, in the same way that having a place to live is special and valuable. But rent is not special and valuable, and neither is the kind of control that accompanies landlordism.

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[38] *About SPOA*, SMALL PROP. OWNERS ASS'N, https://spoa.com/about-spoa/.

[39] *See, e.g.*, Mike Overby, *Copyright Holders Are Landlords and it's Not OK*, (June 26, 2020), https://ssrn.com/abstract=3637125.

If authors and copyright owners want to continue to rely on the shadow theory of copyright based on moral rights, they have to make sure that consumers continue to take those moral rights seriously. They better keep up the façade. The more people start to see copyright owners as landlords, the harder it will be.

LITERARY LANDLORDS IN PLAGUETIME

Let us return to the copyright infringement action against the Internet Archive and the National Emergency Library. The pandemic created a need for access to books, and the National Emergency Library stepped in to fill it. There is an ongoing need for access to books, and the Internet Archive helps satisfy it. Both solve real and pressing problems.

Does it matter? Who knows. The awkward question is whether the publishers have viable copyright claims. As much as it pains me to say it, the answer is probably yes. The Internet Archive at least has a variety of defenses, including fair use, which seems like it ought to enable libraries to continue lending books digitally, when they can't do it physically. But the National Emergency Library is at least arguably liable for copyright infringement, based on the letter of the law.

But what about the optics? Do the publishers really want to pursue an action against a library for doing what a library does? Do they really want to insist on asserting vast statutory damages when they know perfectly well that they didn't actually suffer any real economic damages? Do they really want to make a stand on the principle that libraries are bad, because they prevent copyright owners from extracting every last cent of profit from consumers?

If publishers really want to punish the Internet Archive for creating the National Emergency Library and stop the Open Library from lending ebooks without a license, they may very well succeed. It's unlikely the public would even notice. After all, the purpose of the Internet Archive is to preserve things most people don't care about.

And yet, copyright owners have been singing their siren song of moral justification for so long, they've enraptured themselves. They've become oblivious to their own venality and hypocrisy, unselfconsciously justifying their right to claim every last crumb of potential profit as not only their legal right, but a kind of moral duty. It doesn't matter how much the public benefits, unless the copyright owner gets paid.

That kind of hubris is always a little risky. For the moment, the public is team copyright. But that could change if copyright owners push their luck. So far, the

public has more or less bought the copyright story. It's an attractive one, protecting beleaguered authors from rapacious pirates. But the public can be fickle, especially when it's inconvenienced.

People seem to love the idea of copyright, even if they don't really understand how it works. But they also love the idea of libraries, even if they don't really use them. Copyright owners seem to be gearing up to go after libraries in general, looking to squeeze every cent they can from their literary property. I wonder if they are getting a little too close to the sun. Before they throw libraries into the briar patch, they better reflect on whether it'll cause the public to get its eyes scratched in again.

CONCLUSION

If you live by the metaphor, you die by the metaphor. The landlord metaphor is dangerous for copyright owners, because it's so cutting. When you respond to a wounded copyright owner's infringement complaint by saying, "Ok, landlord," they are offended and appalled. Why? Maybe because you're telling the truth, and they dislike how they look in the mirror.

Ultimately, copyright policy is a story about politics and ideology. Copyright owners have convinced themselves that they are in the right and morally pure. But maybe they are victims of their own myopia? After all, landlords also see themselves as in the right and morally pure. The only problem is that most of the public disagrees. No one loves a landlord. At best, they are a necessary evil.

By contrast, the public loves copyright owners. Or at least it loves authors, and copyright owners are close enough. But the public is fickle and easily disappointed. There's no guarantee it will love you tomorrow. And no one is more despised than a disgraced hero.

Copyright owners have claimed the moral high ground for so long, they think it's the shore, and always want more. Often, they still succeed. But the public is finally getting skeptical, especially when copyright owners object to people using works in familiar ways. It's easy to convince people that *others* are doing something wrong. It's hard to convince them that they themselves are doing something wrong. As copyright owners increasingly find themselves at odds with the public, the tide may eventually turn.

Nothing will destroy copyright's goodwill faster and more decisively than copyright owners going after libraries. Everyone loves libraries, even if they never use them. And the people who love authors the most are also the people who love

libraries the most. Up until now, the public has been convinced that loving authors means loving copyright. But they could be dissuaded, especially if they realize that copyright owners see libraries as nothing more than a source of revenue.

Apparently, copyright owners don't care. The National Emergency Library was the first casualty in a war they seem determined to fight. The Open Library is next. After that, why not every other library? After all, they're in the same business, giving the public free access to copyrighted works of authorship. Copyright owners think that's just plain wrong. Sure, they want people to have access to their works, but more importantly, they also want everyone who consumes a work to pay for it. As far as they are concerned, every time someone uses a library copy of a work, they lose a sale, and that's a terrible shame.

Copyright skeptics should welcome this fight, because copyright owners are leading with their chin. They've relied on public goodwill for so long that they've come to take it for granted. That's a mistake. The public doesn't love copyright, it loves authors. It won't take long for people to realize that objections to libraries have nothing to do with protecting authorship, and everything to do with making sure the public pays as much as possible for the works they crave. And when they do, it'll be game over for copyright owners.

The public has long embraced copyright landlords, transfixed by their siren song of authorship and morality. But copyright's sweet melody is hitting some sour notes, and people are noticing. Going after libraries will produce a dissonance no one can ignore. And yet, copyright owners don't seem to care, or even realize their peril.

I think it's all for the best. It's high time for rethinking copyright policy, in light of technological change. For better or worse, people need to use metaphors in order to talk about policy. Most copyright metaphors flatter copyright owners. The landlord metaphor is important, because it's both accurate and unflattering. Maybe it's time copyright owners got a taste of their own metaphorical medicine. Copyright policy would be better for it.

They defied the landlords. They defied the laws.
They were the dispossessed, reclaiming what was theirs.[40]

[40] LEON ROSSELSON, *The World Turned Upside Down, on* THAT'S NOT THE WAY IT'S GOT TO BE (Acorn Records, 1975).

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RISKY BUSINESS: FRAUD, AUTHENTICITY, AND LIMITED LEGAL PROTECTIONS IN THE HIGH ART MARKET

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> Heus, tu insidiator, ac alieni laboris et ingenii surreptor, ne manus temerarias his nostris operibus inicias cave. Scias enim a . . . nobis concessum esse ne quis suppositiciis formis has imagines imprimere, seu impressas per imperii limites vendere audeat; [qui] per contemptum seu avariciae crimen secus feceris, post bonorum confiscationem tibi maximum periculum subeundum esse certissime scias.†

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† "Woe to you, ambusher of other people's labor and talent. Beware of laying your rash hands on our work. Do you not know what . . . has [been] conceded to us? – that no one shall be allowed to re-print these pictures from spurious blocks, nor sell them within the imperial realm. And if you do so, through spite or covetousness, not only will your goods be confiscated, but you will also

The art market is a high-risk industry in which authentication is the sina qua non of merchantability. In an era of increasing market valuations and ever-growing demand for fine art—either for the status it confers on its owners or its investment value—authentication is the art collector's most frequent stumbling block. Recently, authentication technology has become incredibly sophisticated, enabling scientists and historians to authenticate works based on minutiae as discrete as the lead in white paint or the weave of an individual bolt of canvas. Simultaneously however, savvy art forgers are developing new ways to evade detection, through both artificial intelligence and already-present weaknesses in the market. Nevertheless, American law has lagged behind in providing adequate protections for buyers. Existing protections—a patchwork of contract, tort, and state statutory provisions—are incomplete and leave buyers bearing the risk of purchasing a forgery.

This Note examines the art market's reliance upon authentication as the most significant indication of value in a work; provides an overview of the risks associated with authentication; and considers the rights, obligations, and remedies when an owner of art—be it an individual, a gallery, or a museum—discovers that the art he or she owns is a forgery or a fake. This Note then examines the role of artificial intelligence and blockchain technology in both ensuring authenticity and creating further problems for the provenance of presently unauthenticated works. Analysis also examines the current allocation of risk between buyers, sellers, and authenticators. Finally, the Note considers the ethical and normative obligations of collectors of fine art.

Ultimately, this Note demonstrates the extent to which authentication is a double-edged sword. On one hand, authentication drives up the value of paintings, creates publicity that benefits owners, and adds prestige to institutions and individuals whose art has been authenticated. On the other hand, authentication can destroy the value of an artwork just as easily as it can bolster it, with risks ranging from situations where the mere question of a work's authenticity makes it impossible to sell, to situations where authentication leads to a legal duty to destroy the work in question upon proof that it is a forgery. While technology can streamline, reinforce, and guarantee the authenticity of a work, it can also create the opportunity for

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find yourself in the greatest danger." *Imperial Privilege for Albrecht Dürer, Nuremberg (1511)*, PRIMARY SOURCES ON COPYRIGHT (1450-1900), (Lionel Bently & Martin Kretschmer eds.), (Germanisches Nationalmuseum trans.), http://www.copyrighthistory.org/cam/tools/request/showRepresentation.php?id=representation_d_1511b&pagenumber=1_1&imagesize=middle (last visited Mar. 20, 2021); *see also* JOHN JACKSON ET AL., A TREATISE ON WOOD ENGRAVING: HISTORICAL AND PRACTICAL (Project Gutenberg 2d ed. 2013) (1848) (ebook). This is one of the first recorded copyright warnings, first printed in 1511. JOHN JACKSON ET AL., A TREATISE ON WOOD ENGRAVING: HISTORICAL AND PRACTICAL (Project Gutenberg 2d ed. 2013) (1861) (ebook). The warning was directed against Venetian forgers like Marcantonio Raimondi, who illicitly re-created Albrecht Dürer's woodcuts. *See* 6 GIORGIO VASARI, LIVES OF THE MOST EMINENT PAINTERS, SCULPTORS AND ARCHITECTS, 96 (Gaston du C. de Vere trans., Project Gutenberg 2009) (1913) (ebook).

nefarious actors to perpetrate fraud on a massive scale. Until the art market adapts ways to address these risks, the old adage of caveat emptor—buyer beware—will continue to be the hallmark of the market.

INTRODUCTION

The most expensive painting in the world is missing.[1] Once considered lost, Leonardo da Vinci's masterpiece, *Salvator Mundi* (*Christ as Savior of the World*),

[1] Jonathan Jones, *The da Vinci Mystery: Why is His $450m Masterpiece Really Being Kept Under Wraps?*, GUARDIAN (Oct. 14, 2018), https://www.theguardian.com/artanddesign/2018/oct/14/leonardo-da-vinci-mystery-why-is-his-450m-masterpiece-really-being-kept-under-wraps-salvator-mundi.

was authenticated in 2008 and exhibited at The National Gallery, London in November 2011.[2] Since 2011, the panel painting underwent significant conservation and analysis by da Vinci experts.[3] As far as all were concerned, "it was indeed a Leonardo masterpiece, which would make a valuable addition to the hitherto 14 known Leonardo oil paintings."[4] The panel's provenance dates back to 1649, when it was recorded in the art collection of King Charles I of England.[5] The painting later became part of the Duke of Buckingham's collection.[6] After a 1763 auction, the painting disappeared until 1900, when it reappeared "poorly blemished and disfigured" in the property of a Sir Frederick Cook.[7] In the 1950s, it was sold by one of Cook's descendants to an American collector for approximately $60, where it was described as a copy of *Salvator Mundi* completed by one of da Vinci's students.[8] In 2005, the painting was brought to an art historian for research, and in 2007, renowned conservator Diana Modestini took over conservation of the work.[9] Post-restoration, the painting appeared to be of "astonishingly high quality[.]"[10] In particular, "the uncovering of *pentimenti* indicating that Christ's thumb had a more upright position than in the completed artwork[,]" i.e., a trace of an earlier painting between layers of paint, and examination by infrared reflectography served as sufficient grounds for da Vinci specialist Martin Kemp to authenticate the work.[11] After six years of significant restoration efforts, the painting was sold in an auction at Christie's on November 15, 2017.[12] Bidding "rapidly escalated to a final $450.3 million . . . followed by applause from people in the auction house cheering this historic purchase[,]" which made it the most expensive painting ever sold.[13]

Despite uncertainty over who purchased the painting—it is believed to have been purchased by a Saudi Prince connected to the royal family[14]—news coverage

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[2] *Id.*

[3] *See* JEHANE RAGAI, THE SCIENTIST AND THE FORGER: PROBING A TURBULENT ART WORLD 65 (World Scientific Publishing Europe Ltd., 2d ed. 2018).

[4] *Id.*

[5] *Id.* at 66.

[6] *Id.*

[7] *Id.*

[8] RAGAI, *supra* note 3, at 66; *see also* Sara Friedlander, *Salvator Mundi*, CHRISTIE'S https://www.christies.com/en/lot/lot-6110563 (Mar. 21, 2021) (describing past sales for *Salvator Mundi*, including a 1958 sale in London for £45).

[9] RAGAI, *supra* note 3, at 66.

[10] *Id.*

[11] *Id.*

[12] *Id.*

[13] *Id.* at 67.

[14] *Id.*

of the purchase unanimously agrees on two details: first, the painting was slated to be the crown jewel of the new Louvre Abu Dhabi museum,[15] and second, the painting's attribution and authentication were questionable at best even before the painting was sold at the Christie's auction.[16] After the painting's sale, these doubts gained traction across news cycles worldwide, and the painting went dark; it has not been publicly exhibited since its 2017 sale.[17] Such is the power of authentication in the art market: the price of a painting can balloon from $60 in 1958 to $450.3 million in 2017, and then lose legitimacy overnight, based on one authenticator's statement about its attribution.[18]

Analysis proceeds in four parts. Part I examines why the art market demands authentication and provides a brief overview of the centuries of art fraud that created that need. Part II explains the authentication process itself. Part III provides an overview of the risks associated with authentication and considers the rights, obligations, and remedies when an owner of art—be it an individual, a gallery, or a museum—discovers that a purchase is forged or fake. It also provides a comprehensive explanation of existing statutory and common law protections for owners and authenticators, which demonstrates critical gaps in protection but also possible ways forward. Part IV considers the public harms created by art fraud, as well as ethical and normative obligations of collectors of fine art.

I
WHY THE ART MARKET DEMANDS AUTHENTICITY

Forgeries and fake art are nothing new to the art market.[19] Instead, "[f]orged art has been corrupting the Western art market ever since artist patronage extended

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[15] David D. Kirkpatrick, A Leonardo Made a $450 Million Splash. Now There's No Sign of It., N.Y. Times, Mar. 30, 2019, at A1, https://www.nytimes.com/2019/03/30/arts/design/salvator-mundi-louvre-abu-dhabi.html.

[16] *See* Nadja Sayej, *Artistic License? Experts Doubt Leonardo da Vinci Painted $450m* Salvator Mundi, GUARDIAN (Nov. 20, 2017), https://www.theguardian.com/artanddesign/2018/sep/03/louvre-abu-dhabi-postpones-display-of-worlds-most-expensive-painting-leonardo-da-vinci.

[17] *Id.*

[18] *Id.*

[19] A forged work of art may not necessarily be a fake work of art; rather, to call a work a forgery implies that some aspect of that work was modified in order to make the work appear to be something it is not—the addition of a signature, or of false lacquer to make the work appear older than it is, for example. To call a work a fake, by contrast, implies that it was wholly created in order to deceive, and that there is no underlying work independent from the fraudulent purposes for which the work was created. *See infra* Part I(A). The words are used interchangeably in

beyond the royal classes and art became accessible to middle class connoisseurs."[20] Many hoaxes and forgeries throughout history have been "enjoyed and mistaken for the originals."[21] These "deceptive fakes" have provided "aesthetic pleasure for the average person," with experts and laypeople alike unable to spot the difference.[22] The aesthetics of a perfectly reproduced work in the style of Johannes Vermeer, for example, would not change after a painting's provenance is called into question, and yet its monetary value would be significantly diminished.[23] Clearly, then, the value of a painting is not merely derived from its aesthetic quality—there must be something else about an original work that places it at a premium in the market. As discussed further below, these other characteristics might include a work's authenticity, i.e., a work's age and origin, and its attribution, i.e., who created the work.[24] But why does the modern art market put such value into a work's authenticity or its attribution? As one expert asks, "if a fake is so expert that even after the most thorough and trustworthy examination its authenticity is still open to doubt, is it or is it not as satisfactory a work of art as if it were unequivocally genuine?"[25] These questions are interrogated below, with a focus on a work's authenticity.

A. The Significance of Authenticity in Fine Art

From a formalist perspective, it is difficult to understand why the art market places such a premium on authenticity. Visual art is the only form of expression that is singular, unrepeatable, and requires proof that the artist created the piece with his own hand in order to determine authenticity.[26] In contrast, the literary world only requires that letters on the page be assembled in the correct order for a work to be "authentic."[27] A reproduced copy of Jane Austen's *Pride and Prejudice*, for example, is no less authentic or valuable in the eyes of consumers than an original manuscript

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literature on the topic, and in this Note they should be viewed in such a manner, with any particular import to the distinction between them noted when relevant.

[20] Justine Mitsuko Bonner, *Let Them Authenticate: Deterring Art Fraud*, 24 UCLA ENT. L. REV. 19, 20 (2017).

[21] Peter Barry Skolnik, *Art Forgery: The Art Market and Legal Considerations*, 7 NOVA L. REV. 315, 316 (1983).

[22] *Id.*

[23] Michael J. Clark, *The Perfect Fake: Creativity, Forgery, Art and the Law*, 15 DEPAUL J. ART, TECH. & INTELL. PROP. L. 1, 33–35 (2004).

[24] *See infra* Part II. *See also* Bonner, *supra* note 20, at 30 ("Authenticity, as it pertains to art, means that the alleged authorship of a work has been confirmed.").

[25] NELSON GOODMAN, LANGUAGES OF ART: AN APPROACH TO A THEORY OF SYMBOLS 115–16 (1st ed. 1968).

[26] *Id.*

[27] *Id.*

as far as its content is concerned.[28] Yet for fine art, the premium for authentic work persists, even when the forgery's aesthetic value is on par with that of the original. Hans van Meegeren, arguably one of the greatest art forgers in history, was able to recreate Vermeer's works with such expertise that—even upon admission of his actions—experts refused to believe him.[29] It was not until van Meegeren recreated one of his Vermeer-styled works under the watchful eye of a court that he was credited with his famous forgeries.[30] Nonetheless, once the paintings were uncovered as fraudulent, the prices they commanded were only a small fraction of that of an authentic Vermeer.[31] Thus, it could be said that the differences between an authentic work and a deceptive forgery are aesthetically irrelevant, or at least not closely linked.[32]

Instead, the value that an original work commands in the market must derive from another source. Walter Benjamin theorized in his famous essay, *The Work of Art in the Age of Mechanical Reproduction*, that original or authentic works have a unique quality that he coined the work's "aura."[33] Benjamin described, "[e]ven the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be."[34] This "aura," then, includes aspects of history, ownership, changes with time, and tradition—elements Benjamin described as unable to be replicated in even the most perfect reproduction.[35] Later scholars have traced this concept of Benjamin's aura to the value that the art market places on authentic works, describing how the modern art market appreciates "the values, psyche, and structure of the people and society in which [the art] was created."[36] That is not to say that aesthetic features are insignificant, but authorship and provenance are of equal, if not greater importance, for a painting's perceived value.[37] Indeed, perhaps these concepts inform each other: "the signature affixed, the period of creation, and the expert's determination of

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[28] *See id.*

[29] Clark, *supra* note 23. *See also infra* text accompanying notes 232–34.

[30] Clark, *supra* note 23.

[31] *Id.*

[32] *Id.* at 10.

[33] WALTER BENJAMIN, *The Work of Art in the Age of Mechanical Reproduction*, *in* ILLUMINATIONS 217, 217–51 (Hannah Arendt ed., Harry Zohn trans., Schocken Books 1969) (1935).

[34] *Id.*

[35] *Id.*

[36] Skolnik, *supra* note 21, at 317.

[37] *See id.*

authenticity are inextricably interwoven with the aesthetic appeal[]" of a given work, through affecting the work's aura.[38]

Demonstrative of this concept: the *Mona Lisa* is one of the most famous paintings in the Louvre's collection, as well as in the world.[39] People travel from far away countries to visit the Louvre, especially to see da Vinci's masterpiece.[40] But they are not traveling across oceans to see a small framed portrait of a woman; rather, they are traveling to experience everything that the painting represents: the history and grandeur of the Italian Renaissance.[41] If the *Mona Lisa* were suddenly discovered to be a forgery, that it was instead the creation of a master forger in the 1950s, its aura would shift to one that conjures the feeling of theft and lies. Despite having aesthetic significance, the experience of even the most deceptive fake cannot match that of the real thing.[42] Therein lies the necessity of authentication in the art world—the market places a premium on the creative genius of the original creator and the history that a painting evokes.[43]

While not the dominant position in scholarship on authenticity and art, some experts—referred to as formalists—have argued that aesthetics alone should determine the value that society assigns to a piece, not authorship or authenticity.[44] Philosopher of art Alfred Lessing characterizes this strict formalist position as follows:

> Considering a work of art aesthetically superior because it is genuine, or inferior because it is forged, has little to do with aesthetic judgment or criticism . . . . [I]t is impossible to understand what is wrong with a forgery unless it be first made quite clear that the answer will not be in terms of its aesthetic worth.[45]

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[38] Leonard D. DuBoff, *Controlling the Artful Con: Authentication and Regulation*, 27 HASTINGS L.J. 973, 973 (1976).

[39] *See Leonardo da Vinci's Mona Lisa,* ITALIANRENAISSANCE.ORG (June 21, 2012), http://www.italianrenaissance.org/a-closer-look-leonardo-da-vincis-mona-lisa/.

[40] *Id.*

[41] *See id.*

[42] *See* Clark, *supra* note 23, at 6 (contemplating the consequences of a forged Mona Lisa and whether museum goers would have "experienced" the work).

[43] Michael Findlay, *The Value of Art: Money, Power, Beauty*, ARTNET.COM (Nov. 1, 2012), https://news.artnet.com/market/defining-the-value-of-art-27673 [https://perma.cc/L5UH-8Y5M].

[44] Clark, *supra* note 23, at 9 (describing how for a formalist, "a work is an embodiment of images and symbols separate from historical contingency.").

[45] Alfred Lessing, *What is Wrong with a Forgery?*, 23 J. AESTHETICS & ART CRITICISM 461, 461 (1965).

Formalists argue that focusing on a work's aesthetics divorced from history or an artist's biography is the only way for the concept of a "timeless masterpiece[]" to make any sense, concluding, "[i]t is only the work – what we see or experience on canvas – that matters."[46]

More dramatically, there are even some art world outliers who praise fake or forged works for their aesthetic value.[47] Ernst Beyeler, a famous Swiss collector, called one of the fraudulent Knoedler & Co. Gallery "Rothkos" a "sublime unknown masterwork" and hung the painting in his namesake museum.[48] The Musée Jacquemart-André in Paris exhibited two versions of *Mary Magdalene in Ecstasy* to let viewers decide which one they believed to be the authentic Caravaggio.[49] Although these are interesting case studies, they stand in the minority. The fact still remains that forgeries are of little worth in today's art market, either monetarily or in terms of renown for institutions and individual owners.[50]

The idea of art *qua* art has long been superseded by art's commodification.[51] Instead, "[i]n the contemporary art world[,] it has become virtually impossible to separate aesthetic from economic concerns."[52] This is especially true as new investment-minded buyers have flooded the art market and original works remain scarce commodities. Since the 1970s, a number of mega sales have driven investors toward purchases of art for investment purposes; indeed, from 1960 to 1975, the Dow Jones rose approximately 38% in value, whereas certain Impressionist works rose 230%.[53] These deep-pocketed purchasers then affect purchasing decisions and prices across the market, as "art collectors often acquire works less for their intrinsic aesthetic merit than for their investment potential."[54] In addition to growing demand,

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[46] Clark, *supra* note 23, at 9 (internal quotations omitted).

[47] Blake Gopnik, Opinion, *In Praise of Art Forgeries*, N.Y. TIMES, Nov. 3, 2013, at SR5, https://www.nytimes.com/2013/11/03/opinion/sunday/in-praise-of-art-forgeries.html.

[48] *Id. See infra* text accompanying notes 313–23 (discussing the Knoedler & Co. Gallery forged works).

[49] Musetta Durkee, *WYWH: Tricking the Art Market – On Forgery, Beltracchi, and Scientific Technology*, CTR. ART LAW (Dec. 18, 2018), https://itsartlaw.org/2018/12/18/wywh-tricking-the-art-market-on-forgery-beltracchi-and-scientific-technology/.

[50] *See generally* Leila Amineddoleh, *Purchasing Art in a Market Full of Forgeries: Risks & Legal Remedies for Buyers*, 22 INT'L J. CULTURAL PROP. 419 (2015) (describing the risks that collectors face in the modern art market).

[51] *See* NOËL CARROL, *Four Concepts of Aesthetic Experience*, *in* BEYOND AESTHETICS: PHILOSOPHICAL ESSAYS 43 (2001).

[52] Clark, *supra* note 23, at 11.

[53] *Id.* at 11–12.

[54] Bonner, *supra* note 20, at 24 (quoting Denis Dutton, *Art Hoaxes*, *in* ENCYCLOPEDIA OF HOAXES 21 (Gordon Stein ed., 1993)).

the scarcity of original art affects the pricing for works as well.[55] Only one buyer can own a certain coveted item, driving bidding wars at highly publicized sales.[56] In this highly commodified, market economy for art sales, authenticity is linked to a work's monetary value in several ways.[57] As one practitioner described, "[t]he relationship is circular: as prices escalate, the need for a connoisseur's opinion rises; and as connoisseurs vouch for works and their authenticity, the works are more coveted, leading art market prices to soar even higher."[58] Thus, authentication is essential to guarantee that artwork is what it purports to be.

The Metropolitan Museum of Art's *Odalisque en Grisaille* exemplifies the impact of authentication. *Odalisque en Grisaille* had been attributed to Jean-Auguste-Dominique Ingres for many years, but after it was determined to be the work of Armand Cambon, one of his apprentices, the painting's value fell from approximately $1,000,000 to $100,000.[59] This tenfold decrease may seem extreme, but it is certainly not the exception. In the seminal case of *Hahn v. Duveen*, for example, André Hahn claimed to own *La Belle Ferronnière,* a genuine da Vinci painting, and was in the middle of negotiations with the Kansas City Art Museum to sell the painting.[60] Duveen, a bona fide art expert, told newspaper reporters that the painting "was not a genuine Leonardo da Vinci; that any expert who pronounced it genuine was not an expert, and that the genuine *La Belle Ferronnière* by Leonardo da Vinci was in the Louvre[.]"[61] At the time he made the statement, Duveen had not seen the painting in person nor even in a photograph, and his only reasoning was that he believed *La Belle Ferronnière* was housed in the basement of the Louvre.[62] Thus, Duveen reasoned that Hahn's painting was not plausibly an original da Vinci.[63] Hahn sued Duveen for disparagement but the damage had already been done.[64] The slightest question as to the authenticity of the work rendered the painting practically worthless, and the Kansas City Art Museum quickly called off the sale.[65] Whereas Duveen's statements were purely speculative, they had a tremendous impact on the

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[55] Steven Murphy, *Art Explained: How Do Art Auctions Really Work?*, CNN (Aug. 30, 2018), https://www.cnn.com/style/article/how-do-art-auctions-work-steven-murphy/index.html.

[56] *Id.*

[57] Amineddoleh, *supra* note 50, at 424.

[58] *Id.*

[59] DuBoff, *supra* note 38, at 977.

[60] Hahn v. Duveen, 234 N.Y.S. 185, 187 (Sup. Ct. 1929).

[61] *Id.* at 189.

[62] Amineddoleh, *supra* note 50, at 421.

[63] *Id.*

[64] *Id.*

[65] *Hahn,* 234 N.Y.S. at 187.

painting's value.[66] Translating the results of *Hahn* to authentication of other works, where a work cannot be definitively authenticated, i.e., the reality for most works on the market, art remains in limbo, at the mercy of whichever expert is hired to authenticate the work.[67]

B. The Historical Background of Art Fraud: The Rise of the Genius Artist

Art forgery is an activity as old as the art market itself. However, "forgery" in the modern sense of the word implies an inherent value in that which is authentic or original—a work by an independent painter.[68] Yet this was not always the case. In the Middle Ages, European art was designed for systematic and identical distribution to the masses; iconography and Byzantine artistic tropes dictated not only taste, but also the forms, appearance, and prevalence of direct *copying* of art.[69] Through the fourteenth century, Western European art contained "recurring Byzantine iconographies" that belied the "iconographic dependence" of artistic expression across the West on the tastes in Constantinople.[70] Entire compositions were copied from the Byzantine East, and artists who diverged from this norm were outliers.[71]

The market for independent painters and novel artistic compositions began during the Renaissance. Even so, it was common for masters in this era to produce works with the aid of apprentices and employees.[72] "Masters" were known for their particular style of painting, but buyers "made no demand that the master should execute every aspect of the creative process."[73] Noteworthy artists even made replicas of each other's works to please a patron.[74] During the Renaissance, it was common practice in Italy for new artists to train in the workshop of a master, practicing their skill by copying the style and compositions of their master.[75] Among the students of Andrea del Verrocchio, one such master, were da Vinci and Pietro

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[66] Amineddoleh, *supra* note 50, at 421.

[67] *See id.* at 421–22.

[68] *See generally* Patty Gerstenblith, *Getting Real: Cultural, Aesthetic, & Legal Perspectives on the Meaning of Authenticity of Art Works*, 35 COLUM. J.L. & ARTS 321, 326–27 (2012) (defining "authentic" and "original" in the context of art forgery).

[69] *See generally* WILLIAM D. WIXOM, *Byzantine Art & The Latin West*, *in* THE GLORY OF BYZANTIUM: ART & CULTURE OF THE MIDDLE BYZANTINE ERA, A.D. 843–1261 435–508 (Helen C. Evans & William D. Wixom eds., 1997).

[70] *Id.* at 444.

[71] *Id.* at 444–45.

[72] Skolnik, *supra* note 21, at 321.

[73] *Id.*

[74] *Id.*

[75] GÜNTER PASSAVANT, VERROCCHIO: SCULPTURES, PAINTINGS & DRAWINGS 45–51 (Katherine Watson, trans.,1969).

Perugino, whose earlier works were at times indistinguishable as between master and apprentice.[76] Even Michelangelo may have started his career with a forgery: as one scholar wrote, legend has it that Michelangelo sculpted a sleeping cupid in the style of Roman masters, buried it in dirt "so that it would pass for an antique, and [he] would thus obtain much more for it[,] . . . and then sold it as an antique to Cardinal San Giorgio for two hundred ducats."[77] Forgery was clearly nothing new or disdainful: all the great artists from da Vinci to Michelangelo practiced it to some degree.[78]

Toward the end of the sixteenth century, however, "creativity was elevated to a new position of recognition."[79] As the status signifier of art shifted its focus from the art to the artists, "a work of art for the first time became subject to the laws of supply and demand."[80] A talented artist might become "the companion and friend of princes."[81] Whereas the Protestant Reformation (1517) stalled the art market in much of Europe while the Church tightened its grip on what artists produced,[82] the Dutch, who were freer from many religious restrictions, capitalized on the opportunity and began to form the foundations of the art market as we know it.[83] Dutch buyers, too, began to see art as an investment.[84] Artists became art dealers to make more money, and "speculation on the fame of artists was a natural outgrowth as it caught the imagination of almost all who could afford it."[85] In France and Holland, kings like King Louis XIV of France "used art to enhance the splendor of his court . . . by making artists civil servants who had to satisfy the king to be paid."[86] Also in this era, "[i]ntellectualism pertaining to art was born as men discussed theories of art, and the resultant ideas influenced the creativity of artists eager for recognition."[87] The modern conception of an artist was born: "[a]s society more and more recognized the artist's genius, the higher was his rise in social life and the more advanced his economic gain."[88]

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[76] *Id.*

[77] 6 GIORGIO VASARI, LIVES OF THE MOST EMINENT PAINTERS, SCULPTORS AND ARCHITECTS, 423 (Gaston du C. de Vere trans., Project Gutenberg 2009) (1913) (ebook).

[78] *Id.*

[79] Skolnik, *supra* note 21, at 321.

[80] *Id.*

[81] *Id.* at 322.

[82] *Id.* at 322.

[83] *Id.* at 323.

[84] Skolnik, *supra* note 21, at 232.

[85] *Id.*

[86] *Id.* at 322.

[87] *Id.* at 323.

[88] *Id.* at 324.

Forgers grew hand in hand with the rise of the modern art market, as "[i]t was important in the development of art forgery and art fraud that this value was associated with the artist through development of a capitalistic market."[89] Thus, because "[i]n today's modern market originals draw higher prices and are more valued as trade commodities[,] . . . wherever art is disposed, traded, or collected there is the temptation for dishonest people to enrich themselves by forgery or fraud."[90] The temptation for forgers seeking material gain is massive, as "[a]rt prices have multiplied phenomenally since the early 1950's, and public interest in the sale of art has continued to bring exceptional prices."[91] As one commentator explained, "[e]veryone wants to get into the act, creating a ripe environment for fraud and forgery."[92]

C. Historical Legal Protections for Bona Fide Buyers

Most early legal protections against art forgery served to protect artists or the public writ large; these schemas did not protect private buyers. In the sixteenth century, art forgery and art fraud became criminally sanctionable under English law, with possible penalties including physical punishment and even death.[93] That said, sentences tended to be considerably more lenient, especially as time progressed.[94] While the first copyright statute to protect visual arts was enacted in England in 1735,[95] private guilds sometimes enforced limitations on direct copies before its enactment.[96]

There have been few historical instances where the law has provided full protection for the bona fide purchaser of fine art when the work is later shown to be fake. In a forty-year period coinciding with the end of the Georgian Era and the reign of King William IV, English law began to address private disputes regarding art fraud and forgery, albeit in a limited manner. One of the first recorded English court cases to deal with the authentication of an artwork arose in 1797, when two paintings sold as the work of painters David Teniers the Younger and Claude Lorrain were

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[89] Skolnik, *supra* note 21, at 324.

[90] *Id.*

[91] *Id.* at 325.

[92] *Id.*

[93] *Id.* 319–20.

[94] Skolnik, *supra* note 21, at 319–20.

[95] The Engravers' Copyright Act 1735, 8 Geo. 2, c. 13 (Gr. Brit.), http://www.copyrighthistory.org/cam/tools/request/showRepresentation.php?id=representation_uk_1735&pagenumber=1_1.

[96] H. Tomás Gómez-Arostegui, *The Untold Story of the First Copyright Suit Under the Statute of Anne in 1710*, 25 BERKELEY TECH. L.J. 1247, 1249 (2010); Skolnik, *supra* note 21, at 321.

discovered to be copies.[97] The case, *Jendwine v. Slade*, permitted the plaintiff to recover if he could show that he received a warranty from the defendant, not just an opinion upon which the defendant was meant to rely.[98] However, the court held that because the paintings were so old ("the pictures were the work of artists some centuries back"), any statement of authorship by the seller could only be a matter of his opinion.[99] Thus, the seller faced no liability for the sale.[100]

The rule from *Jendwine v. Slade* was carried forward in future cases. Thirty-two years later, in a case involving two forgeries of the works of Nicolas Poussin,[101] the English court permitted the jury to decide whether the purchaser bought the paintings believing that they were originals based on the seller's representation that the paintings were "a couple of Poussin's."[102] If the jury so found, the court wrote that it would find "the [purchaser] is not bound by his bargain."[103] Three years later, another plaintiff brought a case to trial regarding the authenticity of a purported Rembrandt portrait.[104] In this case, the jury was permitted to determine whether the seller had made a representation or a warranty of the painting's authenticity and set damages if they found a breach of warranty.[105] Finally, in 1836, an English court in *Powers v. Barnham* upheld a jury's determination that the bill of sale for a more modern painter (in this case, Giovanni Antonio Canal, known as Canaletto) created an express warranty where it stated "Four pictures, Views in Venice, Canaletto."[106] The reviewing court determined that the plain meaning of the words conveyed a warranty and upheld the jury's determination of such, allowing the plaintiff to recover.[107]

In the intervening nearly 200 years, art crime has risen to be one of the largest criminal enterprises in the world.[108] At present, "[a]rt historians, museum curators, and law enforcement officials tirelessly work to investigate and analyze works that

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[97] (1797) 170 Eng. Rep. 459; 2 Esp. 572.
[98] *Id.*
[99] *Id.*
[100] *Id.*
[101] Lomi v. Tucker (1829) 172 Eng. Rep. 587; 4 Car. & P. 16.
[102] *Id.*
[103] *Id.*
[104] De Sewhanberg v. Buchanan (1832) 172 Eng. Rep. 1004; 5 Car. & P. 344.
[105] *Id.*
[106] (1873) 111 Eng. Rep. 865; 4 Ad. & E. 473.
[107] *Id.*
[108] *Art Theft*, FED. BUREAU INVESTIGATION, https://www.fbi.gov/investigate/violent-crime/art-theft (Dec. 8, 2019).

they suspect are not genuine."[109] But despite their best efforts, forgeries continue to plague the art market.[110] Technology has improved many methods of the authentication process from carbon dating to artificial intelligence; conversely, the same technology has made some forgeries even harder to detect.

II
THE AUTHENTICATION PROCESS

Modern art authentication is incredibly complex, incorporating expert analysis by art authenticators and technologically sophisticated methods.[111] "Today, a forger who creates a painting in the style of a known master and claims its authenticity is aware that the hoax may be uncovered as a result of the detection of features such as questionable underdrawings, the discovery of anachronisms in the pigments[,] or even something as simple as the scrutiny of surface cracks."[112] Art authenticators who review works have generally received superb training and are experts in their fields of study.[113] Thus, even with the availability of complicated tools, "[a] good connoisseur will frequently recognize a forgery even before it is subjected to scientific analysis by identifying the forger's subconscious introduction of a detail that reflects personal style or of an element that is anachronistic with the artist's period."[114] The chances that a forged painting survives the barrage of modern authentication tests undetected are accordingly very low, though not entirely impossible. Nevertheless, "[t]he road traveled so far in the art world indicates that a conclusive verdict *authentic* or *forgery* can only come from science in the following situations: (a) when it acts as a tool for *falsification* — in itself invaluable — through the revelation of anachronistic elements in the painting, (b) when it assists in *authentication*, with a parallel consensus and unified opinion emerging in the world

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[109] *Faking It: Strategies for Reducing Art Fraud & Forgery*, FED. B. ASS'N BLOG (Oct. 11, 2017), https://www.fedbar.org/blog/faking-it-strategies-for-reducing-art-fraud-forgery/.

[110] *Id. See also infra* text accompanying notes 349–50.

[111] For the purposes of this Note, the term "authenticator" should be read to encompass–but not be solely limited to–the term "connoisseur". Connoisseurs, as explained *infra*, are one type of art authenticator; however, there are also other experts who authenticate art (e.g. scientists, historians, and restorers) who are art authenticators but are not connoisseurs.

[112] RAGAI, *supra* note 3, at 1.

[113] *See* Susan Kendzulak, *Top 6 Organizations that Certify Fine Art Appraisers*, BALANCE CAREERS (last updated Nov. 20, 2019), https://www.thebalancecareers.com/organizations-fine-art-appraisers-1295635 (describing how there is no one formal accreditation body for art authenticators in the United States, but several private organizations issue certificates to qualified individuals).

[114] RAGAI, *supra* note 3, at 17; *see, e.g.*, *id.* at 21–23 (describing the Umberto Giunti forgery *Madonna of the Veil*, in the style of Sandro Botticelli, but with the face of 1930s film star Jean Harlow).

of connoisseurship[,] and (c) when it confirms *authentication* as backed by either art historical evidence or by a documented proof of provenance."[115]

There are three main procedures for accomplishing authentication, each of which is discussed in greater detail below: forensics, provenance, and connoisseurship.[116] Forensics involves scientific analysis of a work and the search for "[t]he use of incorrect materials, such as paint pigments, canvas or other backing materials, [which] can indicate that a work was made more recently than its purported date."[117] Relevant testing methods include infrared imaging and radiocarbon dating.[118] Provenance is the history of an artwork; it "may include the original source" of the work, "but is primarily concerned with a history of ownership."[119] Connoisseurship involves the "analysis of stylistic aspects of a work of art, combined with the function and techniques used to create the work[.]"[120] Often, all three of these authentication procedures are used together to determine a work's authenticity, as results from one inquiry may inform or buttress another.[121] Less commonly, a single method may be sufficient in it of itself to provide a compelling answer to an authentication inquiry.[122] A brief explanation of how each of these three authentication procedures is accomplished follows.

A. Connoisseur Authentication

At its most basic, the connoisseur or expert who gives an opinion regarding authentication, "is someone who has developed a clear understanding of the style, imagery, palette, materials and processes that are characteristic of a specific

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[115] *Id.* at 130.

[116] Amineddoleh, *supra* note 50, at 424 (describing how "[a]uthentication has been likened to a three-legged stool which relies on three prongs, bearing the weight on each leg: (1) forensics, (2) provenance; and (3) connoisseurship.").

[117] Gerstenblith, *supra* note 68, at 339.

[118] *Id.*

[119] Clemency C. Coggins, *United States Cultural Property Legislation: Observations of a Combatant*, 7 INT'L J. CULTURAL PROP. 52, 57 (1998).

[120] Gerstenblith, *supra* note 68, at 332 n.38.

[121] Anne Laure Bandle, *Fake or Fortune? Art Authentication in the Art Market and At Court*, 22 INT'L. J. CULTURAL PROP. 379, 380–81 (2015) (describing how "a connoisseur's opinion-based result should be supported by archival evidence or scientific reports[]" and often the various tools "complement each other[.]").

[122] Gerstenblith, *supra* note 68, at 339 (describing how, applying a forensics approach, "use of incorrect raw materials or methods can rule conclusively that a work is not authentic[,]" although "the use of correct materials, tools or methods cannot prove that a work is authentic.").

artist."[123] Connoisseurship can be described as "informed visual perception, based upon a trained scholar or other art expert having looked long and hard at hundreds, maybe thousands, of works by the artist in question — and absorbing their salient characteristics into visual memory — combined with an understanding of the artist's method of working (known as 'facture')."[124] Upon completion of analysis of a work, "[t]his informed visual perception (supported by provenance and any available information on the work's physical properties) is expressed in an expert judgment, usually referred to as expert opinion on authenticity."[125] This opinion serves as one of the three prongs of authentication.[126]

The most common type of connoisseurship for the past century is known as Morellian analysis, named after its inventor, physician and art collector Giovanni Morelli.[127] Morellian authentication "is based on the creation and mapping of formulae describing repeated stylistic details in the artwork and reflecting the particular approach of the artist in creating small features such as ears, eyes, collars," and other details.[128] Early in the development of Morellian analysis, art expert Bernhard Berenson "codified the 'Morellian method' into sets of attributional rules of ostensibly near mathematical precision."[129] Connoisseurship remains focused on trying to achieve scientific precision in its methodology.[130]

However, connoisseurship is in the most basic sense entirely unscientific. Experts in the history of art authentication and art connoisseurs have both observed that "[c]onnoisseurship is a skill that . . . lacks both a comprehensive statement of method and a rationale for that method."[131] Whereas a scientific method would begin with a hypothesis and test that hypothesis with an experiment, connoisseurship tries to draw inferences about authorship from an observed result; it necessarily "treats style as evidence for an inferred cause."[132] Yet, it is not clear that style is a clear indicator for origin, nor that connoisseurs will know in advance which style markers

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[123] Jean E. Brown, *The Legalities of Authenticity and Contemporary Art*, *in* AUTHENTICITY IN TRANSITION: CHANGING PRACTICES IN ART MAKING AND CONSERVATION 95, 100 (Erma Hermens & Frances Robertson eds., 1st ed. 2016).

[124] Ronald D. Spencer, *Protection from Legal Claims for Opinions About the Authenticity of Art*, 3 SPENCER'S ART L.J. 2, 2 (2012).

[125] *Id.*

[126] Amineddoleh, *supra* note 50, at 424.

[127] RAGAI, *supra* note 3, at 17.

[128] *Id.*

[129] Linda Young, *Significance, Connoisseurship & Facilitation: New Techniques for Assessing Museum Acquisitions*, 13 MUSEUM MGMT. & CURATORSHIP 191, 195 (1994).

[130] David Ebitz, *Connoisseurship as Practice*, 9 ARTIBUS ET HISTORIAE 207, 208 (1988).

[131] *Id.* at 209.

[132] Richard Neer, *Connoisseurship and the Stakes of Style*, 32 CRITICAL INQUIRY 1, 11 (2005).

are associated with a specific artist or production period.[133] In many respects, "the connoisseur who attributes a painting to Rembrandt is performing the same actions, and for the same reasons, as the field archaeologist who sorts her finds at the end of a day's work."[134] However, connoisseurship, unlike archeology, cannot stand alone as a means of authentication.[135] Whereas an archeologist can correlate her stylistic judgments to "hard" excavation data about the relative age of items found at different levels of a dig, a connoisseur lacks a comparable external reference point.[136] Thus, while the ultimate desire of authentication is the ability to state with *certainty* that a work is by a specific artist, because connoisseurship is inherently unscientific, this procedure alone is insufficiently reliable to provide that result.

Given shortcomings inherent to connoisseurship, one might wonder why it is still a valued means of authenticating artwork. In the non-legal setting, "[t]he value of connoisseurship to the history of art is judged by the practical result of the connoisseur's activity, namely the attribution of works of art to a particular artist, school or workshop, and to a particular time and place."[137] The sway that connoisseurs hold is largely due to their role in preparing the *catalogue raisonné* for an artist, i.e., a definitive listing of all works completed by a specific artist.[138] Such a "*catalogue raisonné* receives great consideration on the market when its author is considered to be the authority for the given artist[,]" and thus "the reliance on a single expert gives expert authorities enormous power as they decide works that are of cultural significance and those that are not."[139] An artwork's inclusion in a *catalogue raisonné*, or the willingness of the author of that *catalogue* to say that a work is plausibly by that artist, can make or break an authentication.[140] In the legal context, the value of a connoisseur's opinion remains significant as well: in certain cases, judges have found connoisseur testimony so compelling that they have discounted contrary scientific or provenance evidence in favor of it.[141]

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[133] *Id.* at 3.

[134] *Id.*

[135] *Id.* at 14 (describing how "[i]t may be possible to categorize rocks and artworks alike—to divide them into feldspars and granites, Rembrandts and Vermeers—but such categorization will not deliver the goods that art historians and archaeologists desire.").

[136] *Id.* at 3.

[137] Ebitz, *supra* note 130, at 207.

[138] Bandle, *supra* note 121, at 381 ("[A] catalogue raisonné records all works its author, based on his connoisseurship, believes to be by a specific creator.").

[139] *Id.*

[140] *See, e.g.*, RAGAI, *supra* note 3, at 66 (discussing the market reaction to da Vinci connoisseur Martin Kemp's statement that the *Salvator Mundi* painting was indeed by da Vinci).

[141] Bandle, *supra* note 121, at 388 (citing Avrora Fine Arts Inv. Ltd. v. Christie, Manson & Woods Ltd. [2012] EWHC 2198 (Ch) [38] (Eng. & Wales)).

In recent years, artificial intelligence or AI technology has been embraced by the art world for its potential to assist connoisseurs in identifying fraudulent art.[142] "Broadly defined, AI is computer technology that aims to simulate intelligent human behavior."[143] Strong AI "attempts to replicate human reasoning" and to one day "create sentient machines[;]" examples of strong AI do not yet exist.[144] Weak AI, on the other hand, "focuses on performing specific tasks that require capabilities similar to human cognition," such as Amazon Alexa, automated chat bot assistants, and smart cars.[145] The most successful branch of weak AI to date relates to "machine learning," which uses algorithms to analyze large datasets and make predictions.[146]

Several companies have experimented with neural networks trained to identify fraudulent art.[147] Two scientists working in Switzerland, Dr. Carina Popovici and Christiane Hoppe-Oehl, have developed an algorithm that can successfully identify fake works of art.[148] The algorithm "learns" the characteristics of an artist from a comprehensive set of original works, reviews the alleged forgery, and "produces an easy-to-read heat map that pinpoints which areas of the painting are most suspect."[149] The AI detection algorithm has been used numerous times with much success.[150] In essence, the technology adopts the Morellian method of connoisseurship authentication but removes the risks of human error and subjectivity from the process.[151] The analysis is highly accurate, relatively quick, and only requires images of the work in question, eliminating the issue of transportation for

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[142] Jason Bailey, *Can AI Art Authentication Put an End to Art Forgery?*, ARTNOME (Sept. 12, 2019), https://www.artnome.com/news/2019/9/12/can-ai-art-authentication-put-an-end-to-art-forgery.

[143] Jeffrey Greene & Anne Marie Longobucco, *Is Artificial Intelligence the Newest Trend in Fashion?*, N.Y.L.J. (Aug. 24, 2018), https://www.law.com/newyorklawjournal/2018/08/24/artificial-intelligence-the-newest-trend-in-fashion/. *See also* Nick Heath, *What is AI? Everything You Need to Know About Artificial Intelligence*, ZDNET (Feb. 12, 2018), https://www.zdnet.com/article/what-is-ai-everything-you-need-to-know-about-artificial-intelligence/.

[144] Greene & Longobucco, *supra* note 143.

[145] *Id.*

[146] *Id. See also* Joe McKendrick, *Artificial Intelligence Only Goes So Far in Today's Economy, Says MIT Study*, FORBES (Sep. 14, 2019), https://www.forbes.com/sites/joemckendrick/2019/09/14/artificial-intelligence-only-goes-so-far-in-todays-economy-says-mit-study/?sh=7d4559f11162.

[147] Bailey, *supra* note 142.

[148] *Id.*

[149] *Id.*

[150] *Id.*

[151] *Id. See also,* RAGAI, *supra* note 3, at 17.

original works.[152] Furthermore, the use of a computer algorithm eliminates the potential biases of an authenticator who stands to benefit from the outcome of a work's authenticity.[153]

At the same time, however, AI's ability to gain insights from vast amounts of data also opens the door for highly sophisticated forgeries.[154] *Next Rembrandt*, a piece created entirely by AI, exemplifies the potential issues that may arise from AI-generated art.[155] *Next Rembrandt* was created from an algorithm that "could understand Rembrandt based on his use of geometry, composition, and painting materials."[156] The software "learned" Rembrandt's style and created a 3D printed, physical work that mimicked the artist's style to near perfection.[157] This type of technology could be used nefariously to create fakes that are so accurate that even the most experienced connoisseur would not be able to recognize the difference.[158]

B. Forensic Authentication

The forensic prong of authentication involves subjecting a work to a barrage of scientific testing in order to confirm that everything is, to the degree verifiable, as it "should" be in a work of the claimed age and provenance.[159] An authenticator working with a painting, for example, would proceed in a measured and systematic approach from the least invasive analysis to further testing as warranted by anomalies.[160] Evaluation would begin by review of a painting's surface for brushwork and craquelure through use of a stereo-microscope or raking light across the surface, that is, placing light at an oblique angle to the painting.[161] Ultraviolet fluorescence from a UV light can be useful for differentiating old and new additions as well.[162] Further investigation into the body of the painting itself can be accomplished through techniques including pyrolysis-gas chromatography-mass

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[152] Bailey, *supra* note 142.

[153] *Id.*

[154] *Id.* Steve Schlackman, *Who Holds the Copyright in AI Created Art*, ARTREPRENEUR (Apr. 22, 2018), https://alj.artrepreneur.com/the-next-rembrandt-who-holds-the-copyright-in-computer-generated-art/.

[155] Schlackman, *supra* note 154.

[156] *Id.*

[157] *Id.* The "painting" was even three-dimensionally printed on canvas using an AI projection of paint depth and stroke style in existing Rembrandt works, to perfectly mimic his use of layering, texture, and brushstroke. *Id.*

[158] *Id.*

[159] RAGAI, *supra* note 3, at 133–61.

[160] *Id.*

[161] *Id.* at 133.

[162] *Id.*

spectrometry (Py-GC-MS), which allows analysis of synthetic polymers used as binding agents in paints, and proton-induced X-ray emission (PIXE), which permit non-destructive analysis of pigment composition.[163] The goal of these tests is to identify compounds included in paint which, by virtue of the age and/or provenance of a painting, should not be present, such as titanium white paint in a Renaissance panel painting.[164]

Moving from entirely non-destructive analysis to *minimally invasive* techniques, an authenticator can take small samples of paint chips from a work and subject them to chemical analyses.[165] Authenticating a suspected Édouard Manet painting, for example, scientists compared paint samples from the work being analyzed to two known Manet paintings, and in all three paintings, pigments for white, blue and red colors in the works exhibited the same "atypical configurations," suggesting that they were all painted by Manet.[166] In particular, the samples of lead white from the works showed the same nine trace elements in nearly the same proportions, which "could only have been the case if the two paintings had been prepared the same year, from identical production lots" or even "from the same tube of paint."[167] Based on this overwhelming scientific evidence, the painting in question—Manet's reproduction of Diego Velázquez's *Infanta Margarita*—was definitively attributed to Manet in 2003.[168]

Scientific testing has its limits, however. Works that have been retouched by curators can present unique challenges, as certain paint and brushwork will necessarily be newer than others.[169] Organic pigments, synthetic binders, and other additives used by contemporary artists are also more difficult to analyze than inorganic materials used by older artists, posing a challenge for dating more recent works.[170] As one workaround, radioactive isotope analysis through mass spectrometry techniques can accurately gauge the era or locale for both Old Master and modern works of art.[171] This method was first used by Elena Basner, a former curator at the Museum of Fine Arts in St. Petersburg, who thought of using

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[163] *Id.* at 134.

[164] *See* RAGAI, *supra* note 3, at 134, 146.

[165] *Id.* at 137.

[166] *Id.* at 52.

[167] *Id.* (internal quotation marks omitted).

[168] *Id.*

[169] *See, e.g.*, Lisa Giombini, *But Is This* Really *Authentic? Revising Authenticity in Restoration Philosophy*, 12 LEBENSWELT 21 (2018) (discussing how authenticators address challenges unique to restored works).

[170] RAGAI, *supra* note 3, at 142.

[171] *Id.* at 142–46.

radioactive isotopes created by the nuclear bombings in Hiroshima and Nagasaki in August 1945 to identify paintings as having existed before or after that date.[172] Similarly, lead isotopic analysis of white paint "can help in identifying the locality of the lead ore from which the metallic lead was extracted before being converted into lead carbonate."[173] Lead analysis has authenticated works such as Vermeer's *Saint Praxedis* by conclusively demonstrating that the work was created using materials from Holland and not Italy.[174] Furthermore, when compared to the lead white in Vermeer's uncontested work *Diana and Her Companions*, "the paint[s] so closely matched . . . that it was as if the same tube of [paint] had been used in both cases."[175] *Saint Praxedis* thus became the thirty-sixth painting definitively attributed to Vermeer and sold at auction in 2014 for $10.7 million.[176]

In conjunction with analysis of the chemical components of a painting, scientists authenticating a work will use advanced imaging software to examine the panel of canvas on which the work was produced.[177] For example, scientists have developed computer algorithms that can automate the counting of canvas threads from X-rayed images of paintings and then map the density of both horizontal and vertical threads across a particular work.[178] Thread mapping in this manner produces a "weave map," which can be used to compare results of an unknown painting against that of a known work by the same artist in the same period.[179] Similar "weave maps" suggests that two works were created from the same bolt of canvas.[180] In the case of pair paintings, which have been separated or scattered among different collections, this technology can be invaluable in arranging reunification, as many artists like Rembrandt tended to create companion pieces using the same bolt of canvas, prepared in a similar manner.[181] Using this technology, scientists have authenticated and brought back together formerly united or paired works. For

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[172] *Id.* at 145.

[173] *Id.* at 146. Lead white in the form of basic lead carbonate was used in earlier works but replaced by zinc oxide towards the end of the eighteenth century. *Id.* By the early twentieth century, white paint more commonly contained titanium white, i.e., titanium dioxide. *Id.*

[174] *Id.* at 64. Lead isotope analysis confirmed that the painting was created with Dutch/Flemish-mined lead. *Id.*

[175] RAGAI, *supra* note 3, at 64.

[176] *Id.* at 64–65.

[177] *See id.* at 156.

[178] *Id.*

[179] *Id.*

[180] RAGAI, *supra* note 3, at 156.

[181] Petria Noble, *From One Piece of Canvas: The Supports of the Eight Craeyvanger Children's Portraits*, 127 OUD HOLLAND 25, 25 (2014). Canvas must be stretched and is typically painted with a priming agent before oil paint is applied. *Id.*

example, canvas weave analysis was used to authenticate eight unsigned portraits of the children of the Craeyvanger family, painted by Gerard ter Borch the Younger and his apprentice Caspar Netscher, where the analysis "confirm[ed] that the canvas supports of all eight children's portraits are identical and that they were cut from a larger piece of primed, plain weave linen[.]"[182]

Imaging analysis can uncover what lays between the canvas and the top layer of varnished paint as well. Many times, authentication of a work relies on the identification of *pentimenti*: changes in the composition of the painting throughout the creative process, such as a change in the position of a thumb, as was the case with Da Vinci's *Salvator Mundi*.[183] This change may be shown through X-ray imaging of the underdrawings below the paint layers.[184] New technology has increased the precision with which scientists can examine these underdrawings. For example, "[s]ynchrotron-produced X-ray images of underdrawings in paintings have a much greater resolution than images produced by conventional X-rays tubes, revealing very fine details in the paintings."[185] Further expanding the degree to which authenticators can examine the lower layers of a painting, Pascal Cotte and François Dupuy of Lumière Technology invented the first multispectral high-definition camera, which can be used for "a new analysis technique, the layer amplification method (L.A.M.), which allowed the inside of the paint layers [of a painting] to be seen one by one as if in a peeled onion, and [to have] their composition determined[]" on a layer-by-layer basis.[186] Beyond examining the underdrawings with such a method, an authenticator can use cross-section analysis "if there is doubt" about the authenticity of the signature on a painting; for example, to "reveal a layer of dust between the signature and the paint beneath it, which would confirm a forged addition[]" to the painting.[187]

Imaging technology was integral in the very much still disputed attribution of *La Bella Principessa* to da Vinci, a vellum sheet portrait in silverpoint and dry chalk.[188] High-quality imaging revealed the former binding holes in the sheet, lending credence to its origin as a frontispiece in a book in the Polish National Library.[189] Furthermore, "[m]ultispectral imaging revealed a distinctive hatching in which the strokes are inclined towards the left at an angle close to 45 [degrees,]"

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[182] *Id.*
[183] *See* RAGAI, *supra* note 3, at 65–66.
[184] *Id.* at 151–52.
[185] *Id.* at 153.
[186] *Id.* at 157.
[187] *Id.* at 137.
[188] RAGAI, *supra* note 3, at 105–07.
[189] *Id.*

indicating that a left-handed artist like da Vinci had sketched the work.[190] In conjunction with the *pentimenti* observed under imaging and the carbon-14 dating of the paper to approximately 1450 A.D., da Vinci connoisseur Martin Kemp declared the work to be a da Vinci in 2010.[191] Despite pushback from other experts due to the medium upon which the portrait is drawn, there has yet to be any scientific testing that disproves Kemp's attribution of the work.[192]

C. Provenance Authentication

Of the three methods of authentication, provenance authentication is the most straightforward.[193] "Provenance is the history of a work of art, i.e., its chain of title, and whether it has been exhibited or included in a *catalogue raisonné*."[194] In short, it is the entire chain of custody for the painting or work of art—its history, from inception to the present.[195] In the past, authenticators have greatly stressed the importance of a work's provenance, claiming that "[t]here is no substitute for an iron-clad provenance back to the hand of the artist touching the canvas."[196] Nevertheless, the reality of the art market is such that "[i]t is safe to say that most works of art fall far short of having impeccable provenance[,] and that is where the interesting problems of authentication begin."[197]

In the past decade, the growth of digital provenance tracking has begun to emerge, with an emphasis on the use of blockchain technology to track art.[198] As one authentication expert explained, "[t]here is no doubt that in the very near future, *blockchain technology* will revolutionise [sic] the art world."[199] Blockchain

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[190] *Id.* at 106–07.

[191] *Id.* at 107–08. Kemp is the same Leonardo da Vinci connoisseur who authenticated the *Salvator Mundi* panel painting. *See supra* text accompanying notes 11, 143.

[192] *Id.*

[193] *See* Amineddoleh, *supra* note 50, at 424.

[194] Andrea Sobolewski, *The Authenticity Debacle: Why Art Authentication and Litigation Don't Mix*, 35 CARDOZO ARTS & ENT. L.J. 515, 520 (2017) (citing Ronald D. Spencer, *Art Law on Protection for Art Experts*, ARTNET NEWS (Feb. 1, 2013), https://news.artnet.com/market/protection-from-legal-claims-for-art-experts-29980).

[195] *Id. See also* Jennifer C. Grant, Attributing Old Masters paintings and the Plight of the Expert in the Art Market 28 (2012) (unpublished Masters in Art Business thesis, Sotheby's Institute of Art) (on file with the Sotheby's Institute of Art library system) ("For some paintings, if their provenances are uncertain for a period of time and the painting cannot be placed in a location or in a private collection, the loss of the chain of custody can lead to questions of attribution.").

[196] Duane R. Chartier & Fred G. Notehelfer, *Authentication: Science and Art at Odds?*, 3315 PROC. SPIE 74, 76 (1998).

[197] *Id.*

[198] *See, e.g.*, RAGAI, *supra* note 3, at 101–02.

[199] *Id.*

technology may provide the missing link to connect the art world with the digital, through allowing a unique means to track provenance.[200] Blockchain technology came onto the scene as the ledger system used for bitcoin transactions.[201] Succinctly, "blockchain is a distributed, decentralized, public ledger."[202] Generally, "blocks" on the blockchain store information about transactions, the blockchain consists of multiple blocks strung together, and when a block stores new information, it is added to the blockchain.[203] To be added to the blockchain, a transaction must occur and be verified by a network of computers, the transaction must be stored with a specific digital signature, and the block must be given a hash (a unique identifying code).[204] The purpose of blockchain technology is to maintain a vast record strung across a network of millions of computers to make information more difficult to manipulate.[205] "In order to change a single block, then, a hacker would need to change every single block after it on the blockchain[,]" which "would take an enormous and improbable amount of computing power."[206] The result is that, "once a block is added to the blockchain it becomes very difficult to edit and impossible to delete."[207]

Blockchain is currently used by the company Verisart, which provides a website and application for artists and collectors to create certificates of authenticity for works.[208] The process for creating and later verifying a certificate of authenticity is as follows: "[t]he artist takes a picture of the work, adds its title and dimensions, the materials used and year of production[,] and signs off like a normal certificate."[209] Thereafter, "[t]he certificate is then given a URL allowing verification of provenance, as well as a cryptographically secure registry, which is time-stamped."[210] The provenance of the piece is ultimately tracked through blockchain technology, making use of a decentralized, protected database.[211] Technology

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[200] Jacqueline O'Neill, *Art Authentication Is Flawed. Here's How Blockchain Can Fill in the Gaps*, MEDIUM (Apr. 30, 2018), https://medium.com/blockchain-art-collective/art-authentication-is-flawed-heres-how-blockchain-can-fill-in-the-gaps-79cc1ec94a0f.

[201] Luke Fortney, *Blockchain Explained*, INVESTOPEDIA (Nov. 18, 2019), https://www.investopedia.com/terms/b/blockchain.asp.

[202] *Id.*

[203] *Id.*

[204] *Id.*

[205] *Id.*

[206] Fortney, *supra* note 201.

[207] *Id.*

[208] RAGAI, *supra* note 3, at 101.

[209] *Id.*

[210] *Id.* at 101–02.

[211] *Id.* at 102.

company Chronicled, Inc. has also developed "tamper-evident CryptoSeals[,]"[212] which can affix to an artwork and create a direct link to the artwork's digital identity on a blockchain.[213] In theory, "[i]f someone comes into possession of an artwork with a Cryptoseal in 20 years, that person will still be able to verify it on a website backed by Chronicled's infrastructure."[214]

There are two significant downsides that reliance on such technology creates, however: first, the servers on which Verisart, Chronicled and other companies store information are just as at risk as any other technology to environmental damage over time (such as overheating, water damage, or other destruction), and second, blockchain, at this stage, does not have the ability to eliminate the need for experts.[215] Experts will still be necessary to identify a work's origin before the Cryptoseal is affixed.[216] In addition, artwork that predates the internet—and even artwork that predates the invention of blockchain technology—will still have significant provenance records, and examining and verifying such records will accordingly remain a vital aspect of the authentication process.[217] Furthermore, blockchain's benefits come into play after authenticity is confirmed, leaving room for forgeries to be registered if precautions are not taken.[218] The idea is that in years to come, more and more pieces of art will contain a Cryptoseal or something akin to it connected to a secure blockchain for easy authentication by anyone with the ability to access the network.[219] Reliance on blockchain-backed Cryptoseals could prove immensely beneficial to the time intensive process of authenticating art, but in order to impact

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[212] Press Release, Chronicled, Chronicled Launches CryptoSeal for Packaging, Physical Assets, and Supply Chain (Nov. 16, 2016), https://www.prnewswire.com/news-releases/chronicled-launches-cryptoseal-for-packaging-physical-assets-and-supply-chain-300364192.html. The CryptoSeal is a tiny computer chip with a cryptographic identity that slides into an adhesive seal strip allowing application to a variety of works. Each chip is embedded with unique identity information, which is immutably registered and verified on a blockchain. The CryptoSeal has the ability to securely verify sender identity and timestamp deliveries on a closed loop integration with the blockchain providing a secure chain of custody.

[213] O'Neill, *supra* note 200.

[214] *Id.*

[215] *See* Amy Whitaker, *Art and Blockchain: A Primer, History, and Taxonomy of Blockchain Use Cases in the Arts*, 8 ARTIVATE 21, 34 (2019).

[216] *See id.*

[217] Jason Bailey, *Why Use Blockchain Provenance For Art?*, ARTNOME (Jan. 29, 2018), https://www.artnome.com/news/2018/1/26/why-use-blockchain-provenance-for-art.

[218] *See id.*

[219] *Id.*

the authentication process, the art industry must begin to implement Cryptoseal technology.[220]

III
ALLOCATING RISKS FROM AUTHENTICATION AND LEGAL REMEDIES FOR BONA FIDE PURCHASERS

Despite the great degree of precision with which art authenticators can identify forgeries, the consequences of authentication are often difficult to predict with any accuracy. As such, the art market has developed a risk allocation framework between the parties providing authentication services—art authenticators or connoisseurs, auction houses, curators, and artist-specific authentication boards—and purchasers that on the whole leaves both parties at risk of otherwise unforeseen liability. In the event that an authentication goes awry, bona fide purchasers in particular can only seek the protection of a patchwork of contract, tort, and state statutory protections, likely providing inadequate compensation for their loss.

As relevant background to this next section, contemporary artworks are typically bought and sold in one of two markets, a primary market for new works and a secondary market for sales of works already in circulation.[221] These secondary market sales are mediated by private dealers and auction houses and are most customarily the site for transactions involving very high ticket value items.[222] In theory, "[a]uthentication supports the secondary art market by stamping out forgery and misrepresentation and providing a measure of certainty in the secondary market."[223] No such service would generally be necessary in primary market sales, as the artist or her heirs is likely to be alive and active in the sale.[224]

Due to their role as the main distributors in the secondary art market, auction houses and high-end galleries are often the defendants in disputes regarding authentication, though authenticators themselves are occasionally challenged in court as well. The fear of authenticity-related litigation looms large, and without the protection of an airtight indemnity provision, many authenticators and expert consortiums have opted out of authenticating controversial works altogether.[225] This

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[220] *Id.*

[221] Gareth S. Lacy, *Standardizing Warhol: Antitrust Liability for Denying the Authenticity of Artwork*, 6 WASH. J.L. TECH. & ARTS 185, 189 (2011).

[222] *Id.*

[223] *Id.*

[224] *See id.* (describing how many primary market sales take place at galleries, which source works directly from an artist).

[225] N. M. Neuhaus, *Art Authentication: Protection of Art Experts from a Swiss Perspective*, 19 ART ANTIQUITY & L. 59 (2014). Authenticators are often contracted by galleries and auction

section describes the main risks that accompany authentication efforts, explains the assignment of risk between the parties involved, and reviews whether the remedies available to parties are adequate to dispel latent risk. To do so, the Note considers reasons why an authentication may go awry, then discusses risks faced by authenticators, and finally examines the risks that bona fide buyers of fine art face.

A. Reasons Authentication Goes Awry

Given the complexity of the authentication process, it is unsurprising that, in some instances, the process fails. These failures can occur for a variety of reasons—misplaced trust, negligence, sheer mistake, or scientific or historical error—but the results of a failure can be wide-ranging in their fallout. Further, even when it appears that a piece is genuine, new evidence can always come to light after a sale that indicates that a work may be a forgery or was potentially misidentified. Just the rumor that a work is not authentic can have grave consequences for the buyer, rendering it virtually unsalable. This subsection describes some of the reasons that authentication can go awry, while noting that some such reasons for default are controllable and others, largely, are not. In either set of circumstances, it is unfortunately unavoidable that, sometimes, artworks slip through the metaphorical cracks. One example of such widespread and total failure, *in extremis*, is that of the Terrus Museum, in Elne, France.[226] This museum, based in the south of France, had a "disconcerting discovery" in 2018: "[m]ore than half of the works in its collection were fakes."[227] This example affirms the importance of due diligence, especially a thorough investigation of provenance and authenticity in the acquisition process.

In another example of the extreme risks associated with authentication, a 1993 federal court case that questioned the authentication of a mobile sculpture rendered the piece unsalable even after the court ordered that it was a genuine piece by Alexander Calder. Rendering the court's judgment, the judge conceded that the art market would nonetheless likely treat the work as suspect due to trial testimony by a respected Calder expert to this effect.[228] Thus, solely by voicing her *opinion*, a connoisseur's judgement of a work can be treated by the art market as a matter of

houses based on required expertise, typically these authenticators require owners to sign indemnity provisions protecting them from liability. Eileen Kinsella, *A Matter of Opinion*, ARTNEWS (Feb. 28, 2012), https://www.artnews.com/art-news/news/a-matter-of-opinion-512/.

[226] *See* Elian Peltier & Anna Codrea-Rado, *French Museum Discovers More than Half Its Collection Is Fake*, N.Y. TIMES, May 3, 2018, A6, https://www.nytimes.com/2018/04/30/arts/design/french-museum-fakes.html.

[227] *Id.*

[228] Valerie Medelyan, *Says Who? The Futility of Authenticating Art in the Courtroom*, 36 HASTINGS COMM. & ENT. L.J. 1, 1 (2014).

indisputable *fact*, even in the face of a court decision that comes out contrary. Over 20 years after the court's decision, the work remains unsold.[229] The basic setup of the contemporary art market thus assigns risk not to whoever is most likely to be able to prevent harm, but rather to the individuals with the most to lose: the owners of art with shaky attribution.[230]

Further, in some jurisdictions like France and Holland, forgery laws stipulate that any known forgery, once proven to be fake, must be destroyed under law enforcement supervision.[231] For example, in the case of Hans van Meegeren, the most infamous forger of the twentieth century, experts engaged in considerable hand-wringing while van Meegeren's trial was ongoing, fearful that genuine works might accidentally be destroyed.[232] Van Meegeren had spent the better part of the 1920s and 1930s forging works "so intimately in the style of Pietr de Hooch and Jan Vermeer that they would be received as authentic 'undiscovered' paintings by the masters."[233] Even after he was caught and admitted to his crimes, van Meegeren was required to paint "another painting 'in the style of' Vermeer to prove his culpability," as some experts remained unconvinced that the paintings he had made were forgeries.[234] Because Holland's art forgery laws require fake paintings to be destroyed by law enforcement, art connoisseurs feared that "[t]he court might, according to an ancient Dutch Law . . . order[] the destruction of *all* the pictures[,]" whereby "one could, officially, have destroyed two of the most moving works which Vermeer had created."[235] The loss to the art world and humanity as a whole that such a destruction could have inflicted was such that ultimately, van Meegeren's paintings have been saved from destruction despite scientific analysis in the 1950s that accurately identified the majority of his works as forgeries.[236] An art owner who seeks to authenticate their work must nevertheless be cognizant that such a risk can arise.

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[229] *Id.* at 2.

[230] *See, e.g.*, *id.*

[231] France and Holland have such laws. *See* RAGAI, *supra* note 3, at 36 (describing destruction of a forged Cranach painting by French authorities); Clark, *supra* note 23, at 34 (describing potential destruction of van Meegeren forgeries under Dutch law).

[232] Clark, *supra* note 23, at 34.

[233] *Id.*

[234] *Id.*

[235] *Id.*

[236] *Id.* at 34–35.

1. Authenticators' Conflicts of Interest

In performing a valuation or an authentication of a work, museums, artist foundations, and authenticators face significant conflicts of interest. When an authority in the art field—a curator at a museum, an artist foundation board, or a dealer in the artist's work—authenticates or declines to authenticate a work, their decision has an impact on the supply of works by that artist and thereby affects the price of other works by that artist.[237] In such a scenario, all parties benefit from a higher valuation, but other owners of works by the same artist—such as museums, artist foundation boards, or gallery owners—can potentially be adversely affected by the authentication of another work by the same artist, as this reduces the scarcity of the artist's works.[238] Among the parties who may authenticate works of art, conflicts of interest associated with curators, art dealers, and artist foundation boards are often insurmountable. Individuals must turn instead to individual authenticators or auction houses to take on this task—an imperfect solution to an already delicate situation in many circumstances.

Museum curators are often not permitted to render authentication opinions due to the risk that a conflict of interest could be imputed in an otherwise innocent interaction.[239] As one commentator has explained, "[t]he museum curator has nothing to lose financially and everything to gain from valuing favorably [or authenticating] a work of art."[240] The main benefits of a favorable valuation or authentication run not to the curator as an individual, but to the museum: in this sort of favorable transaction, "the museum is more apt to become the donee of the work of art, as a 'quid pro quo[,]'" and "a favor for a wealthy art collector enhances the museum's chances of becoming a recipient of the collection in the future."[241] As such, a serious "conflict of interest arises where a museum curator finds himself in the untenable position of being an expert for both the collector requesting the appraisal and his institution, regarding an art piece that the museum wishes to acquire."[242] Because "[i]t is in the museum's interest to accommodate a collector, who is a potential donor to the museum[,]" authentication may be more likely to come to the conclusion that a work is genuine and result in a generous valuation.[243] Beyond the fear of a conflict of interest, "museum officials frequently refuse to

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[237] *See, e.g.*, Debra B. Homer, *Fine Art Appraisers: The Art, the Craft, and the Legal Design*, 8 COLUM. J. ART & L. 457, 468 (1984).

[238] *See id.*; *see also*, Lacy, *supra* note 221, at 189–91.

[239] Homer, *supra* note 237, at 467.

[240] *Id.* at 467–68.

[241] *Id.*

[242] *Id.*

[243] *Id.* at 467–68.

perform art appraisals since it is inherently alien to them to treat art as an investment."[244]

Conflicts of interest are also inherent in valuation estimates rendered by art dealers. Art dealers have an incentive to please their customers, rather than to be entirely candid in valuations: "[a] collector who desires to seek a high value for his art piece will most likely seek out an art dealer with whom he does business; it is not unusual for a dealer 'to bend over backwards to please a client' by valuing the work at the top range of possible prices."[245] Thus, dealers in such circumstances are incentivized to inflate a valuation estimate in order to satisfy and flatter their clients.

Artist foundation boards' authentication opinions often implicate insurmountable conflicts of interest as well. In the past few decades, some foundations have been the subject of litigation related to the inherent conflicts of interest in their authentication—or their refusal to authenticate—privately-held works.[246] In a 2007 case, the owner of an alleged Andy Warhol painting submitted the work to the Andy Warhol Authentication Board, non-profit organization that renders authentication opinions, for a determination of authenticity.[247] The owner had purchased the work for $195,000 in 1989 and now planned to sell it for approximately $2 million.[248] In response, the Board stamped "DENIED" on the painting without further explanation, thereby not rendering an official authentication decision but negatively affecting the value of the work.[249] The owner spent a year documenting the work's origin and history, but when he re-submitted it for authentication, the Board once again stamped it with "DENIED."[250] While the denial

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[244] Homer, *supra* note 237, at 468. As a general matter, it is true that museums *do* perform valuations of the works they own, particularly for insurance purposes. However, such internal (and strictly confidential) valuations are fundamentally of a different nature from valuations that are involved in preparing a fair market estimate of a work for sale purposes.

[245] *Id.* at 469 (quoting William M. Speiller, *The Favored Tax Treatment of Purchasers of Art*, 80 COLUM. L. REV. 214, 238–40 (1981)). A dealer who maximizes the valuation of an individual's artwork would please that individual for two reasons: (1) to flatter them, and (2) because "[u]nder [S]ection 170(a) of the Internal Revenue Code, I.R.C. § 170 (1954), individuals who make charitable contributions of art are allowed to deduct the amount of the contribution from their taxable income." *Id.* at 457 n.1. For further discussion of the tax implications of authentication, *see infra* Part IV.

[246] *See, e.g.*, Amended Class Action Complaint at 4–13, Simon-Whelan v. Andy Warhol Found. for the Visual Arts, Inc., No. 07 Civ. 6423(LTS), 2009 WL 1457177 (S.D.N.Y. May 26, 2009).

[247] *Id.* at 4–6.

[248] *Id.* at 7.

[249] *See id.*

[250] *Id.*

was again a refusal to authenticate the work, not a negative determination on the merits of authenticity, it nevertheless reduced the work's market value to a fraction of that for a similar but un-stamped work.[251]

The owner of the contested painting eventually filed a federal lawsuit alleging that the Board's refusal to authenticate his painting—thereby minimizing the amount of authenticated Warhol paintings in existence (of which the Board owned many)—violated the federal Sherman Antitrust Act and New York state antitrust law.[252] While the court ultimately dismissed the suit with prejudice for lack of standing, the court had previously denied the Board's motion for summary judgment–a sign that the plaintiff's claims of anticompetitive conduct were plausible.[253] Recognizing the significant legal risks that continued refusals to authenticate works might incur, the Warhol Board and other foundations have shuttered their authentication committees.[254] Thus, owners are left to seek authentication opinions from individual authenticators or auction houses—a solution not without its own inherent difficulties, as explained *infra*.

2. Lack of Professionalization for Authentication

In the United States, an "art expert" is simply someone who holds himself or herself out as such.[255] That is not to say that art experts are unqualified—many have degrees in art history and have studied for years to be able to correctly identify a work's origin. But in practice, an expert's statement of authenticity is nothing more than an opinion.[256] In the French market, by contrast, small auction houses dominate the art market and the auctioneers who run them rely on "independent professional experts to value and appraise a particular piece."[257] The independent experts in this

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[251] Simon-Whelan v. Andy Warhol Found. for the Visual Arts, Inc., No. 07 Civ. 6423(LTS), 2009 WL 1457177, at *3 (S.D.N.Y. May 26, 2009)

[252] *Id.* at *5.

[253] Simon-Whelan v. Andy Warhol Found, for the Visual Arts, Inc., No. 07 Civ. 6423(LTS), 2009 WL 1457177 (S.D.N.Y. May 26, 2009), *complaint dismissed per stipulation*, No. 07 Civ. 6423(LTS)(AJP) (Nov. 30, 2010).

[254] *See, e.g.*, Jennifer Maloney, *The Deep Freeze in Art Authentication*, WALL ST. J. (Apr. 24, 2014), [https://perma.cc/VK7Q-39QM]. *See also* Andreja Velimirović, *Art Authentication Board – An Idea That Fell Through*, WIDEWALLS (Nov. 3, 2017), https://www.widewalls.ch/magazine/art-authentication-board; Georgina Adam, The high-stakes game of art authentication, BBC (Oct. 21, 2014), https://www.bbc.com/culture/article/20140325-high-stakes-in-hunt-for-fake-art.

[255] Raúl Jáuregui, *Rembrandt Portraits: Economic Negligence in Art Attribution*, 44 UCLA L. REV. 1947, 1968–70 (1997).

[256] *Id.*

[257] *Id.* at 1966–67.

model receive a percentage of the final sale from the purchaser, creating a greater incentive to serve the welfare of the client rather than the auction house.[258] France has also implemented mechanisms to certify experts, requiring them to maintain a license from a recognized professional association.[259]

Considering the staggering effect authenticators can have on the value of artwork, it is a wonder that the United States has not implemented any sort of check aside from traditional legal remedies to ensure that authenticators are in fact expert connoisseurs and follow some unified code of conduct. Certification by private organizations, described above, creates a partway, patchwork solution that remains inadequate.[260] Instead, the lack of formalization of the authentication process does little to guarantee fairness, honesty, or reliability.[261] The United States is no stranger to licensing requirements for professionals—doctors, lawyers, dentists, and real estate agents are just a few professions that require certain examinations of skill.[262] In order to remediate the unregulated, unsupervised "Wild West" of American art experts, the United States would be remiss not to consider taking a step in that direction for professional authenticators. Considering the substantial monetary risks art buyers face using unqualified authenticators, such a move could reduce uncertainty in the market to a non-negligible degree.

3. Human Error, Negligence, and Fraud

Other common reasons for errors to arise during an authentication include human error, negligence, and fraud. When an authentication goes wrong, a buyer may assert a case for negligence or fraud against either the authenticator or the seller. Ultimately, the vast majority of such cases will turn into a factual dispute in which a "battle of the experts" could arise.

One example of a case alleging fraud is that of *Aryeh v. Christie's Int'l.*[263] The plaintiff in the case, Eskandar Aryeh, purchased a Faberge imperial egg for $250,000 in 1977, the highest price paid for such a work at the time.[264] When he beheld the egg for the first time, however, Aryeh refused to accept the work, and he

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[258] *Id.*

[259] *Id.*

[260] Jáuregui, *supra* note 255, at 1966–70 (describing how there is no formal organization that accredits authenticators, but several competing organizations including the International Society of Appraisers, American Society of Appraisers, and College Art Association of America do offer relevant certifications). *See supra* text accompanying notes 255–56.

[261] *Id.*

[262] *See id.* at 1965.

[263] Aryeh v. Christie's Int'l, Index no. 1030/86 (N.Y. Sup. Ct. 1986).

[264] Clark, *supra* note 23, at 19.

communicated to Christie's—the auction house through which he purchased the egg—that it did not conform to the quality of Carl Fabergé's workshop.[265] Christie's filed suit against Aryeh, but when the auction house provided an additional letter of certification from A. Kenneth Snowman, a renowned Faberge egg expert, that the work was authentic, Aryeh settled the suit, paying full-price for the egg and covering Christie's legal costs.[266] About a decade later, in 1985, Aryeh sought to sell the egg through Christie's, but on the eve of the sale, the same Faberge egg expert, Snowman, declared the work inauthentic.[267] Aryeh sued Christie's for fraud based on the 1977 sale, with alleged damages of up to $37 million.[268] The auction house settled for an undisclosed sum prior to trial.[269]

A quarter of a century after settling with Aryeh, Christie's was embroiled in another authentication dispute regarding alleged fraud.[270] Guido Orsi sued Christie's in 2011 alleging that the auction house had sold him a painting advertised as by Jean-Michel Basquiat, despite knowing that the work was not authentic, and that Christie's had negligently misrepresented the authenticity of the work to him during the sale.[271] In 1990, Tony Shafrazi Gallery, Inc. purchased the painting from Christie's for $242,000, which had represented the painting to be an original work.[272] The gallery subsequently sold the work to Orsi for $185,000.[273] In 2006, Orsi sought an authentication certificate from a Basquiat authentication committee, which informed him that the work was a counterfeit.[274] In his case, Orsi presented evidence that Gerard Basquiat, the artist's father, and another representative had viewed the painting before its original sale at Christie's and described the painting as "not right."[275] Christie's argued that Basquiat's father had never expressed his concerns to Christie's before its original sale.[276] The reviewing court granted Christie's motion to dismiss, finding that the plaintiff had failed to show a triable issue of material

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[265] *See id.*; *see also* Gordon M. Henry, *Rotten Egg*, TIME (June 24, 2001), http://content.time.com/time/magazine/article/0,9171,143038,00.html.

[266] Clark, *supra* note 23, at 19–20.

[267] *Id.* at 20.

[268] *Id.*

[269] *Id.*

[270] *See* Tony Shafrazi Gallery, Inc. v. Christie's, Inc., No. 112192/07, 2011 WL 6002677 (N.Y. Sup. Ct. Nov. 22, 2011), *aff'd* 955 N.Y.S.2d 875 (2012).

[271] *See id.*

[272] *Id.* at 1.

[273] *Id.*

[274] *Id.* at 1–2.

[275] *Tony Shafrazi Gallery*, 2011 WL 6002677, at 2.

[276] *Id.*

fact.[277] Further, Christie's carried its own burden to show it had no knowledge or intent to defraud.[278] The finding was upheld on appeal.[279]

In 2009, Christie's main rival in the art market, Sotheby's, faced a more convoluted lawsuit alleging negligence and breach of contract, stemming not from the auction house's improper authentication of a work, but rather from a connoisseur's unqualified attribution, announced in public only a year after the painting passed through Sotheby's hands at auction.[280] The suit, brought in London, involved plaintiff Lancelot Thwaytes, who had suspected that the painting he inherited from his father's cousin was a genuine Caravaggio.[281] In 2006, Thwaytes had contacted Sotheby's to discuss different ways of researching the painting to determine if it was a genuine Caravaggio.[282] Thwaytes asserted he discussed using X-rays, which had helped authenticate another Caravaggio work, and that the Sotheby's representative stated that an infrared test would be done.[283] The Sotheby's representative recalled stating that X-rays were not commonly done and claimed he was not aware of what an infrared test would entail, thus could not have suggested performing one.[284] Sotheby's in fact used ultraviolet light, connoisseur opinions, and X-rays to evaluate the work, determined it was not genuine, and the work was sold for £42,000 in 2006.[285] The work was gifted to a renowned Caravaggio connoisseur Sir Dennis Mahon, who proclaimed the work a genuine Caravaggio a year later, after he had performed certain cleaning, advanced imaging, and research of the work himself.[286]

Thwaytes sued Sotheby's, alleging negligence and breach of contract.[287] The English High Court ruled for Sotheby's, finding that the auction house had not breached the ordinary standard of care due to its clients in carefully reviewing and preparing the work for sale.[288] The court rejected imposing a higher standard of care due to Thwaytes's specific interest in certain tests being carried out or belief that the

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[277] *Id.* at 9.
[278] *Id.*
[279] *Id.*
[280] Thwaytes v. Sotheby's [2015] EWHC 36 (Ch).
[281] *Id.*
[282] *Id.* at ¶35.
[283] *Id.*
[284] *Id.*
[285] *Thwaytes*, [2015] EWHC 36, at ¶3, 35, 40–45.
[286] *Id.* at ¶56–59.
[287] *Id.* at ¶67.
[288] *Id.* at ¶68.

work was genuine.[289] Instead, the court found that Sotheby's was entitled to rely on its own and not outside experts and used sufficient care in its review of relevant X-rays.[290] The court found that the auction house had no obligation to carry out infrared imaging.[291] Little of the court's analysis focused on Thwaytes's contract claim, as no issues regarding contract interpretation or validity were raised in the hearing before the court.[292]

4. Continued Influence of the Artist

While uncommon, in some circumstances the continued influence of an artist and their heirs poses a risk to even the most rigorous and unimpeachable of authentications, as some foreign jurisdictions permit the artist's moral rights to continue even after an artist's death.[293] One example of such a circumstance occurred in 1989 when French citizen Jean Fabris disrupted auctions for the works of Maurice Utrillo at Christie's and Sotheby's in London, shouting "fake, fake" when the artist's works came up for sale.[294] While this disruption appears innocuous, it was actually legally significant, as "Fabris, a close friend of Utrillo's deceased widow, inherited from her the artist's 'moral rights,' including the 'right of paternity,' that is, the legal right to claim or disclaim authorship."[295] Therefore, from a formalist legal perspective, any painting that Fabris characterized as "fake" became just that—Fabris held the power to disclaim the artist's association with his works.[296] While "the right to claim authorship is absolute and unqualified under most moral rights legislation . . . moral rights statutes generally require [a] 'just and valid reason' for disclaiming authorship."[297] In the case of Fabris's disclaimer of these Utrillo

[289] *Id.* at ¶68–71.

[290] *Thwaytes,* [2015] EWHC 36, at ¶166.

[291] *Id.*

[292] *Id.* at ¶67.

[293] In the United States, moral rights are relatively limited in scope, applying only to visual works and encompassing only a right to attribution and integrity of the work. *See* 17 U.S.C. § 106A(a)(3). In the U.S., these rights expire upon the artist's death. 17 U.S.C. § 106A(d). This is not the case in other jurisdictions, such as in France, where moral rights continue with the artist's heirs. *See* Code de la Propriété Intellectuelle [C. Prop. Intell.] [Intell. Prop. Code] arts. L121-1–L121-9 (Fr.); *see also* Loi 92-597 du 1 juillet 1992 relative au code de la propriété intellectuelle [Law 92-597 of July 1 1992 Relating to the Intellectual Property Code], Journal Officiel de la République Française [J.O.] [Official Gazette of France], July 3, 1992, Annex.

[294] Steven M. Levy, *Liability of the Art Expert for Professional Malpractice*, 1991 WIS. L. REV. 595, 631 (1991). *See also* Jonathan Randal, *Charges of 'Fake' Paintings Disrupt Christie's Auction*, WASH. POST, Apr. 6, 1989, at B2.

[295] Levy, *supra* note 294, at 631.

[296] *Id.* at 631 n.199.

[297] *Id.* at 632.

paintings, his "just and valid reason"[298] was that he was" [d]etermined to expose the hundreds of fake Utrillos in circulation[.]"[299] While Fabris's disclaimer of these works has not been challenged in court,[300] the incident demonstrates that the very insinuation that works are forgeries can have drastic consequences for prospective buyers or current owners.

5. Lingering Uncertainty: Discovering Unsuspecting Forgeries

Although a rare occurrence in the art world, there are occasions when a painting is presumed to be authentic, comes from a reputable collection, has a relatively solid provenance, and yet is later discovered to be a fake. Some of these risks are unforeseeable—no reasonable amount of due diligence on the part of the art owner could have prevented them, while others could have been avoided had more advanced technology or increased oversight existed at the time of the authentication.

This is not to say that forgeries in and of themselves are rare: a 2014 estimate by Switzerland's Fine Art Expert Institute concluded that approximately half of all art in the art market is forged or misattributed.[301] Shockingly, the Institute's chief Yann Walther called this estimate "likely on the conservative end of the spectrum."[302] Indeed, estimates of the percentage of forgeries included in the collections of major art museums worldwide range wildly, but the general consensus is that a sizable portion of museum holdings are fake. Art historian and forgery expert Noah Charney, for example, has reported "often hear[ing] the statistic that 10 percent of the art in museums is fake[,]"[303] while a 2011 article from the United Kingdom claimed that "[a] reasonable estimate might be that at least 20 per cent [sic] of the paintings held by [British national] museums, some up on the walls, many

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[298] *Id.*

[299] *Id.* at 631.

[300] Levy, *supra* note 294, at 631.

[301] *Over 50 Percent of Art Is Fake*, ARTNET (Oct. 13, 2014), https://news.artnet.com/market/over-50-percent-of-art-is-fake-130821 [https://perma.cc/6BR7-VZCY]. A work that is knowingly misattributed, while not a fake, would still be considered a forgery insofar as it or its provenance were modified to render such a conclusion or misattribution inevitable. It is for that reason that many statistics on art fraud aggregate the two matters. For a further discussion of the difference between a fake and a forgery, see *supra* note 19.

[302] *Id.*

[303] Noah Charney, *The Secret Lives of Works of Art: What Percentage of a Museum's Holdings Are Likely to Be Fakes?*, SALON (Apr. 2, 2017, 10:00 PM), https://www.salon.com/2017/04/02/the-secret-lives-of-works-of-art-what-percentage-of-a-museums-holdings-are-likely-to-be-fakes/.

others in the vaults, will no longer be attributed to the same painter 100 years from now."[304]

An art scandal like no other arose on March 4, 2016, when French authorities seized and later destroyed the panel painting *Venus*, which was previously attributed to German Renaissance painter and printmaker Lucas Cranach the Elder.[305] At the time, the painting was in the collection of the Prince of Liechtenstein and was being exhibited at the Caumont Centre d'Art in Aix-en-Provence.[306] Whereas the work had been purchased for €7 million just a few years before, an investigation by French authorities confirmed it was a forgery: "[a]nalysis of the *Venus* . . . [detected] artificially-aged paint on a panel created 200 years too late for the German Renaissance painter[.]"[307] The forgery was only discovered due to an anonymous tip, which informed police that the work was completed by a highly advanced forger.[308] In accordance with French law, the painting had to be destroyed.[309]

A similarly jaw-dropping scandal erupted in New York City in 2011 when the over 160-year-old and formerly venerable Knoedler & Co. Gallery abruptly closed after facing several high profile lawsuits against its owner and president, Ann Freedman, for selling forged works.[310] Suspicions first arose when hedge fund manager Pierre Lagrange, who had purchased a Jackson Pollock painting from the Knoedler for $17 million, discovered that neither Sotheby's nor Christie's would sell his painting, because the work was not included in Pollock's *catalogue raisonné*.[311] Lagrange ordered forensic testing of the work, which "revealed the anachronistic Pigment Yellow 74, not commercially available during Pollock's lifetime."[312] When Lagrange demanded a refund from Freedman within forty-eight hours of his

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[304] Michael Glover, *The Big Question: How Many of the Paintings in Our Public Museums Are Fakes?*, INDEPENDENT (Oct. 23, 2011), https://www.independent.co.uk/arts-entertainment/art/news/big-question-how-many-paintings-our-public-museums-are-fakes-1946264.html.

[305] RAGAI, *supra* note 3, at 36.

[306] *Id.*

[307] *Id.* at 38.

[308] *Id.* at 37–38.

[309] *See id.*; *see also supra* text accompanying note 231.

[310] RAGAI, *supra* note 3, at 88. A 2021 documentary released on Netflix, *Made You Look*, discusses the Knoedler gallery scandal as well. Michael Rechtshaffen, Review, *'Made You Look: A True Story about Fake Art,' a fascinating $80 million con*, L.A. TIMES (Feb. 23, 2021), https://www.latimes.com/entertainment-arts/movies/story/2021-02-23/review-made-you-look-true-story-fake-art.

[311] RAGAI, *supra* note 3, at 88.

[312] *Id.*

discovery, the scandal broke.[313] Despite the high number of cases filed against the gallery, only Domenico and Eleanore de Sole's case survived to go to trial.[314] In 2004, the de Soles had purchased a red and black painting by Mark Rothko from the gallery for $8.3 million.[315] Forensic testing confirmed that the painting was a forgery.[316] At trial, experts "unleashed a mountain of embarrassing evidence and incriminating testimony describing how dozens of collectors . . . were deceived into buying forged artworks attributed to Abstract Impressionist masters."[317] Freedman "wittingly or unwittingly ignored" what has been described as "a string of red flags" throughout her tenure at the gallery.[318] Before a verdict was reached, the parties settled for an undisclosed sum.[319] Nevertheless, the Knoedler scandal and Freedman's "irrational" decisions in "weigh[ing] information selectively, giving greater weight to facts that supported her belief and less weight to facts that cast doubt on the provenance of the paintings," created a stigma that still stains the American art market.[320]

B. Risks to Authenticators

As a general rule, "[t]here is relatively little litigation in the art market[.]"[321] That generality notwithstanding, when an authentication goes awry, the party responsible for the authentication opinion may face legal action. As detailed below, the standard system of risk allocation typically leaves the buyer bearing the risk when a transaction goes wrong; thus, the injured party is at best only partially protected from risk of loss. In such circumstances, the aggrieved party—usually the buyer—can bring suit against the authenticator.[322] Such a party could sue the independent authenticator directly, or sue both the authenticator and the auction house if the authenticator were under contract with the auction house and not

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[313] *Id.*

[314] *Id.*

[315] *Id.* at 85.

[316] RAGAI, *supra* note 3, at 86.

[317] *Id.* at 88.

[318] *Id.* at 88–89.

[319] *Id.* at 89.

[320] *Id.* at 91.

[321] Swift Edgar, *Standing by Your Man Ray: Troubles with Antitrust Standing in Art Authentication Cases*, 37 COLUM. J.L. & ARTS 247, 264 (2014).

[322] For examples, see *supra* Part III(A)(3). Authenticators make statements about the authenticity or attribution of a piece of art, thus expose themselves to liability where these authentications go awry.

otherwise indemnified.[323] An auction house would usually be sued directly.[324] Further, because an art authenticator's opinion continues to influence a work's value long after her opinion is rendered, "[a]rt authenticators exert continual power over artwork, meaning that owners of art may be subjected to adverse determinations of authenticity long after the statute of limitations has run for causes against the seller."[325] Depending on the discovery rules and applicability of laches in the relevant jurisdiction, art authenticators can have litigation spring up related to an authentication that they made weeks, years, or even decades before with little to no notice.[326]

In general, authenticators do not have special protections under law. There have been some limited attempts by states to provide legal protection to art authenticators, but none have successfully done so thus far. The New York State Senate passed a bill in 2015 that "renders litigation against authenticators more difficult, and can considerably reduce the legal costs when authenticators are faced with a lawsuit."[327] While this bill has passed state Senate votes in every legislative session since 2015, it has yet to be introduced for a vote in the State Assembly.[328] The 2019–2020 legislative session version of the bill would require plaintiffs bringing cases against art authenticators to specify particular facts when pleading and prove elements of their claim by clear and convincing evidence, as well as entitle the defendant-authenticator to recover reasonable attorneys' fees if she prevails.[329]

The lack of significant statutory protections for art authenticators is likely linked to past court treatment of art transactions on the secondary market: "[t]raditionally, the principle of caveat emptor, or 'buyer beware,' was applied in auction transactions."[330] That said, as auction houses increasingly sell pieces to the general public, not just institutions and expert buyers, and demand larger fees, courts

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[323] *See* Amineddoleh, *supra* note 50, at 427–30; Skolnik, *supra* note 21, at 331–37; DuBoff, *supra* note 38, at 1002–16. *See also supra* Part III(A)(3).

[324] *See* Amineddoleh, *supra* note 50, at 427–30; Skolnik, *supra* note 21, at 331–37; DuBoff, *supra* note 38, at 1002–16. *See also supra* text accompanying notes 310–20.

[325] Edgar, *supra* note 321, at 270–71.

[326] *See id.*

[327] RAGAI, *supra* note 3, at 96.

[328] *Id.* at 97; *see also* A107, 242d Leg., 1st Sess. (N.Y. 2019), https://www.nysenate.gov/legislation/bills/2019/A107 (demonstrating a bill to provide additional protections to art authenticators has been introduced in New York State Senate sessions since the 2013–2014 session and through to the 2020–2021 session).

[329] A107, 242d Leg., 1st Sess. (N.Y. 2019), https://www.nysenate.gov/legislation/bills/2019/A107.

[330] Medelyan, *supra* note 228, at 6–7.

have started to change their views.[331] Today, auction house commissions add a premium of about 25% to most buyers' purchases.[332] In light of this change, some "courts have altered their views regarding the buyer-auctioneer relationship," to impose greater protections for buyers transacting through these intermediaries.[333] Auction houses therefore have a substantial interest in the authentication of works that they auction.[334]

Auction houses have notably been responsible for erroneous authentication opinions in the past. To authenticate one 1848 George Inness painting, for example, "Sotheby's sent a black and white photograph of the artwork to an expert, who wrote 'yes' on the back of the photograph and sent it back to Sotheby's."[335] The painting was sold as an original work, but was later determined to be a forgery.[336] Today, such a result would likely open up Sotheby's to litigation, on a theory that the auction house owed the buyer more care in rendering its authentication decision.

Despite the risks that auction houses face in authenticating a work, many large auction houses guarantee authorship or authentication to some extent. "In 1973, Sotheby's announced that it would guarantee the authorship of all post-1870 works and the authenticity of pre-1870 works."[337] To cap its liability exposure, Sotheby's imposed some limits on its commitment, namely that its guarantee: (1) "extends only to the heading in bold type listed in the catalog according to the technical terminology system of attribution established by the auction house[,]" and (2) "is valid for only five years from the date of sale, regardless of when the discovery of lack of authenticity is made."[338] Within this framework, Sotheby's appears to have presumed that it is exposed to an acceptable level of risk.[339] Similarly, Christie's warrants the authenticity of works it sells for a period of five years from the date of sale, provided that: (1) this warranty extends only to aspects of the description of the work published in all caps in the auction catalogue, (2) the warranty does not extend to works whose authenticity could only be brought into question by scientific means

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[331] *Id.*

[332] *Id.* Sellers sometimes pay commissions but not always; their commission may be waived by the auction house to induce them to sell goods through that intermediary. *Id.*

[333] *Id.*

[334] For a further discussion of these sorts of conflicts of interest as they affect various art market participants, see *supra* Part III(A)(1).

[335] Medelyan, *supra* note 228, at 10.

[336] *Id.*

[337] Patty Gerstenblith, *Picture Imperfect: Attempted Regulation of the Art Market*, 29 WM. & MARY L. REV. 501, 531 (1988).

[338] *Id.*

[339] *See id.*

not yet available at the time of the sale, and (3) the buyer provides the written opinion of two independent experts that the lot is not authentic, among other requirements.[340]

The risks faced by independent authenticators and auction houses vary to some degree in a situation where an authentication has gone awry. Auction houses render more authentication decisions than any single authenticator, and thus aggregate a greater amount of total risk exposure.[341] At the same time, these institutions are deeper-pocketed entities than individual experts. Moreover, auction houses make more than a single representation to a client: they can face liability for negligently warranting the authenticity of a work merely by describing it in a certain way in their catalogues.[342] By contrast, the very specific opinion that an independent authenticator provides may be less likely to result in liability. "An art expert is not necessarily negligent because he arrives at a conclusion that later is challenged by other experts or ultimately proves to be wrong[;]" rather, "[h]e is negligent only if the error is due to a failure to use the care and skill ordinarily used by other experts in similar circumstances."[343] Furthermore, authenticators face a lower level of risk than auction houses merely by virtue of the fact that "[s]cientific tests can never prove that a work is genuine, only (sometimes) that it is not genuine."[344] Nevertheless, there have been several notable cases in which an independent authenticator has faced allegations of fraud or negligence stemming from a faulty authentication.[345]

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[340] *New York Conditions of Sale Buying at Christie's*, CHRISTIES, § E(2)(a), https://www.christies.com/buying-services/buying-guide/conditions-of-sale (last visited Feb. 15, 2021).

[341] In 2018, for example, Christie's sold $7 billion worth of art and objets d'art, up 6% from the previous year, with 67 paintings sold at prices over £10 million. *Christie's Continues to Lead the Global Art Market*, CHRISTIE'S (Feb. 7, 2019), https://www.christies.com/features/Christies-continues-to-lead-the-global-art-market-9681-1.aspx. This is compared to "Professor Frederick Hartt, a world-renowned specialist on Michelangelo, [who] testified in 1989 that in his entire career, which spanned decades, he had only been asked to make attributions on about twenty occasions." Levy, *supra* note 294, at 602 (citing Hartt v. Newspaper Publ'g P.L.C. [1989] (unreported) (Eng. & Wales)).

[342] *See, e.g.*, text accompanying notes 270–79.

[343] Levy, *supra* note 294, at 605.

[344] *Id.* at 612.

[345] RAGAI, *supra* note 3, at 71–76. One stark example of the risks that authenticators face is the recent criminal case brought against art authentication expert Elena Basner for forgery. *Id.* Basner's 2014 arrest was branded "an insult to 'the whole Russian intellegensia[]'" by Hermitage Museum Director Mikhail Piotrovsky. *Id.* at 71. The allegations against Basner—of which she was quickly acquitted in May 2016—had their roots in Basner's 2009 authentication of a gouache painting as attributed to Boris Grigoriev, entitled *In A Restaurant*. *Id.* at 72. Basner and her colleague, Yulia Solonovich, agreed after inspection that the work appeared genuine; unbeknownst

C. Remedies for Bona Fide Purchasers

"[T]he art market is one of the largest (if not *the* largest) unregulated markets."[346] Surprisingly, despite the sky-high prices of artworks, some art purchasers have little to no knowledge of best practices when it comes to buying art.[347] "The vast majority of purchases of artworks are impulsive, with buyers shockingly uninformed about the nature of the object to be purchased, its provenance, or its physical condition."[348] The lack of informed buyers, coupled with the dwindling number of experts willing to authenticate art, "has made today's art market the '[W]ild [W]est' for fraud."[349] The statistics of fraud in the art world are staggering. For example, it has been presumed that about 60% of art on the market today has insufficient, unverifiable, or otherwise suspect provenance.[350] It is only logical then that individuals, museums, and galleries across the country own fraudulent pieces and must arm themselves with legal remedies in case of faulty authentication. Furthermore, due to the high risk of purchasing a fraudulent piece, buyers interested in investing in expensive art should make hiring their own independent authenticity expert a priority.

There are a number of legal protections and remedies available in the United States to the good faith purchaser who falls victim to a forgery by mistake or misrepresentation.[351] Common law contract rules provide some protection for consumers who are taken advantage of by more sophisticated sellers.[352] Institutional buyers like museums and galleries may also be victims of fraudulent schemes and can seek out similar protections.[353] In addition to common law contract protections, buyers—sophisticated or not—"unfairly injured in an art sales transaction may find useful legal recourse in tort law, Federal and State Penal statutes[,]" and in

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to the two authenticators, "a few months earlier, the Grabar Restoration Center . . . had ruled it as a fake through the scientific detection of anachronistic phthalocyanine pigments[.]" *Id.*

[346] Amineddoleh, *supra* note 50, at 424.

[347] *See, e.g.*, Clark, *supra* note 23, at 20–21.

[348] *Id.* at 20.

[349] Bonner, *supra* note 20, at 21. While it may be surprising to many that individuals are willing to purchase a multimillion-dollar work of art on impulse, the context of these sales—generally, in a well-respected gallery or through a dealer of known reputation, and with the implicit and explicit assurances of the gallery owner or dealer of the work's authenticity—to some degree explain the ease with which some individuals make these sorts of purchases. *See id.*

[350] *See* Harry Hillman-Chartrand, *Investment Protection: Reducing Financial Loss from Fraudulent Art,* 14 J. CULTURAL ECON. 83, 89 (1990).

[351] Amineddoleh, *supra* note 50, at 427–30.

[352] *Id.* at 429.

[353] RAGAI, *supra* note 3, at 87–93.

legislation enacted in a few jurisdictions prominent in today's art market.[354] New York and California stand out as states with additional legal protections for art buyers.[355]

However, in most circumstances, the currently available legal remedies do not adequately protect the interests of good faith purchasers of fine art. Additional statutory protections, like those adopted in New York and California, would help protect bona fide buyers from the risk of loss associated with fraudulent or negligent authentication. Additional legal protections of this nature would encourage independent authenticators and auctions houses to take more care in rendering their opinions about the authenticity of a work, as well as help deter criminal actors from undertaking fraudulent schemes. Thus, a proliferation of state-level legislation like that enacted in New York state, discussed *infra*, would be a net positive for all parties involved in the art market. At present, the Uniform Commercial Code comes the closest to providing a national and uniform means of protection for purchasers of fine art and other chattel, but it is inadequate to provide full protection in the ever-shifting world of art authentication. As laid out *infra*, none of the current protections available to good faith purchasers are on their own sufficient, though the New York state legislation provides a case study on some potential improvements.

1. Uniform Commercial Code

The Uniform Commercial Code ("U.C.C.") "is the most important legal instrument for ensuring the propriety of transactions involving artworks[,]" as it "offers powerful mechanisms to discourage misrepresentation in the case of paintings."[356] In general, the U.C.C. aims "at protecting the sanctity and fairness of business dealings[,]" specific to transactions for chattel, such as paintings, sculptures, and other tangible works of art.[357] The U.C.C. is particularly useful in the commercial art market, which is filled with many sophisticated sellers and highly inexperienced buyers, as courts have interpreted it to afford special protections for nonprofessional buyers.[358] A nonprofessional buyer is characterized in *Balog v.*

[354] Clark, *supra* note 23, at 25–26.
[355] *Id.* at 26.
[356] *Id.* at 26–27.
[357] *Id.*
[358] *See id.* at 20.

Center Art Gallery-Hawaii[359] as someone who buys art that is not "so valuable as to warrant buyer-financed authentication[.]"[360]

The U.C.C. provides several legal remedies for good faith buyers of fraudulent art. U.C.C. § 2-313 protects buyers against a seller's express warranties, defined as "any promise or affirmation of fact made by the seller, or any description, . . . if it forms part of the basis of the bargain."[361] Therefore, if a dealer makes a statement of fact as to a work's authenticity that constitutes a warranty and the buyer relies on this representation to purchase a work of art, the buyer can seek the protections of U.C.C. § 2-313 when the seller's statement later turns out to be false.[362] A prima facie case for breach of express warranty requires for a plaintiff to prove five elements: "a statement of facts by the seller; the buyer's reliance upon this statement; the seller's making [of] this statement when the bargain was struck; proximate cause; and injury suffered as a result of the buyer's reliance on the seller's statement."[363] Because "an express warranty may be created regardless of the seller's intention to make such a warranty[,]" what a dealer may think is "mere opinion" can nonetheless be treated as an express warranty.[364] Moreover, the seller's "good faith is no defense to a false assertion."[365] Breach of express warranty occurs when the delivery of the chattel is made, unless the warranty "explicitly extends to future performance of the goods and the discovery of the breach must await the time of such performance."[366] The court in *Balog* reasoned that artwork does not perform in the traditional sense of goods covered by the U.C.C., and since any test for authenticity is often deferred until a future sale, "the initial buyer must rely on representations by the seller concerning the certification of the artwork."[367] Such representations "create an explicit 'warranty of future performance,' sufficient to toll the applicable statute of limitations."[368]

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[359] Balog v. Ctr. Art Gallery-Hawaii, Inc., 745 F. Supp. 1556, 1558–59 (D. Haw. 1990).

[360] Clark, *supra* note 23, at 21–23. The buyers in *Balog*, a couple on vacation in Hawaii, purchased what they believed were original works by Salvador Dalí. *Id.* The couple relied on representations by the art gallery including notices entitled "Confidential Appraisal - Certificates of Authenticity[,]" but the works turned out to be fakes and resulted in a net financial loss of $36,200. *Id.*

[361] Jáuregui, *supra* note 255, at 1979.

[362] *Id.*

[363] Drew N. Lanier, *Protecting Art Purchasers: Analysis and Application of Warranties of Quality*, 12 CARDOZO ARTS & ENT. L.J. 191, 192 (1994).

[364] Clark, *supra* note 23, at 27–28.

[365] *Id.* at 28.

[366] *Id.* at 21 n.55 (citing U.C.C. § 2-314).

[367] *Id.* at 22–23.

[368] *Id.* at 23 (citing Balog v. Ctr. Art Gallery-Hawaii, 745 F. Supp. 1556, 1573 (D. Haw. 1990)).

However, the default protections available to buyers within U.C.C. § 2-313 may be modified by contract. Many dealers include disclaimers in all correspondence and contracts with buyers. While permissible, U.C.C. § 2-316 views such disclaimers as a "repugnant" practice and affords them no effect unless "they are clearly and prominently displayed, *and* the dealer has made no assertion of authenticity."[369] However, buyers may be unaware of these requirements for disclaimers and avoid litigation based on the mistaken belief that they have disclaimed their rights to any warranty claim.

Further, U.C.C. § 2-314 establishes an implied warranty of merchantability.[370] "[A]n implied warranty of merchantability springs into existence when goods in question are purchased from a seller who is a 'merchant with respect to goods of that kind.'"[371] This warranty is particularly useful when buyers are dealing with prominent dealers or galleries who are clearly merchants dealing in "goods of that kind."[372] It likely does not apply to sales by private individuals.[373] Moreover, to make use of these protections, the buyer must prove that the forged piece she received is not "fit for its ordinary purpose," which could be difficult for an art collector to prove as the "ordinary purpose" of any art is hard to identify concretely and a piece could still fulfill the "ordinary purpose" of aesthetic pleasure despite being fraudulent.[374]

In sum, the U.C.C. protections for good faith buyers, while promising, remain incomplete. Under U.C.C. § 2-313, sellers can modify express warranties through contract, and plaintiffs struggle to prove a prima facie case for an implied warranty of merchantability under U.C.C. § 2-314. The inadequacy of U.C.C. remedies is especially stark where buyers lack adequate knowledge about their rights and are likely to rely on a seller's representations of such. Thus, rather than protecting unsophisticated good faith purchasers, the U.C.C. merely enforces the already-extant information disparity in such relationships, often to the detriment of individual purchasers.

2. Tort Claims

If the U.C.C. does not provide sufficient protection, another avenue for a duped good faith purchaser is to sue for fraud. To prove fraud, a plaintiff needs to show "reliance on the defendant's misrepresentations, and that this reliance caused

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[369] Clark, *supra* note 23, at 28.
[370] *Id.* at 29. *See also* U.C.C. § 2-314 (amended 2003).
[371] Clark, *supra* note 23, at 29 (citing U.C.C. § 2-314(1)).
[372] Skolnik, *supra* note 21, at 336 (quoting U.C.C. § 2-314(1) (1979)).
[373] *Id.*
[374] *Id.* at 336–37 (quoting U.C.C. § 2-314(1)(c) (1979)).

injury."[375] Yet, "courts have held that a dealer cannot be guilty of fraud for representing information that he himself *reasonably* believes."[376] Accordingly, the buyer has the burden of proving that the dealer had actual knowledge that the artwork was not authentic.[377] Most of the time, the dealer is able to "convincingly assert that he, too, was deceived."[378] Similarly, a dealer may avoid liability by showing that he lacked actual knowledge sufficient for a finding of fraud.[379] Thus, the knowledge requirement for a fraud claim can be a sticking point for a bona fide buyer seeking to redress a loss from authentication.

Owners may also sue for "disparagement," also known as "injurious falsehood," if the defendant makes a derogatory statement about a painting to a third party that causes pecuniary damage.[380] To assert a prima facie case, the plaintiff must show: "1. [t]he plaintiff's interest in the object in question[,] 2. [t]he nature of the derogatory statements made[,] 3. [t]he falsity of the derogatory statements[,] 4. [t]he publication of these statements to a third party (or parties) without the plaintiff's consent[, and] 5. [a]s a result of the publication, the incurrence of a definite pecuniary loss."[381] The plaintiff's burden to prove disparagement, especially showing the falsity of the defendant's statement, is not an easy hurdle. In *Hahn v. Duveen*, for example, Judge Black explained that "in order for a plaintiff to recover, she must prove that her property is what she claims it to be, because until she establishes the genuineness of her own property[,] she cannot prove that defendant's statement regarding its spuriousness was false."[382] In such circumstances, the only route to victory is the plaintiff affirmatively proving that the work that they own is genuine—a tall order, given the limited methods by which a work's authenticity can be definitively determined.[383]

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[375] Jáuregui, *supra* note 255, at 1977.

[376] Amineddoleh, *supra* note 50, at 428.

[377] *Id.*

[378] *Id.* For one example of such an instance of "willful blindness," see *supra* text accompanying notes 310–20.

[379] *Id.* In the tort context, the term "fraud" should be read not to refer to forgery itself, but rather to the intent-based act of purposefully deceiving another for financial gain. *Cf.* Skolnik, *supra* note 21, at 330–31.

[380] MARIE C. MALARO & ILDIKO POGÁNY DEANGELIS, A LEGAL PRIMER ON MANAGING MUSEUM COLLECTIONS 434–35 (3d ed. 2012).

[381] *Id.* at 435.

[382] *Id.*; Hahn v. Duveen, 234 N.Y.S. 185, 187 (Sup. Ct. 1929).

[383] *See supra* text accompanying note 115.

3. Contract Law

Contract law may provide another layer of protection for the good faith purchaser. One potentially applicable principle of contract law is the doctrine of mutual mistake—that is, in some circumstances, a contract cannot be enforced if it is based on both parties' mistaken belief regarding a material aspect of the bargained for exchange.[384] "In contract law, a *material term* is a contract provision that concerns significant issues, such as subject matter, price, quantity, or payment."[385] Specific to transactions in the art market, "a reasonable person would believe that authorship is an important provision of a contract for an artwork."[386] Thus, "[w]here a dealer and a buyer are both mistaken about the attribution, one may be able to successfully assert mutual mistake and void the contract."[387] However, there are several exceptions to the rule of mutual mistake that make this form of redress incomplete. For example, if a contract includes a provision allocating risk to the buyer, or when the buyer is aware of his own limited knowledge but relies on its sufficiency, he cannot seek rescission of the contract for mutual mistake.[388] Thus, whether this form of protection applies will depend on the specific provisions of the contract between the parties and the factual context surrounding the sale itself.

4. Specialized Protections under State Law: New York as a Case Study

In recent years, several states have enacted specific statutory protections for good faith purchasers of fine art. New York state lawmakers stand out as leading the nation in codifying law to protect the art market and its key players.[389] For example, Section 170.45 of New York's Penal Law has made art forgery, fraudulent misrepresentation, and simulation of antiques all separate criminally punishable offenses.[390] In the civil context, Section 13.01 of New York's Arts and Cultural

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[384] RESTATEMENT (SECOND) OF CONTRACTS § 152 (AM. LAW. INST. 1981). More specifically,

> [w]here a mistake of both parties at the time a contract was made as to a basic assumption on which the contract was made has a material effect on the agreed exchange of performances, the contract is voidable by the adversely affected party unless he bears the risk of the mistake under the rule stated in § 154.

Id. at § 152(1); *see also id.* at § 154.

[385] Amineddoleh, *supra* note 50, at 429.

[386] *Id.*

[387] *Id.*; *see also* RESTATEMENT (SECOND) OF CONTRACTS § 152 (AM. LAW. INST. 1981).

[388] Amineddoleh, *supra* note 50, at 429–30. *See also* RESTATEMENT (SECOND) OF CONTRACTS § 154 (AM. LAW. INST. 1981).

[389] Amineddoleh, *supra* note 50, at 428.

[390] Skolnik, *supra* note 21, at 338 (citing N.Y. Penal Law § 170.45 (McKinney)).

Affairs Law "established that when an art merchant, in writing, attributes an artwork to a particular author, it is presumed to be part of the basis of the sale and is deemed to be an express warranty of authenticity," but this warranty only applies "when a written statement is made by an art merchant and provided to a non-art merchant."[391] To determine breach of warranty, Section 13.01 has been interpreted to require the buyer to prove, via preponderance of the evidence, that the merchant's assertions made at the time of the representation did not have a reasonable basis in fact.[392] Likewise, the buyer's claim regarding reasonable basis in fact should be supported by expert testimony from art professionals.[393]

On the whole, New York state's approach is a move in the right direction. Greater criminal penalties for art market crimes, including art forgery and fraudulent misrepresentation, can have an important deterrent effect by encouraging authenticators to take more care in rendering opinions and by deterring criminal syndicates from entering the art market. Furthermore, stronger default protections for bona fide buyers may make it easier to bring a civil case against authenticators and auction houses that have made erroneous representations as to the authenticity or attribution of a work. Laws like New York's suggest that authenticators and auction houses will take more care in future authentications or representations to buyers, and similarly suggest that buyers will have viable means to seek redress when authentication goes awry. Several other states including California and Illinois have attempted to follow in New York's footsteps, passing their own laws to protect the art market.[394] Nevertheless, the United States as a whole is still a long way from remedying the murky waters of the art market, even if action by some states demonstrates a trend in a positive direction.

IV
PUBLIC HARMS FROM ART FRAUD

Art fraud is, in many ways, the epitome of white-collar crime, as it involves billions of dollars in discrete transactions over what some have dismissed as an elitist status symbol. However, when art fraud occurs, the harm created affects more than just elite art collectors and private museums. Beyond loss to individual collectors and institutions, "the federal government also loses money as a result of art

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[391] Amineddoleh, *supra* note 50, at 428; *see* N.Y. Arts & Cult. Aff. Law § 13.01 (McKinney).
[392] Amineddoleh, *supra* note 50, at 428.
[393] *Id.*
[394] Skolnik, *supra* note 21, at 337.

forgery[,]"[395] and the public writ large may be less likely to see important works exhibited.

Public harm from art fraud and mistaken authentication can occur in a variety of ways, such as a decline in federal tax revenue. Such a decline results because, at present, there are several tax benefits that apply in the fine arts market. First, "[u]nder [S]ection 170(a) of the Internal Revenue Code, I.R.C. § 170 (1954), individuals who make charitable contributions of art are allowed to deduct the amount of the contribution from their taxable income."[396] Thus, a forged or misattributed work, donated by a high net-worth individual, would allow that individual to claim an oversized or otherwise unmerited tax deduction. Second, "[t]he Internal Revenue Code enables taxpayers to deduct losses suffered due to the destruction or loss of original artwork not covered by insurance."[397] However, in order to obtain this tax deduction, "taxpayers must provide the Internal Revenue Service ("IRS") with evidence of the amount lost, i.e., the value of the artwork."[398] Therefore, "[i]f the work claimed as the basis of such a deduction is actually a forgery, then the government is granting a deduction for something which is not an original artwork and is losing the value of the tax it would have received on the unoriginal work."[399] Accordingly, the government and the art market should both value originality, because both stand to suffer significant losses due to art forgery.

Beyond the harms to public tax revenue that art fraud can pose, the fear of mistaken authentication may make some parties hesitant about exhibiting their art, lest someone else through research and study determine that it is not authentic. As a baseline matter, only a small fraction of the works in museum collections are on display at any given time: "[t]he Metropolitan Museum of Art in New York, for example, owns two million objects and displays only tens of thousands at a time[,]" while "[a]t the Museum of Fine Arts in Boston, 18,000 objects are on display at any one time, of 450,000 in inventory."[400] Similarly, "[t]he Louvre shows 8%, the Guggenheim a lowly 3% and the Berlinische Galerie . . . [displays] 2% of its holdings."[401] While much of this low exhibition rate is due to limited gallery space,

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[395] Judith Nelson, *Art Forgery & Copyright Law: Modifying the Originality Requirement to Prevent the Forging of Artworks*, 8 CARDOZO ARTS & ENT. L.J. 683, 698 (1990).

[396] Homer, *supra* note 237, at 457 n.1.

[397] Nelson, *supra* note 395.

[398] *Id.*

[399] *Id.*

[400] Geraldine Fabrikan, *The Good Stuff in the Back Room*, N.Y. TIMES (Mar. 12, 2009), https://www.nytimes.com/2009/03/19/arts/artsspecial/19TROVE.html.

[401] Kimberly Bradley, *Why Museums Hide Masterpieces Away*, BBC (Jan. 23, 2015), http://www.bbc.com/culture/story/20150123-7-masterpieces-you-cant-see.

fear of a mistaken authentication being unmasked may worsen the problem. Indeed, the fear that a work could even be destroyed—as the forgery laws of some jurisdictions require upon discovery and confirmation of a forgery[402]—proves to be a strong disincentive to loaning out works. Such a reduced exhibition of museum-held art causes the public to suffer, as society is deprived of exposure to art, resulting in a cultural loss.

Ultimately, expanding criminal penalties to address art fraud and improving the ability for private parties to bring civil suits for faulty authentication would do double duty to improve outcomes for both private parties and the public. The increased ease of seeking a civil remedy will incentivize auction houses to improve the rigor of their authentication services. Increased criminal penalties for forgery will put criminal syndicates on notice that they could face significant liability for fraud and misrepresentation in the art market. Combined with stronger statutory protections for bona fide buyers of fine art, such a renewed statutory scheme could finally throw light onto the dark recesses of the art market, increasing buyer confidence and seller accountability.

CONCLUSION

Authentication is a double-edged sword. While authentication drives up the value of paintings, creates publicity that benefits owners, and adds prestige to institutions whose art has been authenticated, it carries inherent risks. Authentication can destroy the value of an artwork as easily as it can bolster it. Examples of this risk range from where the mere question of a work's authenticity made it impossible to sell to where authentication led to a legal duty to destroy the work in question upon proof it was a forgery.

Ultimately, technology can streamline, reinforce, and guarantee the authenticity of a work, but technology can also create the opportunity for nefarious actors to perpetrate fraud on a massive scale. At present, however, legal protections have not yet adapted to ensure adequate protections for authenticators, auction houses, and bona fide buyers to fairly and predictably allocate risk. Until these concerns can be addressed, and the art market adapts ways to address them, the old adage of *caveat emptor*—buyer beware—will continue to be the hallmark of art authentication.

[402] *Cf. supra* text accompanying notes 305–09 (regarding destroyed Cranach forgery).

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LOCAST AND THE LEGISLATIVE HISTORY OF 17 U.S.C. § 111(a)(5)

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'The American people have given you something really valuable, the airways, for free,' he said, talking about the broadcasters, his eyes popping at the word 'free.' Slowing down for emphasis, he added: 'So shouldn't we get something back for free? Which is great television. That's the social contract, right?'[1]

- *David Goodfriend (January 31, 2019)*

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[1] Edmund Lee, *Locast, a Free App Streaming Network TV, Would Love to Get Sued*, N.Y. TIMES, Feb. 3, 2019, at BU1 (emphasis added).

INTRODUCTION

David Goodfriend is the founder of the broadcast television retransmission service "Locast." The industry's latest creative destructor that has made itself available to a majority of the United States in less than three years.[2] Using antennas placed atop high altitudes, Locast seizes and retransmits over-the-air live broadcast signals to "almost any digital device, at any time, in pristine quality" using a digital stream.[3] Its mobile app and website operate much like a TV on-demand service; in some areas, users can scroll through approximately 50 live feeds. Locast does so, however, without the consent of any of the content's owners or broadcasters.[4]

[2] LOCAST, https://www.locast.org/ (last visited Apr. 26, 2021) (advertising that Locast retransmission signals were available to 51.7% of the U.S. population as of the date visited).

[3] Lee, *supra* note 1; *Live TV Guide*, LOCAST, https://www.locast.org/cities/501 (last visited Feb. 21, 2021) (in the New York market alone, approximately 50 live fees are available, including: CBS, NBC, FOX, ABC, and PBS).

[4] Lee, *supra* note 1.

Nonetheless, Goodfriend challenged the likes of ABC, NBC, CBS, and FOX to sue him in an interview with the *New York Times* in early 2019.[5]

Goodfriend's dare has since been answered. Ten of the largest media companies in the world have filed a joint complaint against Goodfriend in the Southern District of New York.[6] They argue that Locast's unconsented retransmissions infringe their exclusive public performance rights under the Copyright Act of 1976.[7] Given relevant precedent, they have every right to be confident. After all, in 2014 a widely publicized company named Aereo offered an identical service lacking the same consent from these same plaintiffs.[8] And Aereo failed in dramatic fashion. Five months after a 6-3 Supreme Court concluded that its internet-based retransmissions were "public performances" within the meaning of section 106(4),[9] Aereo declared bankruptcy.[10] Therefore, the broadcasters argue that Locast is "simply Aereo 2.0 . . . ."[11] But this characterization fails to capture what makes Locast unique and legally complicated: It operates as a registered nonprofit.[12]

Locast's funding model parallels that of Wikipedia. During live feeds, Locast users are solicited to donate to the organization through an interruption of the

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[5] *See id.* ("Mr. Goodfriend said he would welcome a legal challenge from the networks.").

[6] Amended Complaint, ABC, Inc. v. Goodfriend, No. 19-cv-7136 (S.D.N.Y. Oct. 30, 2020) (named plaintiffs include: ABC, Disney, Twentieth Century Fox Film, CBS Broadcasting, CBS Studios, FOX Television Stations, FOX Broadcasting Company, NBCUniversal Media, Universal Television, and Open 4 Business Productions).

[7] *Id.* at 7; *see also* 17 U.S.C. § 106(5) (2012).

[8] Aereo, like Locast, used antenna technology capable of seizing over-the-air broadcasting signals and translating these signals into "streamable" data for digital devices. ABC, Inc. v. Aereo, Inc., 573 U.S. 431, 436 (2014). However, unlike Locast, Aereo's system was made up of "thousands of dime-sized antennas housed in a central warehouse." *Id.* ABC, CBS, NBC, FOX, and other major broadcast companies filed suit in response. Warren Richey, *Aereo Internet Service v. TV Broadcasters: US Supreme Court to Decide*, THE CHRISTIAN SCIENCE MONITOR, Apr. 20, 2014, https://www.csmonitor.com/USA/Justice/2014/0420/Aereo-Internet-service-vs.-TV-broadcasters-US-Supreme-Court-to-decide.

[9] *See Aereo, Inc.*, 573 U.S. at 451.

[10] Emily Steel, *Aereo Concedes Defeat and Files for Bankruptcy*, N.Y. TIMES, Nov. 22, 2014, at B2, https://www.nytimes.com/2014/11/22/business/aereo-files-for-bankruptcy.html.

[11] Janko Roettgers, *Major Broadcasters Sue TV Streaming Nonprofit Locast*, VARIETY, July 31, 2019, https://variety.com/2019/digital/news/major-broadcasters-sue-tv-streaming-nonprofit-locast-1203286487/.

[12] LOCAST, *supra* note 2.

retransmitted signal.[13] Despite this, continued access to the live feed does not depend on whether a user donates. They are free to disregard the "ask" and continue watching. Goodfriend contends that this quality earns Locast immunity under the Copyright Act's nonprofit retransmission exception.[14] If true, Locast avoids the same compulsory fees that cable providers are otherwise statutorily required to pay.[15] More importantly, the media landscape could forever change. The plaintiffs in the present case have previously asserted that their "very existence" depends on these fees.[16] And if Locast is legal, cable and dish providers may see this as an opportunity to avoid paying their own fee obligations by offering broadcast to their subscribers via the Locast app (as opposed to entering retransmission agreements directly with the networks). Notably, this "parade of horribles" has already begun to march. AT&T recently donated $500,000 to the organization,[17] and Sling TV (a wholly owned subsidiary of Dish Network) currently makes Locast available for download on its user interface.[18] Therefore, the future of Locast (and possibly the media industry itself) depend on how the federal courts interpret a section of the Copyright Act that has neither been adjudicated nor analyzed in published academia.[19] Its language can be found below:

> § 111. Limitations on exclusive rights: Secondary transmissions.
>
> (a) CERTAIN SECONDARY TRANSMISSION EXEMPTED. – The secondary transmission of a performance or display of a work embodied in a primary transmission is not an infringement of copyright if –
>
> (5) the secondary transmission is not made by a cable system but is made by a governmental body, or other nonprofit organization, without any purpose

[13] *See id.*

[14] *See* Answer to Amended Complaint at 2, *ABC, Inc.* (No. 19-cv-07136); *see also* 17 U.S.C. § 111(a)(5) (2012).

[15] *See* 17 U.S.C. § 111 (enumerating the retransmission compulsory licensing fee scheme).

[16] *Aereo, Inc.*, 573 U.S. at 462 (Scalia, J., dissenting) (citing to the network-petitioners' brief).

[17] Ben Munson, *Donating to Locast is the 'Single Smartest Move' Any MVPD/vMVPD Can Make – Analyst*, FIERCE VIDEO, July 9, 2019, https://www.fiercevideo.com/video/donating-to-locast-single-smartest-move-any-mvpd-vmvpd-can-make-analyst.

[18] Ben Munson, *Sling TV Guide Now Integrates Locast on the AirTV Mini*, FIERCE VIDEO, Feb. 10, 2021, https://www.fiercevideo.com/video/sling-tv-guide-now-integrates-locast-airtv-mini.

[19] To the extent that Section 111(a)(5) has been cited, the author has found it briefly mentioned in a single footnote of a published article. Lydia Pallas Loren, *The Evolving Role of "For Profit" Use in Copyright Law: Lessons from the 1909 Act*, 26 SANTA CLARA COMPUT. & HIGH TECH. L.J. 255, 279 n.138 (2010).

> of direct or indirect commercial advantage, and without charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs maintaining and operating the secondary transmission service.[20]

This note analyzes whether the nature of Locast is consistent with the text and legislative history of section 111(a)(5). And through this analysis, the author has discovered conflicting answers. Although Locast plainly falls within the above text (absent further discovery), section 111(a)(5)'s legislative history may lead to the opposite conclusion.

At the time of adoption, Congress considered section 111 to be the most contentious subject of the new copyright law. Through it, the legislative branch sought to apply copyright to the era's then-creative destructor: Community antenna television ("CATV") (a.k.a. cable).[21] Like boosters and translators,[22] CATV enhanced the distributive capacity of broadcast signals. However, its operative method differed in one key respect: Boosters and translators retransmitted the signal over-the-air; CATV retransmitted using cable. This difference allowed the latter to become a profitable enterprise. Through the use of cable, CATV operators could exclude users who refused to pay a monthly subscription by disconnecting them from the system altogether. Booster and translators, on the other hand, had no such ability. Once a signal was retransmitted over-the-air, nothing could prevent a television owner from seizing access using their set's "rabbit ears."[23]

Despite its profit potential, the beginnings of CATV were humble. Its earliest adopters primarily chose to operate in rural communities where broadcast service was otherwise poor or non-existent.[24] The technology was also primitive, as CATV

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[20] 17 U.S.C. § 111(a)(5) (2012).

[21] *See Aereo, Inc.*, 573 U.S. at 442 (discussing Section 111 and Congress's aims for addressing the rise of cable television and its relationship to copyright law).

[22] *See* discussion *infra* Section II.C.

[23] *See* Thorin Klosowski, *Set Up Your Rabbit Ears for Maximum Reception*, Life Hacker (Jan. 16, 2012, 9:00AM), https://lifehacker.com/set-up-your-rabbit-ears-for-maximum-reception-5876388 (discussing how standard, television antenna works (a.k.a. "rabbit ears")).

[24] *Copyright Law Revision: Hearings on H.R. 4347, H.R. 5680, H.R. 6831, and H.R. 6835 Before Subcomm. No. 3 of the H. Comm. on the Judiciary*, 89th Cong. 1225 (1965), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter *1965 House Hearings*] (statement of Ernest W. Jennes.

was only capable of retransmitting 1-5 channels at a time.[25] Therefore, this "historic" version of CATV acted as a mere "supplement" to the nation's system of free broadcast.[26] Its use was narrowly tailored to the boosting of signals so that local stations' news, sports, and weather reports could reach more of their dedicated geographical markets. In other words, "historic" CATV served an identical role as the boosters and translators of the day: It was a signal strengthener. Nothing more. But this changed as CATV's technological capabilities improved and its operators grew more ambitious.

Over time, CATV became capable of retransmitting 20-40 signals simultaneously.[27] Further, owners began to use multi-hop microwave relays to import broadcast signals containing popular content from distant cities into rural areas where the signal was never intended to travel.[28] Finally (and most importantly), CATV owners began to plant operations in markets already served to directly compete against the local stations. Soon, these developments created industry-wide disruption.

After all, the foundation of the broadcasting industry was based on market exclusivity. The major networks (e.g., NBC, CBS, and ABC) created or acquired copyrighted content, then granted their affiliated stations the right to broadcast said content within exclusive geographies. This exclusivity was necessary for the continued existence of the affiliated local stations because—like boosters and translators—they retransmitted broadcasts over-the-air. Unable to charge a subscription fee to their viewers, the stations relied on advertising as their primary source of revenue. Market exclusivity was therefore quintessential for the continuing flow of revenue because higher viewership meant a more attractive product for

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Counsel, Maximum Service Telecaster, Inc.) ("CATV originally did and still does operate in areas of poor television reception where it provides only the signals of local and area television broadcast stations which CATV subscribers within the service areas of these stations would not otherwise be able to receive adequately because of terrain or other factors. Such CATV systems, for example, place a receiving antenna on a mountain and bring the nearby local and area television signals down the mountainside by cable to communities shielded from direct signals."). These modest beginnings are exemplified by Leroy "Ed" Parsons and his early work on the technology. *See* discussion *infra* Section II.C.

[25] *See id.* ("Early systems had one to three channels. Even in 1964, 70 percent of the CATV systems carried five or fewer channels.").

[26] *Id.*

[27] *See id.* ("But new systems already carry up to 12 stations, and systems with 20, 30 or 40 channels are planned.").

[28] *See id.* ("There are no geographical bounds for 'CATV unlimited.' Increasingly, multi-hop microwave relays are being sought or planned to import stations from metropolitan centers across many hundreds of miles and several States.").

advertisers to invest in. But viewership became split as CATV occupied these markets. And two specific traits made CATV the better of the competitors:

First, CATV owners disrupted the local stations' content exclusivity. They imported transmissions into the local stations' areas from stations belonging to the same parent network (or, they simply retransmitted the signal originating from the local station itself).[29] Thus, CATV made available the same content the local stations were already providing, albeit on competing channels. Second, CATV also imported popular content that was otherwise unavailable to these communities–specifically, from major urban markets. The combination of these traits meant that CATV was often able to offer the same, plus more, content to rural localities for a nominal fee.

Moreover, CATV's growth was not constrained to middle America. It had a similar disruptive effect even in more populated, urban markets. As an illustration: In 1955 (when section 111(a)(5) began serious development), the second most popular show in the United States was "I Love Lucy."[30] The sitcom's broadcaster was CBS.[31] Because of the show's popularity, the size of the dedicated market, and the promise of exclusivity, WBBM-TV (CBS' dedicated Chicago station) likely commanded a high price for ads during its time slot. But if a Chicago-based CATV

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[29] *See id.* at 1226 ("As CATV's purpose and operations expand beyond providing an *auxiliary* service, CATV becomes a threat to the public interest in free, diverse, and competitive, local and area television broadcast services. In essence, this threat derives from CATV's ability to import multiple television signals from many distant stations into cities where local and area television stations are already reaching the viewing public. Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served "cities of the signals from stations in other markets means that the exclusivity of the local station as to many—if not most—of its programs will be destroyed. To the extent that a program is viewed on an imported channel, the benefit of exclusivity, for which the local station has bargained, is destroyed—to the damage of the local station, the copyright owner and, ultimately, the public. For, when CATV subscribers watch network programs, feature films, or syndicated film programs imported from distant stations, the local viewing audience is fractionated and the local station is deprived of advertiser support, since it can no longer offer to advertisers as large an audience of local viewers. The resulting decrease in advertising revenue means at least that programing must be curtailed and at worst that the local station will be forced off the air. With either result, those persons unable or unwilling to pay to hook onto the CATV transmission cable or living in rural or other thinly populated areas which CATV cannot afford to serve will receive off the air a degraded service or none at all.").

[30] *1950s TV Shows: What Did People Watch?*, RETROWASTE, https://www.retrowaste.com/1950s/tv-shows-in-the-1950s/ (last visited Mar. 23, 2021).

[31] *Id.*

retransmitted "I Love Lucy" into the city, along with other signals that Chicagoans had trouble accessing because of distance or physical obstruction (e.g., the height of the skyscrapers), then WBBM-TV's ability to maintain viewership could be seriously threatened. And for affiliated stations such as WBBM-TV, this problem grew exponentially. By 1965, CATV was on pace to capture approximately 85% of the national television market.[32]

The broadcasters and copyright owners responded by lobbying Congress to amend the Copyright Act to stop CATV's rise. Their efforts came to fruition with the adoption of section 111(a)(5). However, the section's authoring required two decades of studies, subcommittee hearings, floor debates, and private negotiations amongst the industry's key players.[33] Over the course of these developments, parties split into three philosophical camps: (1) those who believed that *all* categories of retransmission technology deserved immunity from copyright liability;[34] (2) those who believed that *some* deserved immunity;[35] and (3) those who believed that *none*

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[32] *See 1965 House Hearings*, *supra* note 24, at 1226 ("The surge of CATV has reached explosive proportions. Applications are pending for CATV systems in more than 1,000 communities and new applications are being filed at the rate of about 3 every day. CATV promoters have predicted they will take over 85 percent of all television sets in the United States, in virtually every city and town in the country.").

[33] Many of which, ironically, included the plaintiffs suing Locast. *See* discussion *infra* Section III.

[34] *See, e.g.*, HOUSE COMM. ON THE JUDICIARY, 88TH CONG., 1ST SESS., COPYRIGHT LAW REVISION PART 3: PRELIMINARY DRAFT FOR REVISED U.S. COPYRIGHT LAW AND DISCUSSION AND COMMENTS ON THE DRAFT 424 (Comm. Print 1964), *reprinted in* 15 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter CLR PART 3] (comment of George Schiffer) ("I wish to make plain that community antennas, boosters, translators and rooftop antennas should all be treated identically and should all be exempted from the operation of the Copyright Act. . . . The paramount interest is the public's. The public's interest is to have the greatest amount of television service at the lowest possible cost.").

[35] This included the Copyright Office, which—in their 1963 preliminary draft of the Copyright Act—first assumed the stance that boosters and CATV deserved different treatment under the Act. *See id.* at 239 ("The second of the four problems that we see here is the rather interesting question of rebroadcasting or retransmission. And here, of course, there is a vast amount of technology and a vast amount of ignorance, probably on our part as much as anybody else's. But essentially, as we see it, there are two situations where money is involved: (1) the community antenna or CATV system, where the broadcast is picked up and retransmitted over wires to a special receiving set, and where the subscriber pays for the service; and (2) the booster system, where the signal is merely magnified and where anybody in the vicinity can pick the broadcast up. That's the second problem: rebroadcasting or rediffusion. . . . With respect to rebroadcasting . . . we felt it desirable to exempt relay boosters . . . [but] we did not feel that a commercial [CATV] . . . should be exempted . . . .").

deserved special treatment.[36] As we now know, the middle path was followed.[37] All forms of CATV—whether for-profit or not—became subject to copyright liability.[38] While boosters and translators were given the opportunity to earn immunity by operating as non-profits.[39]

After studying Section 111(a)(5)'s legislative history, the author concludes that nonprofit CATV was treated disparately for two central reasons: (1) unlike boosters and translators, CATV was used to fragment market viewership by providing content that was both available and unavailable to consumers in geographical areas already served by local stations;[40] and (2) unlike the networks

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[36] A representative of the National Association of Broadcasters ("NAB") proclaimed it "illogical" to distinguish between CATV and other retransmission services. *Id.* at 254.

[37] *See* 17 U.S.C. § 111 (2012) (subjecting cable system retransmissions to copyright liability, while immunizing nonprofit retransmission services).

[38] *See id.*

[39] *See* 17 U.S.C. § 111(a)(5).

[40] This concern is confirmed by many statements made by the various stakeholders who testified on the matter through the section's development. *1965 House Hearings*, *supra* note 24, at 1226 (statement of Ernest W. Jennes, General Counsel, Maximum Service Telecaster, Inc.) ("Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served cities of the signals from stations in other markets means that the exclusivity of the local stations to many—if not most—of its programs, will be destroyed. To the extent that a program is viewed on imported channel, the benefit of exclusivity, for which the local station has bargained, is destroyed—to the damage of the local station, the copyright owner and, ultimately, the public."); *Copyright Law Revision: Hearing on S. 1006 Before the Subcomm. on Patents, Trademarks, and Copyrights of the S. Comm. on the Judiciary*, 89th Cong. 171 (1966), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter *1966 Senate Hearings*] (statement of Arthur B. Krim, President, United Artists Group) ("The usual [network] license contract in syndication does not grant the right to authorize the telecast of our programs over additional stations and prevent the licensee station or sponsor from authorizing a community antenna to perform the program. These restrictions are in keeping with the underlying principle of geographical limitation that is central to all television release. . . . [I]t can readily be seen [then] that when a CATV system brings programs from a distant city, it plays havoc with every existing licensing system and either seriously downgrades or utterly destroys the property of the copyright owner."). It should also be noted that members of the Motion Picture Association, Inc. ("MPA") additionally expressed reservations about their work being shown in geographies not originally approved. *1965 House Hearings*, *supra* note 24, at 1008 (statement of Adolph Schimel, Chairman of Law Committee, Motion Picture Association of America, Inc.) ("Our TV performance license fees depend on the coverage of potential viewers, the timing of the broadcast, the priority and exclusivity of performing rights which we can grant for the area, and other factors in the licensee's area. . . . We

and affiliated stations, CATV was free to retransmit this copyrighted content without having to pay the copyright owners.[41] In summary, the authors of section 111(a)(5) intended for its scope of immunity to only extend to nonprofit retransmission devices

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feel strongly that our copyrights should not be freely transmitted, and thereby publicly performed, without our prior license, in this CATV manner. Our license for the original TV broadcast in other cities which the CATV operator captures and re-transmits from the air, does not expressly or impliedly license any further transmission by the CATV operator.").

[41] Section 111 would exempt completely from any copyright law provisions secondary transmissions when made at cost by either governmental bodies or nonprofit organizations. . . . [T]his provision was concerned with the operations of "nonprofit 'translators' or 'boosters' *which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception* … ." These translators and boosters have always been subject to FCC regulation and require retransmission consent of the originating station under § 325(a) of the Federal Communications Act.

However, the language of the exemption as formulated in § 111 would be equally applicable to cable systems which are operated by governmental bodies or nonprofit organizations. . . . There are a large number of nonprofit organizations in the United States. Many of them operate big enterprises. Moreover, there are already in existence at least 15 municipally-owned CATV systems and there is an increasing drive across the country for municipal ownership of cable systems. . . . The copyright owners are concerned that increasing governmental or non-profit ownership of cable systems may deprive them of license fees for the use of their product.

A free ride for these entities cannot be squared with the achievement of the public purpose which underlies the copyright system. That purpose is to promote the useful arts by granting compensation adequate to foster creativity. A legal requirement that copyrighted film programs be available to nonprofit and governmental users for free is no less repugnant to the purpose of the copyright system because the user does not intend to make a profit.

Copyright Law Revision: Hearings on S. 1361 Before the Subcomm. on Patents, Trademarks, and Copyrights of the S. Comm. on the Judiciary, 93d Cong. 303 (1973), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter *1973 Senate Hearings*] (statement of Jack Valenti, President, Motion Picture Association of America, Inc.) (emphasis added). *See also 1965 House Hearings* at 1226 (statement of Ernest W. Jennes, General Counsel, Maximum Service Telecaster, Inc.) ("Besides the destruction of program exclusivity, [CATV] is unfair and inequitable. These multiple-channel CATV systems carry vast quantities of program material. If these systems went out into the marketplace to purchase rights to program material, the cost to the CATV's—and the corresponding return to the copyright owners—would be substantial."); *see also* James J. Popham, *The 1971 Consensus Agreement: The Perils of Unkept Promises*, 24 CATH. U. L. REV. 813 (1975) ("[B]ecause the cable television industry's promise to support specific copyright legislation has not been fulfilled, cable television systems still pay nothing for the broadcast programming for which broadcast stations and networks pay millions of dollars each year.").

which were *passive*, i.e., devices that merely strengthened broadcast signals and did not split viewership within the dedicated markets of the local stations by impinging upon their market exclusivity. This understanding is reflected in the below italicized language of the House Report of the Copyright Act of 1976:

> [The clause] would exempt the activities of secondary transmitters that operate on a completely nonprofit basis. The operations of nonprofit "translators" or "boosters," *which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception*, would be exempt if there is no "purpose of direct or indirect commercial advantage," and if there is no charge to the recipients "other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service." This exemption does not apply to a cable television system.[42]

The plaintiffs in this suit accuse Locast, amongst other things, of importing signals into well-served urban areas and stripping the signals' Nielsen watermarks.[43] If either allegation is proven, then the author concludes that Locast conflicts with the purpose behind section 111(a)(5). Specifically, if the former is true, then Locast would be doing the exact thing that the authors of section 111(a)(5) sought to prevent: The impingement of the market exclusivity of local stations. If the latter is true, then originating stations would have no way of tracking the ultimate viewership of their transmitted signals because any user viewing the retransmission through Locast would not be counted towards station viewership statistics. Thus, Locast would effectively split viewership akin to how CATV split the viewership of local station transmissions.

To develop these conclusions, the note begins with a brief textual analysis of 111(a)(5) in Section I. Upon concluding that Locast fits squarely within this language (absent further discovery), the author provides a comprehensive analysis of the section's legislative history. This requires an initial discussion of the invention of broadcasting, its rise in popularity, and the invention of retransmission technologies in Section II. Thereafter, the note traces the development of 111(a)(5)

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[42] H.R. Rep. No. 94-1476, at 92 (emphasis added).

[43] Amended Complaint, *supra* note 6, at ¶ 12.i-iii ("Locast departs from the activities of a mere booster of broadcast signals in a variety of ways. Among other things, Locast . . . strips from the over-the-air broadcast signals the Nielsen watermarks that measure viewing for local and national advertisers, thereby endangering broadcasters' advertising revenue.").

over the course of "more than 30 studies, three reports issued by the Register of Copyrights, four panel discussions issued as committee prints, six series of subcommittee hearings, 18 committee reports, and the introduction of at least 19 general revision bills over a period of 20 years" in Section III.[44] Next, the author provides an analysis of Locast's legality given currently known facts in Section IV. Finally, a conclusion in Section V.

I
TEXTUAL ANALYSIS OF § 111(A)(5)

For convenience I reiterate the language of Section 111(a)(5) below:

> § 111. Limitations on exclusive rights: Secondary transmissions.
>
> (a) CERTAIN SECONDARY TRANSMISSION EXEMPTED. – The secondary transmission of a performance or display of a work embodied in a primary transmission is not an infringement of copyright if –
>
> (5) the secondary transmission is not made by a cable system but is made by a governmental body, or other nonprofit organization, without any purpose of direct or indirect commercial advantage, and without charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs maintaining and operating the secondary transmission service.[45]

Goodfriend argues that "Locast's system falls squarely within" the above text.[46] The author suggests that he is likely correct. Addressing 111(a)(5) line-by-line: First, Locast's internet-based retransmissions are "secondary transmissions" within the meaning of the section.[47] Second, Locast is not a "cable system" within

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[44] Jessica D. Litman *Copyright Compromise and Legislative History*, 72 CORNELL L. REV. 857, 865 (1987).

[45] 17 U.S.C. § 111(a)(5) (2012).

[46] Answer to Amended Complaint, *supra* note 14, at 2.

[47] The Copyright Act defines "secondary transmission" as follows:

> [T]he further transmitting of a primary transmission simultaneously with the primary transmission, or nonsimultaneously with the primary transmission if by a cable system not located in whole or in part within the boundary of the forty-eight contiguous States, Hawaii, or Puerto Rico: Provided, however, That a nonsimultaneous further transmission by a cable system

the meaning of the section.[48] Third, both parties appear to concede that Locast is a registered nonprofit.[49] However, as for whether Goodfriend is directly or indirectly attaining a "commercial advantage" through Locast, the parties currently disagree.[50] The major network plaintiffs allege that Goodfriend is using Locast to further his lobbying efforts on behalf of DISH Network.[51] Goodfriend denies these

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> located in Hawaii of a primary transmission shall be deemed to be a secondary transmission if the carriage of the television broadcast signal comprising such further transmission is permissible under the rules, regulations, or authorizations of the Federal Communications Commission.

17 U.S.C. § 111(f)(2) (2012). Because Locast further transmits primary transmissions simultaneously with their original transmission (via their originating station), it meets the first clause. The second clause is inapplicable because Locast is not a cable system (addressed below).

[48] The Copyright Act defines "cable system" as follows:

> [A] facility, located in any State, territory, trust territory, or possession of the United States, that in whole or in part receives signals transmitted or programs broadcast by one or more television broadcast stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, microwave, or other communications channels to subscribing members of the public who pay for such service. For purposes of determining the royalty fee under subsection (d)(1), two or more cable systems in contiguous communities under common ownership or control or operating from one headend shall be considered as one system.

17 U.S.C. § 111(f)(3) (2012). Because Locast is neither a subscription-based service nor a serve that requires payment, it does not meet this definition. *See also* Dimitry Dymarsky, *FilmOn and the Copyright Act Section 111 Compulsory Licensing*, A.B.A., https://www.americanbar.org/groups/litigation/committees/intellectual-property/practice/2015/filmon-copyright-act-section-111-compulsory-licensing/ (last visited Feb. 22, 2021) (discussing the recent case of *Fox Television Stations, Inc. v. FilmOn X LLC* and the federal court's conclusion that internet streaming technologies are not "cable television systems" within the meaning of Section 111. *See* Fox Television Stations, Inc. v. FilmON X LLC, No. 13-758-RMC (D.D.C. Nov. 12, 2015) (opinion under seal)).

[49] Answer to Amended Complaint, *supra* note 14, at ¶ 137 ("As a threshold matter, the broadcasters do not challenge [Locast's] status as a non-profit . . . ."); Amended Complaint, *supra* note 6 (failing to challenge Locast's status as a registered nonprofit; rather, challenging its specific operations as not being consistent with a nonprofit).

[50] *See* Answer to Amended Complaint, *supra* note 14.

[51] Notably, David Goodfriend remains a consultant for DISH. *See id.* at ¶ 9.

accusations.[52] Therefore, the author must assume—for the sake of further analysis—that this point will not be sufficiently persuasive for the court to outright conclude that section 111(a)(5) is inapplicable.

For some, this means the end of the inquiry.[53] As Justice Blackmun once stated, "[w]here, as here, the statute's language is plain, the sole function of the Court is to enforce it according to its terms,"[54] regardless of whether the interpretation "make[s] perfect sense [for] the statute's overall policy."[55] Suffice to say, this approach to statutory understanding has had a dominating presence in the courts and academia.[56] And with it, its fair share of criticism.[57] Nonetheless, the author chooses not to delve deeply into this philosophical mud puddle. This brief textual analysis of 111(a)(5) serves only to display the disparities between it and the subsequent analysis of the section's legislative history.

II
PRE-HISTORY: THE RISE OF BROADCAST AND RETRANSMISSION TECHNOLOGIES

A. 1887-1927: Development of a National Broadcasting Vision and Policy

Heinrich Hertz's experiments on the wave structure of electromagnetic radiation in 1887 became the catalyst for electronic communication.[58] Engineers and physicists began to understand that information—including the sound of a voice or a picture—could be encoded on sine waves by modulating the wave itself. Innovation was swift. By 1901, the first wireless telegraph signal was successfully transmitted across the Atlantic Ocean.[59] However, the creation of a centralized authority responsible for allocating the radio wave spectrum was needed before it could ever be put to mass use.

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[52] *Id.* at ¶ 8; *see also* Amended Complaint, *supra* note 6, at ¶ 8.

[53] *See, e.g.*, John F. Manning, *Textualism and the Equity of the Statute*, 101 COLUM. L. REV. 1, 4 n.5 (2001) (discussing the philosophy of textualism and the Court's then-leading proponents of the philosophy, Justices Antonin Scalia and Clarence Thomas).

[54] United States v. Ron Pair Enters., 449 U.S. 235, 241 (1989) (quoting Caminetti v. United States, 242 U.S. 470, 485 (1917)).

[55] Manning, *supra* note 53, at 4.

[56] An excellent analysis of both may be found in Jonathan T. Molot's "The Rise and Fall of Textualism." 106 COLUM. L. REV. 1 (2006).

[57] *See id.*

[58] HUGH R. SLOTTEN, RADIO AND TELEVISION REGULATION – BROADCAST TECHNOLOGY IN THE UNITED STATES: 1920-1960 3 (2000).

[59] *Id.* (discussing Italian inventor Marchese Guglielmo Marconi's cross-Atlantic wireless telegraph transmission in 1901).

To illustrate, assume that you live in New York City and you want to listen to WOR 710 AM. The station's corresponding number signifies that it transmits audio signals using an amplitude modulation (i.e. "AM") of 710,000 herz.[60] This means that the DJ's voice is being modulated to an electronic sine wave by varying the amplitude of the wave itself 710,000 times per second.[61] The station takes this modulated wave and distributes it using a transmitter tower.[62] As the transmitted modulated wave scours the horizon, your radio is looking to receive it. To instruct your radio set to receive the wave, you turn your tuner knob to the corresponding herz number. Thus, by turning your knob to 710 AM, you instruct your set to *only* receive sine waves that modulate at 710,000 herz. Once the wave is received, your radio clips off the part of the wave that contains the DJ's voice and sends it directly to your speakers for your listening pleasure.

But what happens if a second radio station transmits using an identical hertz frequency within reach of your set? Unfortunately, receivers are incapable of differentiating between the two.[63] Your radio will receive both, resulting in "interference" as the two transmissions battle for reception dominance.[64] Making matters worse, there is a limited number of adequate frequencies available for quality

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[60] *See How Radio Works*, GA. ST. UNIV. LIBR., https://exhibits.library.gsu.edu/current/exhibits/show/georgiaradio/radio1920s/howradioworks (last visited Feb. 24, 2021).

[61] *See id.*

[62] *See id.*

[63] *See AM, FM and Sound*, CYBER COLL. INTERNET CAMPUS (May 28, 2013), https://www.cybercollege.com/frtv/frtv017.htm (“First, you can't put stations on the same frequency that are too close together in a geographic area. They will interfere with each other. And for the same reason you can't have two stations close together in frequency . . . in the same area.”).

[64] *See Interference with Radio, TV, and Cordless Telephone Signals*, FEDERAL COMMUNICATIONS COMMISSION, https://www.fcc.gov/consumers/guides/interference-radio-tv-and-telephone-signals (last visited Feb. 24, 2021) (“Interference occurs when unwanted radio frequency signals disrupt the use of your television, radio or cordless telephone. Interference may prevent reception altogether, may cause only a temporary loss of a signal, or may affect the quality of the sound or picture produced by your equipment. The two most common causes of interference are transmitters and electrical equipment.”).

modulation.[65] Thus, by the 1920s, Congress realized that the spectrum presented a "Tragedy of the Commons"[66] scenario:

> [R]adio policy in the United States was grounded in the conviction that the spectrum belonged to the public. Everyone should have a right to obtain a license and use the spectrum. However . . . policy makers increasingly viewed the radio spectrum as a finite resource. At any one time, only a limited band of frequencies was available for wireless, and interference among stations (often using poorly tuned equipment) limited the number that could transmit at any one time. *All citizens might own the ether, but if everyone tried to use it its value would be destroyed*. Throughout the early history of radio (at least until 1927), radio policy in the United States had to deal with a potential contradiction. Decision makers wanted everyone to have a right to use the spectrum, but they increasingly came to the conclusion that the government would have to place limits on access to the radio spectrum to avoid overexploitation, or in other words, destructive interference.[67]

Despite the obvious need for regulation, Congress remained slow to adapt.[68] And in the midst of this legislative malaise, the country experienced a boom in amateur radio.[69] By 1912, the *New York Times* estimated that several hundred thousand amateur operations existed across the country.[70] Their homemade equipment broadcasted music, entertainment, and even pranks.[71] Professor Hugh R.

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[65] For AM radio, this range is limited to 540 kHz to 1,600 kHz. *The Electromagnetic Spectrum*, Lumen, http://hyperphysics.phy-astr.gsu.edu/hbase/ems2.html (last visited Feb. 24, 2021). For television, however, because "the waves must carry a great deal of visual as well as audio information, each channel requires a larger range of frequencies than simple radio transmission. TV channels utilize frequencies in the range of 45 to 88 MHz and 174 to MHz." *Id.* In all, the FCC has only allocated frequency bands between 9 kHz and 275 GHz. *Interference with Radio, TV, and Cordless Telephone Signals*, FCC, https://www.fcc.gov/consumers/guides/interference-radio-tv-and-telephone-signals (last visited Feb. 24, 2021).

[66] "[T]ragedy of the commons is an analogy that shows how individuals driven by self-interest can end up destroying the resource upon which they all depend.". Daniel J. Rankin et al., *The Tragedy of the Commons in Evolutionary Biology*, 22 Trends in Ecology & Evolution 643 (2007).

[67] SLOTTEN, *supra* note 58, at 6 (emphasis added).

[68] *See id.*

[69] *See id.* at 6–7.

[70] *Id.* at 7.

[71] A common escapade for young amateur radio operators was to send out fake distress calls to the United States Navy. *See id.* at 7. This prank was so abundant that military personnel lobbied Congress to transfer control over the spectrum from lay users to the military. *See* SUSAN J. DOUGLAS, INVENTING BROADCASTING 1899-1922, 207–210 (1987) (discussing the navy's qualms

Slotten of the University of Otago describes this early period of broadcasting as romantic in nature:

> [A] new, wide-open frontier, akin to the American West, where men could pursue individual interests free from repressive authoritarian and hierarchical institutions. [The amateur operators] resented attempts by the navy and private companies to monopolize the spectrum for commercial or military gain.[72]

Then, in 1912, the Titanic sank in the North Atlantic.[73] In the aftermath of the disaster, the press alleged that rescue efforts were hampered by radio interference caused by amateurs.[74] Four months later, Congress responded to these revelations by adopting the Radio Act of 1912 and declared the government the sole authority over the wave spectrum's allocation.[75] Broadcasting was no longer the romantic frontier where individualism roamed free (as Professor Slotten described). Now, the act of transmission was a privilege available only to those who earned a license.

In the beginning, the Department of Commerce assumed power over this licensing. Whereupon it "divided up . . . the spectrum by assigning specific frequencies to different groups."[76] Be that as it may, the Department handled its application duties haphazardly. Their licensing scheme was based on a singular criterion: Whether granting a license would cause interference. This proved to be too relaxed of a standard for a medium skyrocketing in popularity. From 1921 to 1922, the number of licensed radio operations increased from approximately 50,000 to 600,000.[77] And by 1926, the federal government began to panic. The Radio Act of 1912 had failed to bring order to a spectrum that was growing more congested every

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with early, amateur radio operators and their lobbying efforts to take away the spectrum from such operators).

[72] SLOTTEN, *supra* note 58, at 7.

[73] *Titanic Sinks*, HISTORY, https://www.history.com/this-day-in-history/titanic-sinks (last updated Apr. 13, 2020).

[74] *See* SLOTTEN, *supra* note 58, at 7; Erin Blakemore, *Why Titanic's First Call for Help Wasn't an SOS Signal*, NAT'L GEOGRAPHIC (May 28, 2020), https://www.nationalgeographic.com/history/article/why-titanic-first-call-help-not-sos-signal.

[75] *See* Radio Act of 1912, 44 Stat. 1162 (1912), *amended by* Radio Act of 1927, 44 Stat. 1162 (1927).

[76] *See* SLOTTEN, *supra* note 58, at 8.

[77] *Id.* at 15.

time a license was issued.[78] Making matters worse, two federal court opinions simultaneously stripped the Secretary of Commerce of the authority to deny licenses *and* the power to file claims against illegal radio operations.[79] In 1927, Congress was compelled to amend the Act to overrule these decisions.[80]

To do so, the Radio Act of 1927 shifted spectrum allocation authority from the Department of Commerce to a newly created agency: The Federal Radio Commission ("FRC")[81]–initially tasked with developing "a new rationalized allocation system . . . ."[82] At the same time, members of Congress used the Act as an opportunity to make vast, philosophical declarations for the future of broadcasting. In his closing remarks on the Senate floor, co-author Senator Wallace H. White, Jr. declared that broadcast was a national "right."[83] Several additional officers—including Secretary of Commerce Herbert Hoover and Senator Ewin L. Davis—followed suit.[84] This collective vision for broadcasting as a public good was eventually written into the Act itself: The FRC was instructed to issue licenses only if the "*public interest* . . . would be served by the granting thereof . . . ."[85]

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[78] *See* David Moss et. al., *Regulating Radio in the Age of Broadcasting*, HARV. BUS. SCH. CASE 716-043 (2017) ("By 1927, more than 700 stations were battling over 96 available frequencies. This crowding of the broadcast spectrum substantially diminished the quality of radio listening. In fact, the airwaves were so full of interference that many citizens complained that it was often impossible to tune into any station clearly.").

[79] Hoover v. Intercity Radio Co., 286 F. 1003 (1923), *appeal dismissed per stipulation*, 266 U.S. 636 (1924) (holding that the Secretary of Commerce had no discretion over the issuance of radio licenses); United States v. Zenith Radio Corp., 12 F.2d 614 (N.D. Ill. 1926) (denying the Secretary of Commerce's power to file claims against illegal operators).

[80] *See* Radio Act of 1927, 44 Stat. 1162 (1927).

[81] *See* SLOTTEN, *supra* note 58, at 43; *see also* Radio Act of 1927, 44 Stat. 1162 (1927).

[82] *See* SLOTTEN, *supra* note 58, at 43.

[83] 68 CONG. REC. 2580 (1927) (statement of Sen. Wallace H. White, Jr.) ("We have recognized in that compromise provision that it is not the right of a community to demand a station, not a right of a particular State to demand a station, but it was the right of the entire people to service that should determine the distribution of those stations; and it is written here in express language that it shall be the duty of this commission, this regulatory authority, to make such a distribution of stations, licenses, and power as will give all the communities and States fair and equitable service, and that is the sound basis on which legislation of this character should be founded.").

[84] Hoover's remarks were distributed to Congress during debate. In it, Hoover outlined a national plan for broadcast access. *See id.* at 2576 (statement of Sen. Edwin L. Davis) ("I am advised, Secretary Hoover, that the best broadcasting service can be rendered to the whole country by a few large stations. However, such a view utterly ignores the *rights* of the different sections and the desire of the citizens of different sections to have information and other programs of a sectional, State, or local character broadcast." (emphasis added)).

[85] Radio Act of 1927, 44 Stat. 1162, 1167 (1927) (emphasis added).

Later that year, Secretary Hoover was invited to participate in a demonstration that would prophesize another seismic shift in electronic communications: Broadcast television.

B. 1927-1934: Invention of Broadcast Television and Creation of the FCC

On April 7, 1927, Bell Telephone invited Secretary Hoover to its Washington D.C. laboratory.[86] Hoover was instructed to sit in front of—what we would now call—a broadcast camera and give a pre-written speech.[87] His image and voice were captured and transmitted across 200 miles to an audience of newspaper reporters and dignitaries gathered in a New York City-based auditorium.[88] Those in attendance witnessed the first long-distance use of television broadcasting in history.[89] And they would hear Hoover utter the following words: "Today we have, in a sense, the transmission of sight for the first time in the world's history. Human genius has now destroyed the impediment of distance in a new respect, and in a manner hitherto unknown."[90]

Within twenty years, the following occurred: The government issued the first commercial television station license,[91] President Franklin D. Roosevelt delivered the first live broadcast of a Presidential speech in American history,[92] and many of the named plaintiffs in the Locast complaint began investing into television's commercial potential.[93] But before any of these developments, the federal

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[86] Amy Norcross, *Hoover Joins 1st American Demo of Long-Distance TV, April 7, 1927*, EDN (Apr. 7, 2019), https://www.edn.com/hoover-joins-1st-american-demo-of-long-distance-tv-april-7-1927/.

[87] *Id.*

[88] *See id.*

[89] *See id.*

[90] *Id.*

[91] Suzanne Deffree, *1st American TV Station Begins Broadcasting, July 2, 1928*, EDN (July 2, 2019), https://www.edn.com/1st-american-tv-station-begins-broadcasting-july-2-1928/.

[92] Roosevelt's speech was delivered at the New York World's Fair in 1939. In contrast to his famous "fireside chats" on national radio and President Truman's first televised address from the White House in 1947, this early broadcast only reached receivers at the Fair and in Manhattan. *Harry Truman Delivers First-Ever Presidential Speech on TV*, HISTORY, https://www.history.com/this-day-in-history/first-presidential-speech-on-tv (last updated Oct. 2, 2021).

[93] *See Our History*, NBCUNIVERSAL, https://www.nbcuniversal.com/history (last visited Feb. 24, 2021) (discussing NBC's television beginnings in the early 1930s); Ed Reitan, *CBS Color Television System Chronology*, NOVIA, (2006),

government was again tasked with authoring legislation aimed at encouraging a new medium's proliferation while preventing signal interference.

Sensing the need for a coherent regulatory voice, President Franklin D. Roosevelt requested Secretary of Commerce Daniel C. Roper to appoint an interdepartmental committee for studying the future of electronic communication.[94] The committee concluded:

> Although the cable, telegraph, telephone, and radio are inextricably intertwined in communication, the Federal regulation of these agencies, in our country, is not centered in one governmental body. The responsibility for regulation is scattered. *This scattering of the regulatory power of the Government has not been in the interest of the most economical or efficient service*.[95]

Roosevelt thereafter requested Congress to create a common regulatory body responsible for all such technologies. The body responded by adopting the Communications Act of 1934 and through it, creating the Federal Communications Commission ("FCC").[96] Importantly, the same philosophical underpinnings found in the debate over the Radio Act of 1927 were repeated in the Communication Act's opening text:

> For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, *so far as possible, to all the people of the United States* . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges . . . .[97]

To achieve Congress's vision for broadcast access, the Communications Act vested the FCC with rule-making authority over the development of national

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https://web.archive.org/web/20130922013759/http://www.novia.net/~ereitan/CBS_Chronology_rev_h_edit.htm (discussing CBS' early experimentations with television in 1940); Keith Gluck, *The Genesis of Disney Television*, WALT DISNEY FAMILY MUSEUM (July 23, 2013, 2:00PM), https://www.waltdisney.org/blog/genesis-disney-television (discussing Walt Disney's early investment in television in late 1935).

[94] *See* S. COMM. ON INTERSTATE COM., 73D CONG., STUDY OF COMMUNICATIONS BY AN INTERDEPARTMENTAL COMMITTEE: LETTER FROM THE PRESIDENT OF THE UNITED STATES TO THE CHAIRMAN OF THE COMMITTEE ON INTERSTATE COMMERCE (Comm. Print 1934).

[95] *Id.* at 6 (emphasis added).

[96] Communications Act of 1934, 47 U.S.C. § 151 (1934).

[97] *Id.* (emphasis added).

standards, infrastructure, and distribution.[98] But just as the FRC struggled, the FCC would as well.

Television's growth had barely begun before it was interrupted by World War II.[99] Thus, broadcasting-related innovation stalled until the late 1940s when the war ended.[100] Upon its conclusion, Americans began to demand television in unprecedented numbers. In 1945, it is estimated that fewer than 10,000 television sets were in use.[101] In 1948, these estimates rose to 35,000.[102] By 1950, they skyrocketed to approximately six million,[103] with over seven million sets manufactured in that year alone.[104] We also saw growth in the production of popular content. As early as 1952, Americans enjoyed Lucille Ball's comedic talents on "I Love Lucy" and watched the Yankees defeat the Dodgers in Game 7.[105] With its commercial potential in plain view, hundreds of wannabe broadcasters sought permits to construct their own television stations.[106] But just as television was gaining national acceptance, the FCC issued a "freeze order" on all new or pending applications from 1948-1952.[107] The FCC feared that the existing channel allotment strategy was not capable of handling this hike in demand.[108] Years of hearings were hosted in response. However, its freeze did nothing to quench the nation's thirst for broadcast. Television enthusiasts began to thaw the freeze through innovation. It was during this time that the television retransmission evolution began.

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[98] *See id.* (discussing the consolidation of communications policy authority to the FCC).

[99] STAFF OF THE FED. COMM. COMM'N, BC DOCKET NO. 78-253, REPORT AND RECOMMENDATION IN THE LOW POWER TELEVISION INQUIRY, 5 (1980).

[100] *See id.*

[101] Adam Lefky, *Number of Televisions in the US*, PHYSICS FACTBOOK (2007), https://hypertextbook.com/facts/2007/TamaraTamazashvili.shtml (citing figures from *The World Book Encyclopedia*).

[102] *Id.* (citing figures from *The Encyclopedia Americana*).

[103] *Id.* (citing figures from *The World Book Encyclopedia*).

[104] STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 5.

[105] *See I Love Lucy: An American Legend*, LIBR. OF CONG., https://www.loc.gov/exhibits/i-love-lucy/legacy.html (last visited Feb. 24, 2021) (providing a timeline for "I Love Lucy," beginning in the early 1950s); David B. Wilkerson, *The Hunt for TV's Lost Baseball Treasures*, MARKETWATCH (Oct. 27, 3:36PM), https://www.marketwatch.com/story/the-hunt-for-tvs-lost-baseball-treasures-2010-10-27.

[106] STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 5.

[107] *Id.* at 107.

[108] *Id.* at 107-08.

The author begins discussion of this period by describing the modest, early versions of CATV—along with the invention of boosters and translators—in order to convey precisely why Congress saw these retransmission devices as *passive*. Next, the author describes CATV's growth from modest signal booster to direct competitor to the networks and their affiliated stations. Finally, he relates the adversarial response by the television networks and copyright owners.

C. 1934-1955: Invention of Retransmission Technologies and CATV

In 1948, Leroy "Ed" Parsons lived in Astoria, Oregon.[109] Astoria was the quintessential rural community shunned by the broadcasting world: It had a population of 10,000 and the nearest television station was located in Seattle—at least 150 miles away.[110] Because of this distance, the mountainous terrain between Astoria and Seattle, and the freeze order, no viewable broadcast signal could reach Astoria and its citizens.[111] Nonetheless, Parsons found a way. An engineer by trade, Parsons placed an antenna on top of the roof of a local hotel where the distant Seattle-based transmissions were weak but nevertheless receivable.[112] He then installed an amplifier that "boosted" the signal and strung a cable from the device to the adjacent building where he lived.[113] As the boosted signal travelled through the cable and into his television set, the broadcast was rendered watchable. In doing so, Ed Parsons unknowingly invented cable television.[114]

When the surrounding citizenry received word of what Parsons accomplished, chaos ensued. Hundreds of strangers visited his home to glimpse the electronic medium they had heard so much about.[115] As Parsons retells it:

> The first problem was too many people coming into our apartment or penthouse. We literally lost our home. People would drive for hundreds of miles to see television. We had gotten considerable publicity . . . when people drove down from Portland or came from The Dalles or from Klamath Falls to see television, you couldn't tell them no. So I approached the hotel manager and suggested that it would be a simple

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[109] Richard Burton, Interview with Leroy "Ed" Parsons, THE CABLE CTR.: THE HAUSER ORAL HIST. PROJECT (June 19, 1986), https://www.cablecenter.org/programs/the-hauser-oral-history-project/p-q-listings/leroy-ed-parsons.html.

[110] *See id.*

[111] *See id.*

[112] *Id.*

[113] *See id.*

[114] Cablefax Staff, *Ed Parsons Brings Cable to Astoria*, CABLEFAX (2015), https://www.cablefax.com/cablefax_viewpoint/ed-parsons-brings-cable-astoria.

[115] *See id.*

> matter to drop a cable down the elevator shaft and put a set in the lobby of the hotel. He thought that was a wonderful idea. So we did. A short time later, he asked me to remove the set because the lobby was so full people couldn't get in to register.[116]

Parsons failed to realize the profit potential for his invention.[117] Nonetheless, it would not take long for others to derive revenue from his ingenuity. In 1950, Robert Tarlton created the first widely publicized commercial cable system by installing his own master antennas in rural towns around the country.[118] Hundreds at a time could connect to Tarlton's systems with access dependent on whether the user timely paid a monthly subscription fee.[119] Thus, Tartlton was among the first to understand that CATV could attain profitability by excluding users who refused to pay a fee by disconnecting them from the system entirely. Formally named "community antenna television systems" ("CATVs"), others followed in Tarlton's footsteps. So quickly, that by 1952, 14,000 Americans relied on CATV for broadcast access.[120] However, CATV was not always the most convenient mode of retransmission. Installation costs were high and community housing patterns had to be dense enough to justify stringing cables to individual homes. In response to these inconveniences, alternative retransmission devices were invented: Boosters and translators.

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[116] *Id.*

[117] *Id.* ("Ed said he never really made any money in cable television because it did not occur to him that he could turn it into a steady income. . . . Ed charged an installation fee based on his expenses, typically $125, but it did not occur to him to charge a monthly fee for his service.").

[118] Loran Rasmussen, Interview with Robert Tarlton, THE CABLE CTR.: THE HAUSER ORAL HIST. PROJECT (June 27, 1986), https://www.cablecenter.org/programs/the-hauser-oral-history-project/t-v-listings/robert-tarlton-penn-state-collection.html.

[119] *See id.* ("I designed so that we'd figure, well, about 200 people can afford to buy service and that's what I designed the thing for. Little did I know within a month's time the 200 people would be compounded. People clamoring for service."). Tartlon charged a $100 installation fee with a $3/month maintenance fee. *Id.*

[120] *The Cable History Timeline*, THE CABLE CTR. 1, https://www.cablecenter.org/images/files/pdf/CableHistory/CableTimelineFall2015.pdf (last visited Feb. 24, 2021).

Some speculate that boosters and translators were also invented by Ed Parsons.[121] Although they performed the same function as CATV, boosters and translators were less expensive to install.[122] However, because they retransmitted signals over-the-air (as opposed to cable), their profit potential was comparatively weak. This fact made them a much less attractive business ventures compared to CATV. Communities often found themselves forced to form nonprofit organizations to fund their construction.[123] Thus, boosters and translators were viewed as signal strengthening devices rather than legitimate commercial enterprises.

The FCC's freeze order was lifted through the issuance of its Sixth Report and Order in 1952.[124] The Order's spectrum allotment scheme prioritized metropolitan areas[125] in the hopes that urban station signals would reach surrounding rural communities without the need for additional infrastructure. However, the scheme's central assumption—that the signals would successfully travel these vast distances—rested on a highly simplified physical terrain model that "predicted coverage in a smooth radius from the transmitter location outward."[126] This thinking defies physics for two reasons: (1) radio waves are affected by the natural curvature of the Earth. Therefore, the farther the distance, the less likely the signal will reach

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[121] STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 6 ("According to E.B. Craney, a pioneer in the field of low-power television, the first booster probably was established in 1948, by Ed Parsons to reach homes beyond the range of his cable TV system in Astoria.").

[122] *Id.* at 4.

[123] *Id.* at 30 ("The earliest translators often were financed by individuals who wanted television service for themselves and found that other members of the community would provide contributions to help cover the operating costs.").

[124] 18 FED. COMM. COMM'N ANN. REP. 107 (1952).

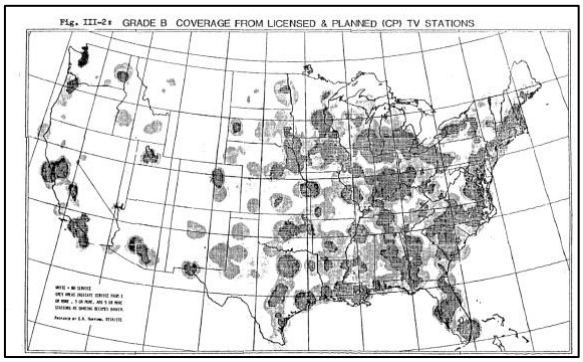
[125] K.M. Richards, *Translators: The Complete Story*, UHF TELEVISION, http://www.uhftelevision.com/articles/translators.html [https://web.archive.org/web/20190911011955/http://www.uhftelevision.com/articles/translators.html]. The below is the proposed channel allotment strategy in the Sixth Report and Order:

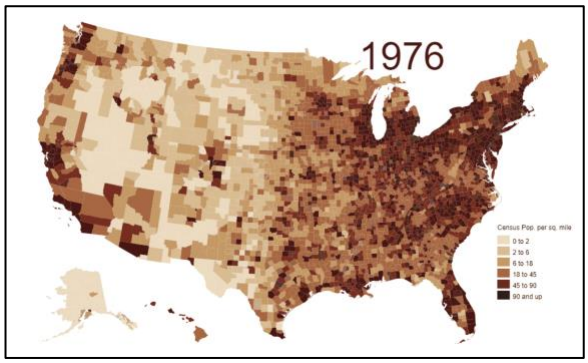
Population of Central City	Number of Channels
1,000,000 and above	6 to 10
250,000 – 1,000,000	4 to 6
50,000 – 250,000	2 to 4
Under 50,000	1 to 2

STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 56.

[126] Richards, *supra* note 125.

its destination;[127] and (2) large physical structures (e.g. mountains) inevitably obstructed the waves' path as it travelled vast distances.[128] In other words, the FCC's strategy accidentally reinforced the same inequities that the agency wanted to avoid. Populated, urban communities were favored at the expense of their rural counterparts. And this had devastating long-term effects.[129] The left of the two maps depicts the areas of the country reachable by broadcast signals in 1976. The right shows the most populated areas of the country that same year.[130] A comparison between the two demonstrates a strong correlation with population density and broadcast access:





A side effect of this misstep, however, was the alteration of the media landscape itself. With less station licenses, rural Americans sought retransmission technologies to gain access to broadcast. In particular, CATV. And as demand for

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[127] *Radio Waves*, SCI. ENCYC., https://science.jrank.org/pages/5675/Radio-Waves-Propagation-radio-waves.html (last visited Feb. 25, 2021).

[128] *See* Mark D. Casciato, Radio Wave Diffraction and Scattering Models for Wireless Channel Simulation 1 (2001) (Ph.D. dissertation, University of Michigan), http://www.eecs.umich.edu/radlab/html/NEWDISS/Casciato.pdf ("The propagation of a radio wave through some physical environment is effected by various mechanisms which affect the fidelity of the received signal. . . . These effects can include shadowing and diffraction caused by obstacles along the propagation path, such as hills or mountains in a rural area, or buildings in more urban environment.").

[129] STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 38.

[130] Jeff Desjardins, *Visualizing 200 Years of U.S. Population Density*, VISUAL CAPITALIST (Feb. 28, 2019), https://www.visualcapitalist.com/visualizing-200-years-of-u-s-population-density/ (displaying an animated map created by Vivid Maps, based on U.S. census data and Jonathan Schroeder's county-level decadal estimates for population).

CATV increased,[131] its technological capabilities improved. By the early 1950s, CATV was able to retransmit multiple channels simultaneously using split-band amplifiers.[132] Reception also improved through the construction and development of multi-hop microwave relay infrastructure—allowing for the importation of signals originating from distant metropolitan areas.[133] Suddenly, CATV owners began to root their operations in communities already served by local stations in an effort to capture larger subscriber bases—thus, directly competing against the local stations in their supposedly exclusive markets. The FCC and major networks watched in both glee and horror.

Regarding boosters and translators, the FCC initially labelled them illegal out of fear that their proliferation would cause signal interference.[134] This was met with tremendous resistance from underserved communities.[135] In response, the FCC engaged in further inquiries on whether they should create a licensing scheme dedicated to booster and translator operations.[136] On the other hand, the networks and stations generally supported their use. As Ernest W. Jennes—speaking on behalf of more than 160 stations—later explained to Congress on June 24, 1965: Boosters and translators were beneficial to their business because they helped signals reach the rest of their dedicated geography (and thus, increase viewership).[137]

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[131] Hundreds of operations were erected as the decade passed. *Cable Television, History of*, ENCYCLOPEDIA.COM, https://www.encyclopedia.com/media/encyclopedias-almanacs-transcripts-and-maps/cable-television-history (last visited Mar. 31, 2021).

[132] *See* Burton, *supra* note 109 (Leroy "Ed" Parsons discussing the Jerrold amplifier in the 1950s, designed for retransmitting four channels simultaneously).

[133] During the 1950s, AT&T Long Lines built a transcontinental system of microwave relay links across the United States that grew to carry the majority of American television network signal traffic. "*Sugar Scoop" Antenna Catches Microwaves*, POPULAR MECHS., Feb. 1955, at 87. *See also 1965 House Hearings*, *supra* note 24 (statement of Ernest W. Jennes. Counsel, Maximum Service Telecaster, Inc.) ("There are no geographical bounds for 'CATV unlimited.' Increasingly, multi-hop microwave relays are being sought or planned to import stations from metropolitan centers across many hundreds of miles and several States.").

[134] STAFF OF THE FED. COMM. COMM'N, *supra* note 99, at 7–8.

[135] One particular incident involved Governor Ed Johnson of Colorado—former Chairman of the Senate Commerce Committee—who issued an open challenge to the FCC to sue the state as he granted licenses to *all* persons seeking a booster license. *Id.* at 7. A similar incident involved an Oregon Senator who resisted the shutting down of a local booster operation in the Okanogan Valley. *Id.* at 6–7.

[136] *See id.* at 8.

[137] Robert Kastenmeier, Register of Copyright.

> Actually, don't the stations commercially benefit by this, in the sense that translator stations, booster stations, add to viewership? I would think that the stations

In regards to CATV, the FCC was ambivalent.[138] But the broadcasters feared and resisted its rise:

> In essence, this threat derives from CATV's ability to import multiple television signals from many distant stations into cities where local and area television stations are already reaching the viewing public. Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served cities of the signals from stations in other markets *means that the exclusivity of the local station as to many—if not most—of its programs will be destroyed*. To the extent that a program is viewed on an imported channel, the benefit of exclusivity, for which the local station has bargained, is destroyed—to the damage of the local station, the copyright owner and, ultimately, the public. For, when CATV subscribers watch network programs, feature films, or syndicated film programs imported from distant stations, the local viewing audience is fractionated and the local station is deprived of advertiser support, since it can no longer offer to advertisers as large an audience of local viewers. The resulting decrease in advertising revenue means at least

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> involved whose signals were being thus picked up and translated would stand to benefit and be able to commercially improve their rate structure as far as advertising is concerned."

Ernest W. Jennes.

> Well, if you take the situation—and we are talking apparently about translators now and not CATV systems—where the service is being provided by a translator, the extension of the service is being provided free. Where the stations is able to increase the number of people it serves by virtue of a translator, it is to that extent benefiting its own circulation. This is in sharp contrast to the CATV situation where you have outside signals being brought in by CATV into the areas served by the station and fractionating the audience of the station.

1965 House Hearings, *supra* note 24, at 8.

[138] *See* Daniel J. Smith, Note, *Stay the Course: A History of the FCC's Response to Change in the Cable Industry*, 13 J.L. & POLITICS 715, 726–727 (1997) (discussing the FCC's rejection of jurisdiction for CATV issues).

> that programing must be curtailed and at worst that the local station will be forced off the air.[139]

In response, the broadcasters sought to secure protective legislation from Congress, demanded intervention from the FCC, and challenged CATV's actions in federal court.[140] But "by the end of the 1950's the CATV industry had rebuffed these challenges; Congress had not acted, the [FCC] had not intervened, and no judicial decisions favorable to the broadcasts had been obtained."[141] Helpless, the major copyright owners, networks, and their local stations sought to stop CATV's rise through another mode of attack: Amending the Copyright Act. Their efforts lasted 20 years. It is against this backdrop that Section 111(a)(5) must be read.

III
LEGISLATIVE HISTORY OF COPYRIGHT ACT § 111(a)(5)

A. Addressing the Complexity of the Act's Legislative History

The legal community has long used legislative history to interpret statutory language.[142] However, this approach to interpretation proves uniquely difficult to apply for the Copyright Act of 1976. After all, the Act's legislative record spans more than 30 studies, three Register reports, four committee prints, six series of subcommittee hearings, 18 committee reports, and the introduction of at least 19 general revision bills (the history of section 111 alone spans 22 congressional

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[139] *1965 House Hearings*, *supra* note 24, at 3 (statement of Ernest W. Jennes, General Counsel, Maximum Service Telecasters, Inc.).

[140] Jacob W. Mayer, Book Review, 16 WM & MARY L. REV. 1033 (1974) (reviewing DON R. LE DUC, CABLE TELEVISION AND THE FCC: A CRISIS IN MEDIA CONTROL (1973)).

[141] *Id.* at 1035.

[142] *See, e.g.*, Gerald C. MacCallum, Jr., *Legislative Intent*, 75 YALE L.J. 754 (1966).

sessions[143]).[144] Yet, "one can read this history in its entirety and find no evidence that any member of Congress intended anything in particular to follow from many provisions of the statute."[145] Compounding this difficulty, "[m]ost of the [Copyright Act] was not drafted by members of Congress . . . [i]nstead, the language evolved through a process of negotiation among authors, publishers, and other parties with economic interests in the property rights the statute defines."[146] Therefore, Professor Jessica Litman of Michigan Law characterizes the Act's development as "reflect[ing] an anomalous legislative process designed to force special interest groups to negotiate with one another."[147] And as will be discussed below, section 111(a)(5)'s development was more than consistent with Litman's characterization; involved were some of the largest media entities in the world, including: NBC, ABC, CBS, Disney, Universal Pictures, Twentieth Century Fox, the NFL, MLB, the Motion Picture Association, and the Screen Actors Guild.[148]

Nevertheless, these complexities should not be treated as an excuse to disregard the informational richness that this history provides for the present inquiry. As Professor Litman further states:

> [I]t would be a mistake to conclude that simply because the statutory language and legislative history are difficult to interpret, they convey nothing about what the 1976 Act intended to accomplish. The statute

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[143] As early as 1932, Senator Clarence Dill (D-WA) proposed a revision to the 1909 Act that would have explicitly recognized radio broadcasting as a protected "public performance." SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS OF THE S. COMM. ON THE JUDICIARY, 86TH CONG., COPYRIGHT LAW REVISION STUDIES, *Limitations on Performance Rights*, STUDY NO. 16, at 99 (Comm. Print 1960), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter CLR STUDY] ("That the use of a machine, instrument, or instruments serving to reproduce mechanically and/or electrically such work or works, except where such reproduction is by radio or wireless broadcast, shall not be deemed a public performance for profit unless a fee is charged for admission to the place where such reproduction or rendition occurs: *Provided further*, That the provisions of this Act shall not apply to the reception of any work by the use of a radio-receiving set or other receiving apparatus unless a specific admission or operating fee is charged therefor by the owner or operator of such radio-receiving set or other receiving apparatus.").

[144] Litman, *supra* note 44, at 865.

[145] *Id.*

[146] *Id.* at 860–61.

[147] *Id.* at 862.

[148] *Infra* III.C.

> was a complicated and delicate compromise, but the nature of most aspects to that compromise is possible to unearth.[149]

In fact, the Supreme Court has searched the Act's legislative history for linguistic meaning on multiple prior occasions.[150] Thus, the author proceeds to do the same. And in doing so, he traces each version of section 111(a)(5) up until its adoption in 1976. This begins in 1955 when Congress first approached the Copyright Office for assistance in their amendment efforts.[151] Every published, proposed draft is compared along the real-time thoughts and criticisms of the economic actors. By comparing their statements on the drafts with the subsequent changes made to the language, we discover what viewpoints motivated the section's development and thus, arrive at the true authorial intent behind section 111(a)(5).

B. 1955-1965: Birth of the Nonprofit Booster/Translator Exception

By 1955, Congress had been quarreling over whether public performance copyright liability should extend to radio and television broadcast retransmissions for nearly 30 years.[152] After decades of dead bills and failed initiatives, Congress

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[149] Litman, *supra* note 44, at 861.

[150] *See, e.g.*, Mills Music v. Snyder, 469 U.S. 153, 165 (1985) (analyzing the legislative history of Section 304(c)).

[151] SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS OF THE S. COMM. ON THE JUDICIARY, 86TH CONG., COPYRIGHT LAW REVISION STUDIES, *Foreword*, at III (Comm. Print 1960), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter CLR FOREWORD] ("Beginning in 1955, the Copyright office of the Library of Congress, pursuant to appropriations by Congress for that purpose, has been conducting studies of the copyright law and practices. . . . The subcommittee believes that these studies will be a valuable contribution to a better understanding of copyright law and practice and will be extremely useful in considering the problems involved in proposals to revise the copyright law.").

[152] The exclusive right of public performance has existed since 1856. *See* CLR STUDY, *supra* note 143, at 81. In the beginning, the right extended only to public performances of dramatic works. By 1897, it was expanded to musical works and public speeches. The early version of the law, however, enumerated no exceptions. *Id.* This changed with the Copyright Act of 1909, which exempted—for the first time—public performance done for a nonprofit purpose. Copyright Act of 1909, 17 U.S.C. §1(e) (1909) (amended 1976). Supposedly, this change was motivated by congressional fears that an absolute public performance right could stifle the "free enjoyment of music." CLR STUDY, *supra* note 143, at 82. Their attempt at protecting live musical performances, however, was rendered futile by their failure to define the term "public performance" in the Act itself. *See* 17 U.S.C. §1(e). This definitional gap became the frequent subject of legal disputes across the country as musical composition owners began to file claims against parties publicly playing their music to paying and nonpaying audiences using radio technology. So much so that by 1916, the Supreme Court granted certiorari to attempt to define the right of public performance. Herbert v. Shanley Co., 242 U.S. 591 (1916). The Court later attempted to clarify this definition

sought the help of the Copyright Office. Funds were appropriated for the creation of a special committee of copyright experts, entitled the Subcommittee on the Judiciary Subcommittee on Patents, Trademarks, and Copyrights.[153] Arthur Fisher, then-Register of Copyrights for the Library of Congress, assumed its lead.[154] However, Fisher feared that the subcommittee—occupied by multiple representatives of the various special interest groups– would endlessly quarrel and thus, stall the amendment efforts.[155] He responded to these fears by insisting that the Copyright Office be solely responsible for putting forward any future statutory recommendations; rendering the members of the newly created subcommittee as mere advisors.[156] Therefore, the ultimate proposal put forward by Fisher's Office in 1961 lacked sufficient industry compromise.[157] This proved to be catastrophic, and allowed the special interests to capitalize and force their influence on the Office's revisionary efforts. Therefore (and rather, ironically), Fisher's avoidance of the special interests incidentally provided them with a larger platform for section 111(a)(5)'s eventual development.

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in the case of *Buck v. Jewell-La Salle Realty Co.*, where—for the first time—the Court extended the public performance right to broadcast retransmissions. 283 U.S. 191, 197-98 (1931). Soon thereafter, multiple members of Congress introduced amendments to the copyright law seeking to adapt to broadcast. *See* S. 3985, 72d Cong. (1st Sess. 1932) ("That the use of a machine, instrument, or instruments serving to reproduce mechanically and/or electrically such work or works, except where such reproduction is by radio or wireless broadcast, shall not be deemed a public performance for profit unless a fee is charged for admission to the place where such reproduction or rendition occurs; *Provided further*, That the provisions of this Act shall not apply to the reception of any work by the use of a radio-receiving set or other receiving apparatus unless a specific admission or operating fee is charged therefor by the owner or operator of such radio-receiving set or other receiving apparatus."); H.R. 10364, 72d Cong. (1st Sess. 1932) (exempting "the reception of any copyright work by the use of a radio receiving set or other receiving, reproducing, or distributing apparatus, except where admission fees, cover charges, operating charges, or similar made."); S. 3047, 74th Cong. (1st Sess. 1935) (seeking to extend the 1909 Act's nonprofit exception to all broadcast performances).

[153] *See* CLR FOREWORD, *supra* note 151, at III; *see also* Legislative Appropriations Act of 1956, Pub. L. No. 242, 69 Stat. 499.

[154] Jessica D. Litman, *Copyright Legislation and Technological Change*, 68 OR. L. REV. 275, 309 (1989) ("Fisher hoped to keep the policy making process insulated within the Copyright Office to avoid the partisan wrangling that infected prior legislation.").

[155] *See id.*

[156] *See id.* at 308–09.

[157] *Id.* at 309.

Fisher's 1961 report proposed: "The statute should exempt the mere reception of broadcasts from public performance right, except where the receiver makes a charge to the public for reception."[158] Interpreted broadly, it would cast liability on all unauthorized forms of broadcast retransmissions containing copyrighted material. In other words, all retransmission technologies (including boosters, translators, and CATV) would be infringing regardless of their profit motive. Interpreted narrowly (i.e., that broadcast reception is the *only* form of broadcast interaction that copyright law is concerned with), the proposal would immunize every form of retransmission. Multiple public comments were filed in opposition.[159] Herman Finkelstein, on behalf of the American Society of Composers, Authors and Publishers ("ASCAP") and Chairman of the ABA's Committee on Program for Copyright Revision, went so far as to call the draft "evil."[160] A number of ABA members echoed Finkelstein's sentiments, and "insisted that they would prefer the current outmoded statute."[161] This vitriol forced the Copyright Office to start from scratch and prolong the revision process. The next tentative draft wouldn't be

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[158] H. COMM ON THE JUDICIARY, 87TH CONG., COPYRIGHT LAW REVISION: REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW 31 (Comm. Print 1961).

[159] Those opposed included: (1) The American Guild of Authors and Composers. HOUSE COMM. ON THE JUDICIARY, 88TH CONG., 1ST SESS., COPYRIGHT LAW REVISION PART 2: DISCUSSION AND COMMENTS ON THE REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW 235 (Comm. Print 1963), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) (statement of Leon Kellman, Counsel, The Copyright Committee of American Guild of Authors and Composers) ("The use and enjoyment of creative works, by the public, involves many services and commodities. Actors, musicians, directors, electricians, designers, seamstress, carpenters, stagehands, ticket sellers . . . must be hired. . . . All this is true *regardless* of whether the production or enterprise is a commercial one or whether it is conducted by a nonprofit organization." (emphasis added)). (2) ASCAP. *Id.* at 47 (statement of Herman Finkelstein, Counsel, American Society of composers, Authors and Publishers) ("I applaud the suggestion of the report that with respect to motion pictures the right of public performance be enlarged, without the 'for profit' limitation; I would support making the same extension to choreographic works, after recognizing them."). And (3) the Writers Guild of America. *Id.* at 413 (statement of Richard B. Jablow, Counsel, Writers Guild of America) ("It is the guild's position that the reception of broadcasts in every case constitutes a public performance.").

[160] *Id.* at 283 (statement of Herman Finkelstein, Counsel, American Society of Composers, Authors and Publishers) ("The proposed exemption is wholly unwarranted. It would appropriate the creation of authorship for the benefit of a special class of commercial users. The *evil* might ultimately be as far reaching as the present jukebox exemption." (emphasis added)).

[161] Litman, *supra* note 154, at 310–11.

circulated until 1963.[162] By this time, Fisher would pass away[163] and at least 650,000 Americans would be hooked to cable.[164]

Replacing Fisher as Register of Copyrights was Abraham L. Kaminstein.[165] Contrary to Fisher's approach, Kaminstein insisted that the Copyright Office seek industry input. After analyzing the comments regarding the previous 1961 revision, the Copyright Office proposed—for the first time—that boosters and translators should be exempt from public performance liability.[166] However, they refused to extend immunity to CATV operations.[167] Barbara A. Ringer, Chief of the Copyright

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[162] 2 THE KAMINSTEIN LEGISLATIVE HISTORY PROJECT: A COMPENDIUM AND ANALYTICAL INDEX OF MATERIALS LEADING TO THE COPYRIGHT ACT OF 1976, at 162 (Alan Latman & James F. Lightstone, eds., 1982) [hereinafter KAMINSTEIN].

[163] *Arthur Fisher, 1951-1960*, U.S. COPYRIGHT OFF., https://www.copyright.gov/about/registers/fisher/fisher.html (last visited Feb. 27, 2021).

[164] *The Rise of Cable Television*, ENCYCLOPEDIA.COM, https://www.encyclopedia.com/arts/news-wires-white-papers-and-books/rise-cable-television (last visited Mar. 19, 2021).

[165] *Abraham L Kaminstein, 1960-1971*, U.S. COPYRIGHT OFF., https://www.copyright.gov/about/registers/kaminstein/kaminstein.html (last visited Feb. 27, 2021).

[166] *See* Preliminary Draft for Revised U.S. Copyright Law: § 13(a), *reprinted in* CLR PART 3, *supra* note 34, at 13.

[167] The full text of the statute can be found below. The office's extension of immunity to boosters and translators can be found in subsection (a). Its refusal to immunize CATV is found in subsection (b):

> §13. Scope of exclusive rights with respect to broadcasting and diffusion
>
> Subject to the limitations specified in subsection (b), the exclusive right to perform a work publicly under section 5(c) shall, with respect to a program incorporating a performance of the work, include the right to transmit the program by broadcasting, rebroadcasting, diffusing, rediffusing, or otherwise publicly communicating it.
>
> The exclusive rights . . . shall not include the right to prevent:
>
> (2) Rebroadcasting or rediffusision of the program, over wires or otherwise, for reception on ordinary home receiving sets, where the broadcast signals are merely being strengthened in power without being altered in wavelength or content, and where the program is not being transmitted to the subscribers to a rediffusion service.

KAMINSTEIN, *supra* note 162, at 162.

Office's Examining Division, introduced the language to many of the same parties who opposed the previous draft (and the current plaintiffs in the Locast suit).[168] Ringer rationalized the Office's discriminatory treatment of CATV as follows:

> [The problem] that we see here is the rather interesting question of rebroadcasting or retransmission. And here, of course, there is a vast amount of technology and a vast amount of ignorance, probably on our part as much as anybody else's. But essentially, as we see it, there are two situations where money is involved: (1) the community antenna or CATV system, where the broadcast is picked up and retransmitted over wires to a special receiving set, and where the subscriber pays for the service; and (2) the booster system, where the signal is merely magnified and where anybody in the vicinity can pick the broadcast up.
>
> . . .
>
> With respect to rebroadcasting or rediffusion, we felt it desirable to exempt relays, boosters, master antennas on apartment house roofs, and the like. But, on the basis of the representations that have been made to us, we did not feel that a commercial community antenna system, which installs special equipment on a subscriber's receiving set and charges him for operating the set, should be exempted, and it is not exempted under this draft provision. *On the basis of our knowledge, which is far from perfect, we felt that there is a distinction between a system of this sort—where, from what we have been told, people are really operating for profit—and the situation where somebody puts an antenna up on a hill and lets everybody have the benefit of their largesse, wherever the money comes from*. Now we don't know all we should about this, and we are anxious to be educated.[169]

Ringer's statement contains three notable elements: (1) the Office admitted their ignorance regarding rebroadcasting technology, and requested the assistance

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[168] In addition to the American Publisher's Council, American Textbook Publishers Institute, American Guild of Authors and Composers, ASCAP, and Writers Guild of America, the 1964 commentators included many representatives of plaintiffs in the *Locast* suit, including: Twentieth Century-Fox Film Corp., CBS, Universal Pictures, Walt Disney Productions, and ABC. H. COMM. ON THE JUDICIARY, 89TH CONG., 1ST SESS., COPYRIGHT LAW REVISION PART 5: 1964 REVISION BILL WITH DISCUSSIONS AND COMMENTS 33–36 (Comm. Print 1965), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter CLR PART 5].

[169] CLR PART 3, *supra* note 34, at 239–240 (statement of Barbara Ringer, United States Copyright Office, Chief of Examining Division) (emphasis added).

from the major industry leaders in the drafting effort; (2) the Office chose not to distinguish between retransmission devices based on the technological method of retransmission; rather, (3) for the first time, they distinguished between booster, translators, and CATV on the basis of the latter's profit-making capabilities and purpose. In the meantime, however, the Copyright Office unknowingly started a war.

George Schiffer, on behalf of the National Community Television Association ("NCTA") (today, named the Internet & Television Association), fiercely opposed the Office's stance.[170] In a comment filed to the Committee, Schiffer reasoned:

> I wish to make plain that community antennas, boosters, translators and rooftop antennas should all be treated identically and should all be exempted from the operation of the Copyright Act. . . . The paramount interest is the public's. The public's interest is to have the greatest amount of television service at the lowest possible cost.
>
> . . .
>
> If and so long as the public is to have free television service, [they] must have the correlative right to select the equipment which is most efficient and most adapted to particular needs. . . . Those who manufacture, sell, lease or install reception equipment, whether it be sets, boosters, translators, community antennas, master antennas or rooftop antennas are all in the same business. They do not sell time. They do not sell programs. They do seek to make a profit by dealing in equipment. Without doubt, there would be no market for reception equipment if there were not broadcasts of copyrighted materials. . . . There is simply no "performance," if that word still has a meaning, in the passing of an electric current through tubes and wires-which is all a community antenna accomplishes. The irrelevancy of "performance" is shown by the draft's exemption of boosters, which are as much broadcasting devices as any television station.[171]

Of course, many opposed Schiffer's statements. Douglas Anello, general counsel for the National Association of Broadcasters ("NAB"), argued that CATV deserved different treatment from boosters and translators because it contrarily had

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[170] *See id.* at 419–433 (statement of George Schiffer, National Community Television Association).

[171] *Id.* at 424, 426.

the ability to insert foreign programming into the retransmission."[172] Harry J. Olsson Jr. of ABC acknowledged the need for wider coverage,[173] but contended that it was unfair for CATV to enjoy immunity while earning profits.[174] Even Robert D. Greenburg, commissioner of the FCC (and frequent opponent of the networks), agreed with Olsson's sentiments.[175] At the same time, others argued that *all* retransmission technologies were undeserving of immunity. Sydney M. Kaye, counsel for the NAB, reasoned that differentiating between CATV, booster, and translator was "doomed to failure."[176] Annello agreed, calling it "illogical" to draw a meaningful distinction.[177] Finally, NBC, ABC, and CBS went on to propose new statutory language which refused *any* immunity to retransmission devices.[178] These disagreements left the Copyright Office responsible for authoring a middle ground.

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[172] *Id.* at 245 (statement of Douglas Anello, General Counsel, National Association of Broadcasters) ("Finally, the community antenna operator, in contradistinction to the apartment-house antenna operator, can insert—and does in fact insert—his own programming from time to time. In other words, he has control over the transmission that each subscriber to that system receives.").

[173] *Id.* at 248 (statement of Harry J. Olsson Jr., Counsel, American Broadcasting Company) ("I would like to comment on several things that Mr. Schiffer has said. I think the first of his two main points was that there's a need for adequate TV reception in the public. I think everybody in the room will probably agree that there is.").

[174] *Id.* at 248–249 (statement of Harry J. Olsson, Jr., Counsel, American Broadcasting Company) ("The broadcasters satisfy that need as well as they can, and they now reach something over 90% of the population in the country. . . . But we don't, as a consequence, plead for freedom from paying copyright royalties, despite the fact that we are satisfying the need. . . . I don't think that's an adequate basis on which to plead for an exemption. . . . The CATV system is selling programs, or it's selling the right to receive copyrighted material. . . . Subscribers pay to be able to receive the programs which contain the copyrighted material. I think it [sic] just to say that the CATVs charge an electronic admissions fee. In a sense, they have a pay-television system in operation.").

[175] *Id.* at 251 (statement of Robert D. Greenburg, Commissioner, Federal Communications Commission ("I really have very little to add to what some of the broadcasters have said, except that I couldn't resist the opportunity to align myself for once with the industry. [Laughter]").

[176] *Id.* at 244 (statement of Sydney M. Kaye., Counsel, National Association of Broadcasting).

[177] *Id.* at 254 (statement of Douglas Anello, General Counsel, National Association of Broadcasters) ("Well, I am a broadcaster, and I say it's illogical to draw a distinction for copyright purposes between transmissions by CATV systems, transmissions by a booster, transmission by a translator, and transmission by a regular broadcast.").

[178] Their proposed language can be found below:

> § 13. Scope of Exclusive Rights with Respect to Transmission of Performance by Wire or Radio Communication
>
> "The exclusive right to perform a work publicly under Section 5(c) shall include the right to transmit a performance of a work to the public by wire or radio

Kaminstein's 1964 draft contains two sections relevant to boosters, translators, and CATV: Section 8(4) and section 13.[179] This author, however, is of

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> (including television) communication; provided that such communication of a performance of a work to a specific group of persons limited in number and assembled to see or hear the performance in an office, classroom, or other place not open to the public at that time, or to the occupants of one or more apartment buildings by means of a facility owned or controlled by the owner of such building or buildings, shall not constitute a public performance under Section 5(c)."

Id. at 361 (statement of Robert V. Evans, Assistant General Attorney, Columbia Broadcasting Systems, Inc.).

[179] Section 8(4) and Section 13 state as follows:

> § 8. Limitations on exclusive rights: exemption of certain performances and exhibitions.
>
> Notwithstanding the provision of section 5, the performance of nondramatic literary or musical work, or the exhibition of a pictorial, graphic, or sculptural work, is not an infringement of copyright in any of the following cases:
>
> . . .
>
> (4) performance of the work, otherwise than in a broadcast to the public, without any purpose of direct or indirect commercial advantage and without payment of any salary, fee, or other compensation to the performers, if:
>
> (A) There is no direct or indirect admission charge, or
>
> (B) The proceeds, after deducting the reasonable costs of producing the performance, are used exclusively for educational, religious, or charitable purposes and not for private financial gain.
>
> § 13. Scope of exclusive rights: public communications of broadcasts.
>
> Notwithstanding the provision of section 5, the following are not infringements of the exclusive right to perform or exhibit a copyrighted work:
>
> communication of a broadcast embodying a performance or exhibition of the work to the private rooms of a public establishment by means of a system of loudspeakers, *unless the person responsible for the communication or the operator of the establishment alters or adds to the content of the material included in the broadcast;*
>
> reception of a broadcast embodying a performance or exhibition of the work on a single receiving apparatus of a kind commonly used in private homes, unless a direct admission fee is charged to see or hear the broadcast, or unless the receiving apparatus is coin-operated.

CLR PART 5, *supra* note 168, at 6, 9. Section 13(1) appears to prohibit the insertion of content on top of retransmitted signals. *See id.* at 9.

the opinion that analyzing the language of the 1964 version is practically useless because of its incomprehensibility. On the one hand, section 8(4) suggests that a nonprofit CATV operation would be immunized.[180] On the other hand, representatives of the Copyright Office repeatedly stated—in public comments for the bill—that they did not intend for such a reading.[181] Eventually, this became a point of embarrassment for the Office's draftsmen. Robert Evans, counsel for CBS, pointed out a number of ambiguities in the language and requested clarification.[182] When Register Robert Kaminstein asked Evans if he interpreted the language as exempting CATV, Evans replied: "I am not certain, Mr. Chairman. I'd like your assurance. [Laughter]."[183]

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[180] CLR PART 5, *supra* note 168, at 6.

[181] George Schiffer, on behalf of CATV interests: "I gather that the intent was not to exempt community antennas, albeit we approve of the effect of this provision." *Id.* at 117 (statement on George Schiffer, National Community Television Association). Robert Kaminstein responded: "That's right. I think it would be a dangerous assumption otherwise, Mr. Schiffer. [Laughter]." *Id.* (statement of Robert Kaminstein, Register, United States Copyright Office).

[182] Mr. Chairman, there seems to be some uncertainty as to the exact meaning of section 13. Mr. Schiffer has suggested that clause (2) would give an exemption to community antenna systems, and he made the same observation with respect to section 8(4). I think this may be due to some of the language which appears there. Looking at it, the operative words seem to be "communication of a broadcast embodying a performance …"

> In trying to discover what this means, I think it's fair to look back to section 5, because section 13 is intended to limit section 5. Turning back there, I find three other very similar clauses. I find "broadcast a performance," "transmit … a broadcast of [a] performance," and "communicate a performance." I am sure that something different is meant by each of these four clauses, but I confess I am not quite sure what is meant exactly by each one. For example, under which section could a broadcaster in a proper case sue a community antenna system for infringement? I think it would be helpful if you or someone on your staff could tell us precisely what situation each of these words is intended to apply to.
>
> Finally, I think it would be helpful, and would clarify this whole thing if we had a definition of the word "broadcast," which appears in section 13, in section 5, and also in section 8. I'd suggest as a definition: "To broadcast, means to transmit a performance or exhibition of a work to the public by wire or radio communication, including television." This would be based on sections 3(a) and (b) of the Communications Act of 1934, and therefore has an already-established meaning. Thank you, Mr. Chairman.

Id. at 129 (statement of Robert V. Evans, Counsel, Columbia Broadcasting Systems, Inc.).

[183] *Id.* at 130.

If anything is to be learned from the 1964 draft's language and debate, it is that CATV was (again) refused immunity. This intention was maintained and clarified in the 1965 revision draft—the first introduced to Congress. And with it, the modern nonprofit retransmission exception began to develop.

C. 1965-1966: Debate & Authorship of the Provision in House Subcomm. No. 3

After a decade of hearings and multiple drafts, Abraham Kaminstein introduced a proposal for a new Copyright Act to Congress on February 4, 1965.[184] Its version of the nonprofit retransmission exception was as follows:

> § 109. Limitations on exclusive rights: Exemption of certain performances and exhibitions
>
> Notwithstanding the provisions of section 106, the following are not infringements of copyright:
>
> (5) the further transmitting to the public of a transmission embodying a performance or exhibition of a work, if the further transmission is made without altering or adding to the content of the original transmission, without any purpose of direct or indirect commercial advantage, and without charge to the recipients of the further transmission;[185]

House Subcommittee No. 3 of the Committee on the Judiciary held 22 public hearings over the course of four months to consider the 1965 version's language.[186] Each hearing was narrowly focused on one or more industries to be potentially impacted by the legislation. This allowed trade representatives to voice their support or opposition (and sometimes, propose amendments to the draft). For example, the

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[184] Bill for the General Revision of the Copyright Law, H.R. 4347, 89th Cong. (1965). *See also* H. COMM. ON THE JUDICIARY, 89TH CONG., 1ST SESS., COPYRIGHT LAW REVISION PART 6: SUPPLEMENTARY REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW, 1965 REVISION BILL, at v (Comm. Print 1965), *reprinted in* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT LAW: COPYRIGHT LAW REVISION (rev. ed. 2020) [hereinafter CLR PART 6].

[185] H.R. 4347, § 109, *as reprinted in* KAMINSTEIN, *supra* note 162, at 175.

[186] Hearings began on May 26, 1965 and ended on September 2 of the same year. *1965 House Hearings*, *supra* note 24, at i.

first of these hearings—held on May 26, 1965—focused on publishing.[187] Thus, representatives from the Authors Guild, Authors League of America, and American Book Publishers Council were invited to testify and file comments.[188] The tenth meeting—held on September 1, 1965—was mostly dedicated to live television broadcasting as representatives of various professional sports leagues testified on the subject of public performance protection.[189] The eighth—hosted on June 24, 1965—focused on the retransmission debate.[190] Whereupon major copyright owners, CATV operators, trade groups, and the major networks were invited to testify on the nonprofit retransmission exception (amongst other provisions).[191] However, because of the importance of the CATV issue across various industries, many of the other hearings included testimony relevant to section 111(a)(5). In fact, the first comment addressing the section's intent is found as early as the Copyright Office's opening statement during the subcommittee's first hearing.

George D. Cary, Deputy Register of Copyrights, introduced the nonprofit retransmission exception to Congress on May 26, 1965.[192] Notably, Cary began his remarks by labelling the CATV issue as "controversial."[193] He acknowledged that CATV furthered Congress's goal of nationwide television access.[194] However, Cary highlighted a number of CATV attributes that his Office found disturbing, including: (1) CATV was no longer a "passive" device; instead, it was an "extremely complex transmission system" that operated just like a broadcaster;[195] (2) most of these CATV systems were operated as commercial enterprises and successfully earned a profit, thus their operators "neither need[ed] nor deserve[d] a free ride at the expense of copyright owners or in competition with local broadcasters, wired music services, and other users who must pay royalties for similar uses;"[196] and (3) CATV

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[187] *Id.* at 1–154.

[188] *Id.* at iii.

[189] Testimony included the representatives of the National Football League, the American Football League (now defunct), and various baseball organizations. *Id*. at 1823.

[190] *Id*. at 1223.

[191] *Id.*

[192] *Id.* at 29–60 (statement of George D. Cary, Deputy Register, United States Copyright Office).

[193] *Id.* at 34 ("The next *controversial* issue involves the problem of community antenna television, or CATV as its commonly known." (emphasis added)).

[194] *See id.* at 34–35 ("CATV started out after World War II as an aid to those television viewers who were located in mountain valleys or other unfavorable locations where the television signal could not be adequately received, if it could be received at all. . . . It may be added that these early cables were able to carry at the most about three television channels.").

[195] *See id.* at 36.

[196] *Id.*

retransmissions impeded upon the market exclusivity of local stations by retransmitting signals into communities already served, resulting in viewership split which hindered the stations' ability to attract advertisers.[197]

With these considerations in mind, the Copyright Office sided with the right holders and networks on the issue.[198] They explained their decision with the following testimony:

> [T]here is no exemption in this bill for community antenna television operations. . . . . The number of the systems, which in early January of this year totaled around 1,600, has been growing very rapidly at the rate of approximately 40 systems per month. They now bring the broadcast of more than 400 television stations to well over a million and a half subscribers. The industry is reported to have garnered income last year in excess of $100 million and the anticipation for the future is even rosier.
>
> . . .
>
> In our view, there may be valid arguments on both sides of this entire question. . . . *On balance, however, it is our view that the CATV operators are making a performance to the public of a copyright owner's work. This performance results in a profit which in all fairness the copyright owner should share. Unless he is compensated, the performance can have damaging effects upon the value of the particular copyright. For these reasons, therefore, we have not included an exemption for commercial community antenna systems in the bill*.[199]

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[197] *See id.* ("CATV systems effectively deprive the copyright owner of control over his work. In many cases, for example, motion pictures or syndicated series, where the broadcasting of a work is licensed for particular limited territory and audience, a CATV retransmission of a broadcast to subscribers in another area can mean the actual loss of the market for broadcasts in that other area. Multiplied many times throughout the country this loss can be very serious.").

[198] *Id.* ("On balance, however, it is our view that the CATV operators are making a performance to the public of a copyright owner's work. This performance results in a profit which in all fairness the copyright owner should share. Unless he is compensated, the performance can have damaging effects upon the value of the particular copyright. For these reasons, therefore, we have not included an exemption for commercial community antenna systems in the bill.").

[199] *Id.* at 35–36.

The majority of copyright owners and networks applauded the Office's stance. This included many of the same plaintiffs in the present case.[200] On behalf of Disney, Universal Pictures, and Twentieth Century Fox Television, Arthur B. Krim echoed Cary's thoughts: He urged Congress not to think of commercial CATV as a mere signal strengthener.[201] Rather, he characterized the rising technology as a "vast and powerful industry" whose players actively impinged upon the market exclusivity of the local stations.[202] CATV was no longer serving the same nonprofit purpose that Ed Parsons pursued.[203] Instead, Krim argued that commercial CATV unfairly competed against the stations by providing the same content while avoiding copyright clearance obligations.[204] Ernest W. Jennes, counsel for the Association of Maximum Service Telecaster Inc. (whose membership included more than 160 television stations), focused his comments on the market exclusivity concern.[205] Below, the author provides a lengthy quote from Jennes primarily because it beautifully summarizes the importance of the issue for the stations and the future of broadcasting:

> The entire fabric of our free system of television programming depends on the exclusivity of television program rights. The ability of a television network to persuade an advertiser to include a particular station on the network lineup and the revenues which the network and the station will receive depend upon whether [*sic*] that station is the

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[200] Walt Disney Productions, Inc., Twentieth Century-Fox Television, Inc., and Universal Pictures were represented at this hearing by the president of United Artists Corp. and that of its subsidiary, United Artists Television, Inc. *1965 House Hearings*, *supra* note 24, at 1332 (statement of Arthur B. Krim, President, United Artists Corp.)

[201] *See id.* at 1334. (statement of Arthur B. Krim, President, United Artists Corp.) ("When CATV began, its purpose was to serve towns far distant from the site of television stations or isolated by mountainous terrain. . . . As I shall explain, the continued growth of CATV, if not subject to copyright, would upset the nationwide FCC system of contour area allocations, make a mockery of the exclusive license agreements between copyright owners and television stations and seriously damage the property interests of both. . . . [It] has now proliferated into a vast and powerful industry. It operates even in areas where TV stations are already in existence or where the population is large enough to support them.").

[202] *Id.*

[203]*See id.* ("When CATV began, its purpose was to serve towns far distant from the site of television stations or isolated by mountainous terrain. . . . As I shall explain, the continued growth of CATV, if not subject to copyright, would upset the nationwide FCC system of contour area allocations, make a mockery of the exclusive license agreements between copyright owners and television stations and seriously damage the property interests of both.").

[204] *See id.*

[205] *See id.* at 1224 (statement of Ernest W. Jennes, Counsel, Association of Maximum Service Telecaster Inc.

exclusive outlet for the network in the particular city, since a network advertiser will usually not pay twice for the same coverage.

. . .

Exclusivity, that is, the ability of the program owner to control its exposure to the public, is thus essential to a continuing supply of television programs which, in turn, is essential to the survival of television itself. . . . As an inducement, to the production and broadcast of television programs, there is no realistic substitute for exclusivity.

. . .

CATV originally did and still does operate in areas of poor television reception . . . [i]n its historic role, CATV has fulfilled an important function as a supplement to our system of free television . . . More recently, [however], an entirely different type of CATV has been emerging. . . . There are no geographical bounds for 'CATV unlimited.' Increasingly, multi-hop microwave relays are being sought or planned to import stations from metropolitan centers across many hundreds of miles and several States. *These multi-channel systems, importing distant stations both off the air and by microwave, are trying to mushroom into cities and towns of all sizes where reception of local and area broadcasting stations is excellent*.

. . .

In short, 'CATV unlimited' is a new type of CATV with capabilities and operations only faintly resembling historic CATV. As CATV's purpose and operations expand beyond providing an *auxiliary* service, CATV becomes a threat to the public interest in free, diverse, and competitive, local and area television broadcast services. In essence, this threat derives from CATV's ability to import multiple television signals from many distant stations into cities where local and area television stations are already reaching the viewing public. Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served "cities of the signals from stations in other markets means that the

> exclusivity of the local station as to many—if not most—of its programs will be destroyed.[206]

And these sentiments were largely echoed by ABC,[207] CBS,[208] NBC,[209] and the NFL.[210] To the extent that all parties were concerned about CATV's *technological* nature, it stretched only to CATV's increasing ability to retransmit multiple channels.[211]

Thus, the record demonstrates that the major copyright owners and broadcasters opposed immunization of commercial CATV for two primary reasons: (1) Unlike boosters/translators, commercial CATV retransmissions destroyed the market exclusivity of broadcasting stations by retransmitting signals into

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[206] *Id.* at 1224–26 (emphasis added).

[207] *Id.* at 1880–81 (statement of Harry R. Olson, Jr., General Attorney, American Broadcasting Company) ("Insofar as the CATV's merely receive television signals their arguments are sound enough. However, the CATV's do more than merely receive signals. They transmit and furnish for a charge broadcast material, including copyright material, to their subscribers. . . . [They] have proliferated at an amazing rate; many are prosperous and many perform a socially useful function but no other industry using such material, it seems to us, makes a more direct charge to its customers for the privilege of seeing and hearing copyright works.").

[208] *See id.* at 1892 (statement of Leon R. Brooks, Vice President and General Counsel, Columbia Broadcasting Systems) ("At the outset we want to affirm our support of those provisions . . . which make CATV systems subject to the copyright law thereby, in our opinion, codifying the law as it presently exists.").

[209] *See id.* at 1918 (statement of Thomas E. Ervin, Vice President and General Attorney, National Broadcasting Company) ("NBC has proposed for many years that the broadcast station whose programs are being distributed by a CATV system be the focal point for rights clearances. If the station desires to permit its programs to be carried on a particular system, the station can negotiate with the holder of the rights for such CATV distribution when it acquires the right to broadcast the program.").

[210] *Id.* at 1825 (statement of Pete Rozelle, commissioner, National Football League) ("Moreover, by reason of CATV, leagues such as the NFL can no longer guarantee exclusivity of freedom from unlicensed competition to stations or networks which purchase the television rights to sports contests. Television values can therefore be expected to go down.").

[211] *See, e.g., id.* at 1225 (statement of Ernest W. Jennes, Counsel, Association of Maximum Service Telecasters, Inc.) ("The number of channels carried is increasing rapidly. Early systems had one to three channels. Even in 1964, 70 percent of the CATV systems carried five or fewer channels. But new systems already carry up to 12 stations, and systems with 20, 30, or 40 channels are planned.").

communities already served;[212] and (2) Unlike the broadcasters, commercial CATV was not forced to pay for the copyrighted material.[213]

On the other hand, *nonprofit* CATV, boosters, and translators failed to incite the same divisiveness. Multiple parties—including the FCC and the Air Force—approved of the draft's treatment of nonprofit retransmission devices.[214] However,

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[212] *Id.* at 1226 (statement of Ernest W. Jennes, Counsel, Association of Maximum Service Telecasters, Inc.) ("Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served cities of the signals from stations in other markets means that the exclusivity of the local station as to many—if not most—of its programs, will be destroyed. To the extent that a program is viewed on an imported channel, the benefit of exclusivity, for which the local station has bargained, is destroyed—to the damage of the local station, the copyright owner and, ultimately, the public."). *See also id* at 1335 (statement of Arthur B. Krim, President, United Artists Group) ("The usual [network] license contract in syndication does not grant the right to authorize the telecast of our programs over additional stations and prevents the licensee station or sponsor from authorizing a community antenna to perform the program. These restrictions are in keeping with the underlying principle of geographical limitation that is central to all television release. . . . [I]t can readily be seen [then] that when a CATV system brings programs from a distant city, it plays havoc with every existing licensing system and either seriously downgrades or utterly destroys the property of the copyright owner."); *id.* at 1008 (statement of Adolph Schimel, Vice President and General Counsel, Universal Pictures Col, Inc.) ("Our TV performance license fees depend on the coverage of potential viewers, the timing of the broadcast, the priority and exclusivity of performing rights which we can grant for the area, and other factors in the licensee's area. . . . We feel strongly that our copyrights should not be freely transmitted, and thereby publicly performed, without our prior license, in this CATV manner. Our license for the original TV broadcast in other cities which the CATV operator captures and re-transmits from the air, does not expressly or impliedly license any further transmission by the CATV operator.").

[213] *Id.* at 1226 (statement of Ernest W. Jennes, Counsel, Association of Maximum Service Telecasters, Inc.) ("Besides the destruction of program exclusivity, [CATV] is unfair and inequitable. These multiple-channel CATV systems carry vast quantities of program material. If these systems went out into the marketplace to purchase rights to program material, the cost to the CATV's—and the corresponding return to the copyright owners—would be substantial."); *id.* at 1335 (statement of Arthur B. Krim, President, United Artists Group) ("If [CATV] is permitted to make use of copyrighted work without compensation, CATV will have a devastatingly destructive effect upon the business of producing and distributing television programs.").

[214] *Id.* at 196–97 (statement of Herman Finkelstein, General Counsel, American Society of Composers, Authors, and Publishers) ("No. (5) exempts performances on a so-called 'booster' . . . . We feel that it is appropriate to exempt such a further nonprofit transmissions . . . ."). The FCC stated as follows:

the plaintiffs presently suing Locast—including Disney, Universal Pictures, Twentieth Century Fox, and NBC—were comparatively ambivalent at the time.[215]

> We are concerned with the phrases 'without any purpose of direct or indirect commercial advantage' and 'without charge to the recipients of the further transmission.' We believe that the phrase 'without any purpose of direct or indirect commercial advantage' may prove to be troublesome. Where the translator is owned by or licensed to the commercial television station whose programs the translator is retransmitting, the purpose would clearly appear to include commercial advantage. However where the translator licensee is an individual or organization in the community served by the translator, there would appear to be countless fact situations which could raise difficult questions as to whether the purpose of establishing a particular translator was direct or indirect commercial advantage. Inquiry would have to be made into the *purpose* or *intent* which led to the construction and operation of a particular translator. In our view, the matter could better be handled by excluding from the exemption two particular classes of translators: those which are operated for profit, and those which are under common ownership with regular commercial TV stations (which have built them in hopes of improving their coverage). We would, therefore, favor eliminating the language 'without purpose of direct or indirect commercial advantage' and substituting language along the following lines: 'where the further transmission is by a facility neither operated for profit nor under common ownership (wholly or partly) with the commercial broadcast station whose signal it is rebroadcasting.'").

Id. at 478–79 (statement of FCC). The Air Force stated as follows:

> The Defense Department singles out clause (5) of section 109 for support because that portion of the bill insures that nonprofit retransmission of radio and television programs by community antenna systems, CATV, and by TV translators, which merely retransmit a signal on a different higher frequency, will be a noninfringing activity.

Id. at 1125 (statement of Maxwell C. Freudenberg, Patent Attorney, Department of the Air Force). Notably, the CATV operators wanted the nonprofit exception to be extended to for-profit CATV operation that didn't alter the retransmission signal. *Id.* at 1251 (statement of Frederick W. Ford, President, NCTA) ("For all of these reasons the 'without charge or commercial advantage' exemptions of the present bill are anomalies which fall short of a proper exemption for services which merely improve or assist reception but do not alter or add to the content of the original transmission.").

[215] Louis Nizer, on behalf of Disney, Universal Pictures, and Twentieth Century Fox, testified:

> The bill thus gives a special privilege to noncommercial CATV systems such as an antenna erected and shared by neighbors, as long as they do not alter or add to the content of the TV programs and as long as they do not charge for such service. As we interpret this provision, it would not permit large-scale operations by cooperatives which would make a regular or periodic charge to the recipients, but

Though, this ambivalence requires context. At the time, CATV was a capital-intensive business.[216] For-profit CATV operations required a decade before earning a profit.[217] Thus, it's difficult to imagine that many nonprofit CATV operations were being pursued. Louis Nizer, on behalf of Disney, Universal Pictures, and Twentieth Century-Fox, remarked that a nonprofit exception might not even be necessary given these financial realities.[218] As for NAB, CBS, and the Motion Picture Association: They were either silent or suggested that exempting nonprofit CATV-based retransmission *might* create further troubles.[219]

> would permit bona fide contributions by neighbors to the actual cost of building and maintaining antennas, amplifying and distribution equipment for their personal use. *While the necessity for such exemption appears doubtful, its economic impact on program suppliers and local television stations seems to be so limited that we do not oppose it*.

Id. at 1362 (statement of Louis Nizer, Counsel, Twentieth Century-Fox Televisions, Inc., Universal Pictures, Inc., Walt Disney Productions, Inc., Warner Bros. Pictures, Inc., and others). Thomas E. Ervin, Vice President and General Attorney for NBC, joined with Nizer on the issue. *See id.* at 1918 (statement of Thomas E. Ervin, General Attorney, National Broadcasting Company) ("[T]hose provisions of H.R. 4347 applicable to CATV systems are simply restatement of the present law. We support their enactment as clearly resolving any possible doubt as to the applicability of the copyright law to CATV systems.").

[216] Lisa Robin Stern, *The Evolution of Cable Television Regulation: A Proposal for the Future*, 21 URB. L. ANN. 179, 184 (1981).

[217] *Id.* at 184 n.27.

[218] "The bill thus gives a special privilege to noncommercial CATV systems such as an antenna erected and shared by neighbors, as long as they do not alter or add to the content of the TV programs and as long as they do not charge for such service. As we interpret this provision, it would not permit large-scale operations by cooperatives which would make a regular or periodic charge to the recipients, but would permit bona fide contributions by neighbors to the actual cost of building and maintaining antennas, amplifying and distribution of equipment for their personal use. *While the necessity for such exemption appears doubtful, its economic impact on program suppliers and local television stations seem to be so limited that we do not oppose it.*"

1965 House Hearings, *supra* note 24, at 1362 (statement of Louis Nizer, Counsel, Twentieth Century-Fox Televisions, Inc., Universal Pictures, Inc., Walt Disney Productions, Inc., Warner Bros. Pictures, Inc., and others) (emphasis added).

[219] *See id.* at 1719–1727 (statement of Douglas A. Anello, General Counsel, National Association of Broadcasters) (voicing support for extending public performance liability to CATV

Predictably, commercial CATV fiercely opposed the Office's stance. Representatives argued: (1) Commercial CATV furthered Congress' vision for national broadcast access;[220] (2) Because CATV does not retransmit the signal through the air, it was a passive technology that did not literally "perform" the copyrighted work;[221] and (3) Requiring copyright clearance would decimate broadcasting access for distant, rural communities.[222]

The Subcommittee concluded their hearings on September 2, 1965. Beginning in February of the following year, its members—together with the Copyright Office—held another forty executive sessions to apply what they learned for further revisions to the draft's language.[223] Over a month was dedicated to the issue of

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without mentioning the nonprofit exception or translators/boosters); *see also id.* at 1892–1893 (statement of Leon R. Brooks, Vice President and General Counsel, Columbia Broadcasting Systems, Inc.) (voicing support for extending public performance liability to CATV without mentioning the nonprofit exception or translators/boosters); *id.* at 1029 (statement of Adolph Schimel, Vice President and General Counsel, Universal Pictures Co., Inc.) ("As to the exemption under Section 109(5), if there be no charge to CATV recipients and no purpose of direct or indirect commercial advantage, we withhold any commitment at this stage, although we have some misgivings as to what the future may bring in this new and developing era.").

[220] *See, e.g.*, *id.* at 1277 (statement of Tom Creighton, Counsel, Texas Community Antenna Television Association) ("Thus, the CATV system enabled the broadcaster and copyright owners to achieve more satisfactory coverage of an audience within their intended coverage area."); *id.* at 1245 (statement of Frederick W. Ford, President, National Community Television Association) ("We believe that the public interest in free and unrestricted dissemination of television to the public, including the millions of viewers connected to community and other master antenna systems, and the national television policy compel a conclusion that these systems should be free from copyright clearance requirements.").

[221] *See id.* at 1245 (statement of Frederick W. Ford, President, National Community Television Association) (referring to Mr. Cary's comments: "As I indicated a moment ago, a CATV system does nothing more than provide its subscribers with a service for improving their television reception. . . . [it] is nothing more than a master antenna, the use of which is rented to the system's subscribers and a working connection from the antenna to the subscribers' sets.").

[222] *See id.* at 1243 (statement of Frederick W. Ford, President, National Community Television Association) ("[The Subcommittee's draft] would restrict home television reception by CATV subscribing members of the public by giving the holder of a copyright, for the first time, the exclusive right to control the reception of a telecast copyrighted work by a homeowner who uses a community antenna, which is basically contrary to the public's interest in full dissemination of the protected works. . . . This pure element of geographic chance, whether due to unfavorable terrain or high buildings which interfere with television reception, has been ignored by those who seek to create an element of invidious discrimination between Americans on an arbitrary and unjustified basis which to me is contrary to our basic concept of equality of treatment under the laws.").

[223] *1966 Senate Hearings*, *supra* note 40, at 7 (statement of Abraham Kaminstein, Register, United States Copyright Office) ("Beginning in February of this year, the House subcommittee

commercial CATV alone.[224] On September 27, 1966, the Subcommittee delivered amended language for consideration to the House Committee on the Judiciary.[225] This draft was the first labelled "section 111," and with it, much of the modern nonprofit retransmission exception's language was included (along with a series of limitations):

> §111. Limitations on exclusive rights: Secondary transmissions.
>
> (a) CERTAIN SECONDARY TRANSMISSION EXEMPTED. –
>
> (2) Notwithstanding the provisions of subsection (c), but subject to the provisions of subsection (b), the secondary transmission to the public of a primary transmission embodying a performance or display of a work is not an infringement of copyright if the secondary transmission is made by a governmental body, or other nonprofit organization, without any purpose of direct or indirect commercial advantage, and without any charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service.
>
> (b) CERTAIN SECONDARY TRANSMISSION FULLY ACTIONABLE. – Notwithstanding the provisions of . . . clause[] (2) . . . of subsection (a), the secondary transmission to the public of a primary transmission embodying a performance or display of. a work is actionable . . . if:
>
> (2) the secondary transmitter, within one month before or after the particular secondary transmission, originates any transmission to those members of the public to whom it

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has been holding twice-weekly executive sessions aimed at revising and reporting the bill. So far there have been 40 of these sessions . . . .").

[224] *Id.* ("Consideration of the CATV problem alone took well over a month, during which every aspect of this immensely complex problem was explored and a proposed solution was drafted, reviewed, and agreed upon.").

[225] 112 CONG. REC. 24064–68 (1966) (summarizing principal provisions of H.R. 4347, as amended, and inserted into Record by Rep. Robert Kastenmeir (D-WI)).

> also makes the secondary transmission, except for no more than two transmission programs at any one time unaccompanied by any commercial or political advertising and consisting solely of: weather, time, and news reports free from editorial comments; agricultural reports; religious services; and local proceedings of governmental bodies; or
>
> (3) the secondary transmitter, within one month before or after the particular secondary transmission, makes any separate direct charge for any particular transmission it makes to those members of the public to whom it also makes the secondary transmission; or
>
> (4) the primary transmission is not made for reception by the public at large but is controlled and limited to reception by particular members of the public; or
>
> (5) the secondary transmission is made for reception wholly or partly outside the limits of the area normally encompassed by the primary transmission . . .
>
> (6) the secondary transmission is made for reception wholly or partly within the limits of an area normally encompassed by one or more transmitting facilities, other than the primary transmitter if –
>
> (A) a transmitting facility other than the primary transmitter has the exclusive right within that area, under an exclusive licenses or other transfer of copyright, to transmit the same performance or display of the work, and
>
> (B) the transmitter having the exclusive right or any other copyright owner has given written notice of such exclusive right to the secondary transmitter at least ten days before the primary transmission, in accordance with requirements that the Register of Copyright shall prescribe by regulation.[226]

[226] KAMINSTEIN, *supra* note 162 at 195–97.

Importantly, Subcommittee Chair Rep. Robert Kastenmeir (D-WI) rationalized the above edits using the same language the broadcasters used to describe commercial CATV during their 1965 hearings. Specifically, Kastenmeir emphasized that the exemption only extended to "passive" devices, including boosters, translators, and nonprofit CATV.[227] No device that impinged upon the market exclusivity of the local stations could earn immunity—*regardless* of whether they operated as a nonprofit.[228] In other words, the broadcasters won. Their lobbying resulted in a section which—in effect—maintained the market power of the networks and their stations. Their provisions successfully passed through the House Judiciary Committee and were introduced to a Committee of the Whole House on October 12, 1966.[229] The House would not debate the bill until April 6, 1967.[230] However, this lapse in time gave the commercial CATV interests the opportunity to form a resistance. By end of debate, section 111 was removed from the bill. And for the next 10 years, this issue single-handedly blocked any revision of a new Copyright Act from being adopted.

D. 1966-1967: Fortnightly, *the FCC, Debate of the Whole, and Removal of § 111*

At this point, it is essential to discuss what was happening outside of Congress. First, in the Southern District of New York, United Artists Television, Inc. —producer of *The Fugitive* and *Gilligan's Island*[231]—filed suit against Fortnightly, Inc., a West Virginia CATV operator.[232] United Artists argued that CATV retransmissions infringed their public performance right (an unresolved legal question at the time).[233] And on May 23, 1966, the Southern District agreed.[234] Judge William Herlands held that commercial CATV retransmissions constituted a "public performance for profit."[235] He acknowledged that exempting some categories of

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[227] 112 CONG. REC. 24066 (1966) (emphasis added).

[228] *See* 112 CONG. REC. 24066 (1966).

[229] H.R. REP. NO. 2237 (1966) (Submitted with H.R. 4347).

[230] 113 CONG. REC. 8580–8622 (1967).

[231] *United Artists Television,* TVIV, http://tviv.org/United_Artists_Television (last visited Feb. 27, 2021).

[232] United Artists Television, Inc. v. Fortnightly Corp., 255 F. Supp. 177, 180 (1966).

[233] *Id.* at 181; *see also* H.R. REP. NO. 90-83, at 51 (1967) ("[The *United Artists*] decision, the first to be handed down on the question in the United States . . . .").

[234] *See United Artists Television, Inc.*, 255 F. Supp. at 214 (deciding in favor of United Artists).

[235] *Id.*

retransmission technologies might be desirable "purely on policy grounds." Nonetheless, those distinctions were an issue to be resolved by Congress.[236] Second, the FCC buckled to years of pressure and asserted regulatory power over CATV.[237] The FCC's "First Order" required CATV using microwave relay to seek permission from local stations to retransmit their content, and were prohibited from carrying their programs into markets already served.[238] However, because most urban CATV didn't rely on microwave relay, they found themselves otherwise exempt from the FCC's scrutiny.[239] Therefore, when the Whole House reconvened on April 6, 1967,[240] CATV was desperate. Other than those operations based in urban markets, the FCC's Order shut the door to CATV's expansion to much of the country already accessible to local station signals. Further, regardless of whether or not the law was adopted, CATV was going to be forced to pay for copyright unless the Act contained an explicit exception. Enter: Rep. Arch A. Moore, House Republican for West Virginia.[241]

On April 5, 1967, Rep. Moore sought to destroy Section 111 and exempt *all* CATV from copyright liability. He actively circulated letters and comments to his colleagues urging them to accept an amendment doing the same.[242] The author has been unable to find evidence explaining Moore's motives. But one can speculate: In

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[236] *Id.* at 214–15.

[237] *See* Stern, *supra* note 216, 186–191 (detailing the FCC's eventual decision to assert regulatory jurisdiction over CATV).

[238] *Id.* at 191–92.

[239] *Id.* at 192.

[240] 113 CONG. REC. 8580–8622 (1967) (debating the bill).

[241] Rep. Moore had represented West Virginia in the House since 1956. *WVU Libraries Opens Congressman Arch Moore Archives, Releasees Digital Photographs*, WVU TODAY (Mar. 18, 2019), https://wvutoday.wvu.edu/stories/2019/03/18/wvu-libraries-opens-congressman-arch-moore-archives-releases-digital-photographs. He came from a long line of state electors and defied the odds as a powerful Republican in an overwhelmingly Democratic state. *See also* Adam Bernstein, *Arch Moore Jr., Charismatic W. Va. Governor Convicted of Corruption, Dies at 91*, WASH. POST (Jan. 8, 2015), https://www.washingtonpost.com/politics/arch-moore-jr-charismatic-wva-governor-convicted-of-corruption-dies-at-91/2015/01/08/e5857798-974d-11e4-927a-4fa2638cd1b0_story.html. A cunning politician, Moore was remembered for "his bravado on the stump, his backslapping demeanor and his ability to remember seemingly everyone's name." *Id.* He used these talents to win several years in the House and three terms of the West Virginia governorship. *Id.* So skilled was Moore that he defeated a (very) well-funded John D. Rockefeller IV for the latter position in 1972. *Id.* Thus, he was a lethal friend and enemy. And on the CATV issue, the CATV operators were lucky to call him a friend.

[242] *See* 113 CONG. REC. 8620 (1967) ("What Mr. Whitener does here is substantially submit for your consideration at an earlier time the proposals which I circulated to you by letter and by written comment late last evening.").

West Virginia, Moore served the cities of Clarksburg and Fairmont—the exact two cities where Fortnightly was headquartered and operated.[243]

Rather than attack its merits, Moore criticized section 111's development. Specifically, Moore grounded his opposition on a technical issue: He claimed that the House Judiciary, by assuming sole authority over the CATV issue and the new copyright law, interfered with the exclusive jurisdiction of the House's Committee on Interstate and Foreign Commerce:

> "[W]hat we seek to do in this legislation is control CATV by copyright. I say that is wrong. I feel if there is to be supervision of this fast-growing area of news media and communications media, it should legitimately come to this body from the legislative committee that has direct jurisdiction over the same, [the Interstate and Foreign Commerce Committee]. . . . I believe the ramifications of controlling CATV through the copyright mechanism is highly technical, is in error, and is a grievous mistake. Should not the recommendations in this matter, I say to this Committee, come from the legislative committee that has the direct responsibility and that which has the primary jurisdiction in this matter?"[244]

His stratagem was cunning and disingenuous. Cunning, because the Committee on Interstate and Foreign Commerce was chaired by Harley O. Staggers: an influential fellow West Virginian who likely sympathized with Moore's stance on the CATV issue.[245] Disingenuous, because Moore himself sat on the House

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[243] *United Artists Television, Inc. v. Fortnightly Corp.*, 255 F. Supp. 177, 179 (1966) (explaining that Fortnightly had CATV operations in both Clarksburg and Fairmont, West Virginia); *West Virginia's 1st Congressional District*, WIKIPEDIA, https://en.wikipedia.org/wiki/West_Virginia%27s_1st_congressional_district (last visited Feb. 27, 2021) (acknowledging Rep. Arch A. Moore representation of the First District of West Virginia, containing Clarksburg and Fairmont).

[244] 113 CONG. REC. 8599 (1967).

[245] *Harley O. Staggers Sr. Dies at 84*, WASH. POST (Aug. 21, 1999), https://www.washingtonpost.com/archive/local/1991/08/21/harley-o-staggers-sr-dies-at-84/f76b1223-a904-4f86-acf1-1ace3c739f8b/. This was a bet worth taking. Rep. Staggers was an unmatched political force. Until his retirement in 1981, he served 16 consecutive terms on behalf of West Virginia's Second District. Frank N. Wilner, *Staggers What? Time for a Name Change*, RY. AGE (Jan. 9, 2018), https://www.railwayage.com/news/staggers-what-time-for-a-name-change/. He demanded respect because of his reputation as "wholly and incorruptibly honest."

Judiciary Committee.[246] And according to at least one of his fellow members, Moore never voiced any jurisdictional opposition up to this date.[247]

This resulted in a "full-scale verbal war . . . between representatives favouring [*sic*] broadcasting and others supporting cable interests."[248] Nine representatives (across political party and country)[249] joined Moore to accuse the Judiciary Committee of jurisdictional interference.[250] Importantly, this included Rep. Staggers—an unmatched political force. When Rep. Staggers stood in opposition and called on his colleagues "to vote against the bill unless the regulatory provisions in section[] . . . 111 . . . [are] deleted," they listened.[251] Rep. Basil L. Whitener (D-

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Lenora G. Kenwolf, A Social Political History of the National Radio Astronomy Observatory at Green Bank, WV 37 (2010) (MA Thesis, West Virginia University) (on file with author). More importantly, Staggers chaired the House Committee on Foreign and Interstate Commerce for 16 years—the longest in the Committee's 200-year history. *Dinner Named in Memory of Harley O. Staggers Sr.*, CUMBERLAND TIMES-NEWS (Sept. 20, 2019), https://www.times-news.com/community/dinner-named-in-memory-of-harley-o-staggers-sr/article_1818d1d5-185f-5b4e-93e2-c0555405bc90.html.

[246] *About Arch Alfred Moore Jr.*, W. VA. UNIV.: W. VA. & REG'L HIST. CTR., https://moore.lib.wvu.edu/about (last visited Feb. 27, 2021).

[247] Herbert Tenzer, Democratic member of the House for New York, called out Rep. Moore on this point. 113 CONG. REC. 8615–16 (1967) (statement of Rep. Herbert Tenzer) ("Mr. Chairman, I participated in all of the sessions of this subcommittee. At no time did I ever hear any member of the subcommittee say a word—or read a communication from anyone—or did I hear a word spoken about interfering with the jurisdiction of the distinguished Committee on Interstate and Foreign Commerce. At no time did I hear any debate or any discussion or hear any testimony as to taking away the jurisdiction over communications from that distinguished committee. What we are dealing with here is protection of copyrighted material, and what the members of the Interstate and foreign Commerce Committee have sought to do is confound the House.").

[248] U.S. COPYRIGHT OFFICE, 94TH CONG., SECOND SUPPLEMENTARY REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW: 1975 REVISION BILL, ch. 5, at 6 (Oct.–Dec. 1975) [hereinafter SECOND SUPPLEMENTARY REPORT] (unpublished manuscript) (on file with author).

[249] This included: Rep. Arch A. Moore (R-WV), Harley O. Staggers (D-WV), Torbret MacDonald (D-MA), Wayne Hays (D-OH), Paul Rogers (D-FL), J. Arthur Younger (R-CA), John Dingell (R-MI), John E. Moss, and Basil L. Whitener. 113 CONG. REC. 8599–8619.

[250] *See* 113 CONG. REC. 8600, 8602 (statement of Rep. Harley O. Staggers) ("[M]y objection is that the Committee on the Judiciary and particularly the subcommittee of which the gentleman from Wisconsin [Mr. Kastenmeir] is chairman, went into the communications field and has undertaken to state what CATV could broadcast, how they could broadcast it, and at what times they could broadcast it. We say that those questions lie within the jurisdiction of the Committee on Interstate and Foreign Commerce, while the gentleman states that it comes under the copyright law.").

[251] *Id.* at 8600.

NC) responded by offering an amendment doing the same while extending immunity to all CATV operations.[252] An amendment authored by Moore himself.[253]

Rep. William L. Springer (R-IL), the ranking member of the Interstate and Foreign Commerce Committee, stood to save the bill.[254] In harsh language, Rep. Springer proclaimed to the Whole of the House:

> [Rep. Moore] has offered an amendment which could not be more mischievous than anything I could think of. . . . This subject is complicated . . . [i]t has been up before our committee on several occasions. The bill now before the House attempts to modify that decision in order to give CATV some rights they do not already have, and it would partially overcome the decision of the New York court.
>
> . . .
>
> I take it that down in the gentleman's territory there is a lot of CATV. At least one other gentleman on my side who is in the same area has indicated the same thing. [But] [s]omewhere along the line we have to be fair. We have to balance off the originating station with the CATV. I believe this bill does about as good a job in trying to balance those interests as we could find.
>
> . . .
>
> [I]f the substitute is defeated, an amendment will be offered by the gentleman from New York [Mr. Ottinger], which would strike all of section 111 and put the subject matter back in our committee. Reluctantly, I personally did not want to see all of this happen, but in view of the contentions that have arisen on this floor, rather than accept the amendment now and go ahead and do what the gentleman from North Carolina has in mind at this point, it would be much better to accept the Ottinger amendment . . . . At first I did not think this ought

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[252] *Id.* at 8619.

[253] *Id.* at 8620 (statement of Rep. Arch A. Moore) ("What Mr. Whitener does here is substantially submit for your consideration at an earlier time the proposals which I circulated to you by letter and by written comment late last evening, and which were also the subject matter of my comments in the study of this bill during general debate on this bill.").

[254] *Id.*

> to be done. I had a feeling that we ought to go along with section 111. But the way this thing is developing, the worst type of legislation you could have at this point would be the substitute. It would ruin the whole purpose of the copyright law with reference to the division, in fairness, between the originating station and CATV itself.[255]

Springer's statement was, in a sense, "Washingtonian." By demanding that the bill be refused a final vote and ordered to return to his committee, Springer rallied the broadcaster to retreat and fight another day. On cue, the vote was called for Moore's amendment and it lost 24-80.[256] And in its place, Rep. Richard Ottinger (D-NY) offered the Springer amendment: Striking section 111 without extending an exemption from public performance liability to CATV.[257] Shortly thereafter, the House halted discussion with plans to begin formal discussions on the new amendment in five days.[258]

On April 11, 1967, Rep. Ottinger reopened discussions on the Copyright Act by informing his colleagues of a compromise. According to Ottinger, the jurisdictional controversy on April 5 prompted the leadership of the Judiciary and Interstate Committees to discuss the future of the CATV issue.[259] And a compromise had been struck. Pursuant to this, the Interstate Committee was assigned responsibility over future CATV regulation and the Judiciary was left with handling the scope of copyright liability.[260] Section 111 would be removed from the bill, the CATV copyright issue would continue to be debated in the Senate Subcommittee on Patents, Trademarks, and Copyrights, and the rest of the Act would move to a full

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[255] *Id.* at 8620–21 (statement of Rep. William L. Springer) (emphasis added). The author also notes that Rep. Springer's motivations might also have been constituent-based. Rep. Springer was a long-time resident of Champaign, IL and a friend of the author's family. While living in Champaign, Springer was a notable friend of August C. Meyer Sr., founder of Midwest Television, Inc.—and one of the largest radio and television broadcasting companies in the country. Springer was an important ally of Meyer's business interests while he served in Congress.

[256] *Id.* at 8621.

[257] *Id.*

[258] *Id.* at 8622.

[259] *Id.* at 8990 (statement of Rep. Richard Ottinger) ("[L]ast Thursday . . . I offered my substitute striking section 111 primarily for two reasons: First, to head off an amendment by the gentleman from North Carolina [Mr. Whitener], which would have had the undesirable effect of exempting all CATV from any copyright protection whatsoever; second, because of jurisdictional problems between my own committee, the Committee on Interstate and Foreign Commerce, and the Committee on the Judiciary. After consultation with the two committees, the jurisdictional problem has now been worked out as I understand it.").

[260] *Id.*

vote in the Senate.[261] Secretly, they hoped that the issue would be clarified by the federal courts with *Fortnightly*.[262]

This thinking, however, was naïve. CATV was too important of an issue for the Senate to vote on a new Copyright Act without clarification on its future.[263] Moreover, it was doubtful that the federal courts were going to assume any role in this policy-driven debate—as demonstrated by SDNY's handling of *Fortnightly*. Thus, in effect, Congress' removal of Section 111 shelved all development of the Copyright Act until the issue could be resolved by the Senate subcommittee.[264] The

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[261] *Id.* at 8991.

[262] *Id.* at 8990–91 (statement of Rep. Richard Ottinger) ("In view of the dangers of wholesale copyright exemption posed by the amendment of the gentleman from North Carolina [Mr. Whitener], however, and in view of the agreement made between the commerce and the Judiciary Committees, I think my amendment, deleting CATV altogether from this bill and leaving its copyright coverage to the courts for the time being, is the best available disposition of the matter."); *see also* 113 CONG. REC. 10408 (1967) (statement of Rep. Richard Ottinger) ("The issue I presented to the House, however, was whether during the period that may elapse before the committee on Interstate and Foreign Commerce considers overall regulation of CATV and the Judiciary Committee considers any pertinent copyright provision in connection therewith, CATV should be left fully exempt from copyright coverage as proposed by the gentleman from North Carolina [Mr. Whitener], and the gentleman from West Virginia [Mr. Moore], or whether during this interim CATV should be fully covered as would be the effect of my amendment. Passage of H.R. 2512 with my amendment means that, should it become law in its present form, all CATV transmissions subject to its provisions will be included within its protections.").

[263] As Rep. Emanuel Cellar (D-NY) later recounted in a statement published in the *New York Journal*, "[t]he question quite seriously arises for me whether the bill that passed the House, even without any provisions bearing on cable television, could not appropriately have been allowed to become law, leaving the unresolved CATV and other issues for a later time. Proposals to disembarrass copyright law revision from the incubus of the CATV problem by enacting a so-called "bare bones" bill has not met with Senate approval." 116 CONG. REC. 37529 (1970).

[264] *See id.* at 37529–30 (statement of Rep. Emanuel Celler) ("We now know that no revision measure was enacted in 1967 or in 1968 or 1969 and that none will have been enacted in 1970. I guess we are here, or let us say I am here to speculate about the reasons why progress in copyright law revision has slowed down to the point where some assert that it is negative. . .. On the floor of the House these provisions ran into serious difficulties of the CATV issue is that it involves both the regulation of communications and compensation of copyright owners. . . . "[T]he situation in which the proponents of revision find themselves leaves them with little choice other than to close their ranks and continue in the coming year to hammer out the terms of an overall copyright law revision. This is so because the 'bare-bones' proposal has been rejected and because it is too soon to fall back to a situation in which individual issues are offered for piecemeal adoption.").

broadcasters and CATV operators responded by reentering negotiations.[265] These meetings became urgent, however, when the Supreme Court granted certiorari in *Fortnightly*.

E. 1967-1973: Fortnightly *and Clay J. Whitehead*

After the Second Circuit affirmed the Southern District's decision in *Fortnightly*,[266] the Supreme Court granted certiorari in 1968.[267] As previously discussed, the government saw this as an opportunity to end the CATV debate. The Solicitor General implored SCOTUS to administer a judicial compromise accommodating the relevant interests.[268] However, the Supreme Court refused.[269] Justice Stewart, writing for a 5-1 majority,[270] acknowledged that the 1909 Act needed revision given the modern nature of retransmission technologies.[271] But in a

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[265] SECOND SUPPLEMENTARY REPORT, *supra* note 248, ch. 5, at 11 ("Throughout this period there were countless private, semi-private, and public meetings aimed at negotiating a solution acceptable to the private interests involved."); 113 CONG. REC. 27588 (1967) (statement of Sen. John L. McClellan) ("The subcommittee has been confronted with a situation in which, before the Congress had an opportunity to complete action on the revision bill, a number of lawsuits for copyright infringement might be filed against CATV systems. This could disrupt the television viewing of millions of our citizens. Therefore, consideration has been given to the necessity of legislation providing for a temporary suspension of judicial remedies for copyright infringement by CATV systems . . . . *Before any such legislation was introduced, all interested parties participated in a series of meetings. As a result of these discussions there has been submitted to the subcommittee certain representations on behalf of the major owners and distributors of television film programs . . . .* [*W*]*hile the parties are negotiating contractual arrangements and discussing appropriate legislative formulas, the copyright owners will refrain from instigating legal action against CATV systems*." (emphasis added)); S. REP. NO. 91-519, at 6 (1971) ("During the first session of the 90th Congress, the subcommittee completed the public hearings on legislation for a general revision of the copyright law. The hearings were conducted on S. 597, which had been introduced at the request of the Librarian of Congress. During the subcommittee hearings on S. 597, the House of Representatives passed a copyright revision bill, H.R. 2512, and this has also been under consideration by the subcommittee. Although no action on copyright law revision was taken by the subcommittee during the second session, other than to approve legislation providing for a 1-year extension of expiring copyrights, there were a number of significant developments concerning several of the major provisions of this legislation.").

[266] *United Artists Television, Inc. v. Fortnightly Corp.*, 377 F.2d 872, 874 (2d Cir. 1967).

[267] *Fortnightly Corp. v. United Artist Television, Inc.*, 392 U.S. 390, 393 (1968).

[268] *Id.* at 401.

[269] *Id.*

[270] Neither Justice Douglas, Marshall, nor Harlan participated in the decision. *Id.*

[271] *See id.* at 395 ("At the outset it is clear that the petitioner's systems did not "perform" the respondent's copyrighted works in any conventional sense of that term, or in any manner envisaged by the Congress that enacted the law in 1909. But our inquiry cannot be limited to ordinary meaning and legislative history, for this is a statute that was drafted long before the development

shocking turn-of-face, Stewart reversed the lower courts and held that CATV was immune from copyright public performance liability under the existing Act.[272] He acknowledged the government's pleas for help,[273] but "decline[d] the invitation. That job is for Congress."[274] By the time this opinion was announced, approximately 2,000 cable systems were in operation around the country—serving 2.8 million homes.[275] All of which would be free to compete against the local stations without needing to pay copyright clearance fees thanks to the Stewart majority.

By this time, the FCC became convinced to enter the fray.[276] Two years before the Supreme Court's decision in *Fortnightly*, the agency issued a freeze on the importation of all cable signals into the top 100 markets.[277] A protectionist policy aimed at preserving the exclusivity of the major local stations.[278] Next, Senator John L. McClellan (D-AK)—Chairman of the Senate Subcommittee of the Patents, Trademarks, and Copyrights—reintroduced the Copyright Revision Bill for consideration by his subcommittee in 1969.[279] Although there is little recorded evidence of their negotiations, we do know the result: A compromise. Representatives of commercial CATV agreed to make reasonable payments for the use of copyrighted material under a compulsory licensing scheme.[280] In exchange, the FCC would remove their freeze order and allow CATV to grow. The bill went

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of the electronic phenomena with which we deal here. In 1909 radio itself was in its infancy, and television had not been invented.").

[272] *Id.* at 401.

[273] *Id.*

[274] *Id.*

[275] Lewis J. Paper, *Cable TV—The Time is Prime for Regulation*, N.Y. TIMES, Nov. 22, 1981, https://www.nytimes.com/1981/11/22/arts/cable-tv-the-time-is-prime-for-regulation.html.

[276] Stern, *supra* note 216, at 192 (1981) ("The FCC adopted further rules in 1966, extending the mandatory carriage and nonduplication rules to all cable systems."). It is important to note that whether the FCC had this authority was an open question that required multiple Supreme Court opinions. *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968); *United States v. Midwest Video Corp.*, 406 U.S. 649 (1972).

[277] Stern, *supra* note 216, at 193 (1981).

[278] *See id.* at 193–94.

[279] 115 CONG. REC. 1404 (1969) (statement of Sen. John. L. McClellan). Notably, in *Aereo*, Justice Breyer acknowledged that "one of Congress' primary purposes" in adopting the Copyright Act of 1976 was to "overturn" *Fortnightly*. *ABC, Inc. v. Aereo, Inc.*, 573 U.S. 431, 439 (2014).

[280] S. REP. NO. 91-519, at 7 (1969) ("Although there was general agreement that CATV systems should make a reasonable payment for the use of copyrighted materials, there was substantial disagreement as to the mechanics of determining and collecting such payment and with respect to the nature of protection to be accorded to copyrighted works.").

through significant edits to reflect these understandings.[281] As enumerated, the Subcommittee's draft provided that CATV would have to comply with a licensing fee schedule based on a percentage of the CATV's operator's gross receipts.[282] Existing CATV would be grandfathered in.[283]

Most importantly, McClellan's draft re-adopted the nonprofit retransmission exception in its entirety.[284] By December 10, 1969, the Senate Subcommittee on Patents, Trademarks, and Copyrights recommended the below text to the Judiciary Committee:[285]

> § 111. Limitations on exclusive rights: Secondary transmissions.
>
> (a) CERTAIN SECONDARY TRANSMISSION EXEMPTED. –
>
> (4) the secondary transmission is made by a governmental body, or other nonprofit organization, without any purpose of direct or indirect commercial advantage, and without any charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service.[286]
>
> (b) SECONDARY TRANSMISSION OF PRIMARY TRANSMISSION TO CONTROLLED GROUP. –
>
> Notwithstanding the provisions of subsection (a) and (c), the secondary transmission to the public of a primary transmission embodying a performance or display of a work is actionable as an act of infringement under sections 501, and is fully subject to the remedies provided by sections 502 through 506, if the primary transmission is not made for reception

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[281] *See* S. REP. NO. 91-1219, at 9 (1970) (discussing the creation of the compulsory license scheme); SECOND SUPPLEMENTARY REPORT, *supra* note 248, ch. 5, at 12–13 (discussing the creation and introduction of the compulsory license scheme into the bill).

[282] SECOND SUPPLEMENTARY REPORT, *supra* note 248, ch. 5, at 13.

[283] *Id.*

[284] KAMINSTEIN, *supra* note 162, at 209–10.

[285] S. REP. NO. 91-1219, at 4 (1970) (discussing the approval of the bill through the Senate Subcommittee).

[286] KAMINSTEIN, *supra* note 162, at 210.

> by the public at large but is controlled and limited to reception by particular members of the public.[287]
>
> (c) SECONDARY TRANSMISSION BY CABLE SYSTEMS. –
>
> (2) Subject to the provisions of subsections (a) and (b), but notwithstanding the provisions of clauses (2) and (4) of this subsection, the secondary transmission to the public by a cable system of a primary transmission made by a broadcast station licensed by the Federal Communications Commission and embodying a performance or display of a work is subject to compulsory licensing under the conditions specified by subsection (d) in the following cases.[288]
>
> (B) Where the reference point of the cable system is within the local service area of the primary transmitter;

The subcommittee's decision to reintroduce the preexisting language suggests that the same thinking underlying the 1965 draft was intended to be maintained. Thus, the parties continued to believe that the nonprofit retransmission exception should extend only to boosters, translators, and nonprofit CATV. Development of the fee scheme, on the other hand, needed further development. This work was split between the Senate, special interests, and FCC over several years.[289] Of course, these efforts are not the subject of this note. The author is only concerned with the development of the nonprofit retransmission exception. But it is important to (briefly) discuss the parties involved and the consensus reached as this allows for better understanding of why nonprofit CATV was eventually amended out of the nonprofit retransmission exception in 1973.

The fee scheme reported out of McClellan's Subcommittee in 1969 bears little resemblance to what exists today.[290] This is so because the FCC, major copyright

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[287] *Id*. at 210–11.

[288] *Id*. at 213.

[289] *See* 119 CONG. REC. 9388–89 (discussing the consensus agreement between the FCC, special interests, and drafters of the Copyright Act of 1976).

[290] *Compare* KAMINSTEIN, *supra* note 162, at 210, *with* 17 U.S.C. § 111 (2012).

owners, and networks angrily opposed it.[291] The owners and networks felt the scheme overly favored CATV.[292] While the FCC believed that it would tie their hands with handling the broadcast spectrum.[293] In response, the FCC became more involved in the development of the copyright law's handling of CATV.[294] And in 1971, the agency provided their most important contribution: The endorsement of Clay J. Whitehead as mediator amongst the parties.[295]

Clay J. Whitehead was an MIT-educated electrical engineer and economist who had been obsessed with telecommunications since working on his ham radio as a child in Kansas.[296] After a brief stint at Bell Labs, he joined the White House as Special Assistant to President Richard Nixon.[297] In this role (and in the many roles he assumed over his illustrious career), Whitehead displayed a unique ability to combine his love for free markets with his expertise in arising technologies.[298] These skills were showcased early when he spearheaded the American "Open Skies" satellite policy, which allowed private companies to launch communication satellites.[299] Soon thereafter Nixon appointed Whitehead as the inaugural director of the newly created White House Office of Telecommunication Policy.[300] In this position, Whitehead aimed to make the federal government "more anticipatory" to technological change in the communications sphere.[301] More importantly, "he sought to demolish the monopoly model that had given tremendous power to large international [telecommunication] corporations."[302]

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[291] SECOND SUPPLEMENTARY REPORT, *supra* note 248, ch. 5, at 13–14.

[292] *See id.* at 13.

[293] *Id.* at 14 ("The amended copyright bill was also strongly criticized by the [FCC], primarily on the ground that it left the FCC with too little flexibility to deal with the problem of cable retransmissions.").

[294] *See id.*

[295] *See id.* at 15.

[296] Dennis Hevesi, *Clay T. Whitehead, Guide of Policy That Helped Cable TV, is Dead at 69*, N.Y. TIMES (July 31, 2008), https://www.nytimes.com/2008/07/31/washington/31whitehead.html.

[297] *Id.*

[298] *See id.*

[299] *Id.*

[300] Adam Bernstein, *Nixon Advisor Revolutionized Cable TV*, L.A. TIMES (Aug. 2, 2008, 12:00AM), https://www.latimes.com/archives/la-xpm-2008-aug-02-me-whitehead2-story.html.

[301] *Id.*

[302] *Id. See also* TIM WU, THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES 177 (2010) ("In the 1960s, cable was a technology serving small towns and remote localities, barred by federal law from expansion. It seemed doomed to being but the handmaid of broadcasting. Indeed, another version of history, the cable networks would have emerged only as offshoots of NBC, CBS, and ABC, as has been the fate of cable in other major economies, among them Japan and Germany. But the Nixon administration had a different vision for cable. Nixon's

From the beginning, the Whitehead-mediated negotiations focused on the problem of unfair competition between the networks, their stations, and CATV.[303] The networks wanted assurance that the importation of distant signals into well-served local markets would be prohibited.[304] They also wanted Congress to overrule *Fortnightly* and obligate commercial CATV operations to pay for copyright clearance.[305] CATV, on the other hand, requested that the clearance fees be "fair" and contrarily requested for the removal of the FCC's freeze order.[306] After Whitehead's initial proposal failed to gather support, he sent a "take-it-or-leave-it" offer to all parties—today, famously known as the "Consensus Agreement."[307] Its terms included:

(1) The FCC's absolute freeze on distant signal carriage into well-served markets would be abolished.[308] Signal importation was allowed under certain limitations depending on the size of the imported market.[309] However, duplicative signal importation was prohibited.[310] Upon acceptance, these regulatory changes would be put into effect promptly.[311]

(2) All parties pledged to support separate copyright legislation.[312] This would provide for a compulsory license scheme for CATV retransmissions.[313] The

young head of communication policy, Clay Whitehead, ran the Cabinet Committee on Cable, which foresaw a life for the medium as a highly deregulated common carrier.").

[303] James J. Popham, *The 1971 Consensus Agreement: The Perils of Unkept Promises*, 24 CATH. UNIV. L. REV. 813, 814 (1975).

[304] *See id.*

[305] *See id.*

[306] *See id.*

[307] *See id.*; *see also 1973 Senate Hearings*, *supra* note 41, at 295–296 (statement of Jack Valenti, President, Motion Picture Association of America, Inc.)

[308] *1973 Senate Hearings*, *supra* note 41, at 295–296 (statement of Jack Valenti, President, Motion Picture Association of America, Inc.).

[309] *Id.* ("CATV systems were to be permitted to import programs from distant stations subject to certain limitations depending on the size of the market into which the importation was to take place . . . .").

[310] *Id.* (". . . subject to the non-duplication by cable systems of programs available in the same market from local television stations.").

[311] *Id.* ("The rules will, of course, be put into effect promptly.").

[312] *Id.*

[313] *Id.*

fee obligation would cover all local signals and a certain number of distant signals.[314] The existing nonprofit exception would remain in the bill.[315]

All parties accepted these conditions, albeit "unenthusiastically."[316] Thus, Whitehead had managed to do what Congress had found impossible for nearly two decades: Get the copyright owners, networks, local stations, and CATV operators to agree on basic conditions. Later, the FCC "implement[ed] the communications segment of the compromise" and ended the freeze on distant signal importation.[317] In 1973, Senator McClellan (D-NY) formally notified Congress that the end was nigh. A revised Copyright Act was about to finish consideration in the Senate's Subcommittee on Patents, Trademarks, and Copyrights.[318] On August 1, the Subcommittee gave the broadcasters, copyright owners, and CATV operators one final chance to offer amendments. These hearings birthed the modern language of section 111(a)(5) when it stripped immunity from nonprofit CATV.[319]

F. 1973-1976: Scrutiny of Nonprofit Cable and Adoption of the Copyright Act

Despite pledging themselves to support speedy passage of the copyright legislation,[320] the major copyright owners voiced multiple gripes with section 111's existing language on August 1, 1973.[321] Most notably, Jack Valenti, President of the Motion Picture Association of America, Inc. (also speaking on behalf of the Association of Motion Picture and Television Producers Inc.), argued that the nonprofit retransmission exception was "overly-broad."[322] He emphasized that this grant of immunity should only cover *passive* retransmission devices—nonprofit translators, boosters, and "similar secondary transmitters."[323] Specifically, Valenti testified:

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[314] *Id.*

[315] Though not explicit.

[316] SECOND SUPPLEMENTARY REPORT, *supra* note 248, ch. 5, at 18.

[317] S. REP. NO. 92-935 (1972).

[318] 119 CONG. REC. 9389 (March 26, 1973) (statement of Sen. John L. McClellan) (introduction of S. 1361).

[319] *See generally 1973 Senate Hearings*, *supra* note 41, at 278–316 (statements from broadcasters, copyright owners, and cable operators during the August 1, 1973 hearing).

[320] *See id.* at 278 (statement of Jack Valenti, President, Motion Picture Association of America, Inc.) ("Now, all parties to this agreement pledged themselves to support the concept of a speedy passage of the legislation, and also the concept of an arbitration tribunal that would be put in the bill if the parties could not agree on a private schedule of fees.").

[321] *See, e.g.*, *id.* at 283.

[322] *Id.*

[323] *Id.* at 303–304.

> There are a large number of nonprofit organizations in the United States. Many of them operate big enterprises. Moreover, there are already in existence at least 15 municipally-owned CATV systems and there is an increasing drive across the country for municipal ownership of cable systems. . . . *The copyright owners are concerned that increasing governmental or non-profit ownership of cable systems may deprive them of license fees for the use of their product*.
>
> A free ride for these entities cannot be squared with the achievement of the public purpose which underlies the copyright system. . . . A legal requirement that copyrighted film programs be available to nonprofit and governmental users for free is no less repugnant to the purpose of the copyright system because the user does not intend to make a profit.
>
> *No matter how well governmentally sponsored and nonprofit enterprises function, no one would suggest that the law require that their suppliers of equipment, products, and services furnish them free of charge*.[324]

Valenti's thoughts were echoed by the Committee of Copyright Owners ("CCO"), an ad hoc committee formed by producers and distributors of filmed and taped programs.[325] The CCO additionally stressed to the subcommittee that any

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[324] *Id.* (emphasis added).

[325] The CCO offered their own version of the nonprofit retransmission exception found below. It is practically identical to what was eventually adopted by Congress in 1976.

> §111. Limitation, on exclusive rights: Secondary transmissions
>
> (a) CERTAIN SECONDARY TRANSMISSIONS EXEMPTED. – The secondary transmission of a primary transmission embodying a performance or display of a work is not an infringement of copyright if:
>
> (4) the secondary transmissions is not made by a cable system and is made by a governmental body, or other non-profit organization, without any purpose of direct or indirect commercial advantage, and without charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service.

Id.

cable system which operates within a served community should be obligated to pay copyright fees.[326] The NAB agreed with these sentiments by stressing to the subcommittee that the broadcasters' primary qualms with cable television were twofold: (1) "CATV systems continue to take from broadcast stations without payment and sell to the public for a fee;" and (2) CATV was "in direct,

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[326] This is also found in their proposed statutory language:

> §111. Limitation, on exclusive rights: Secondary transmissions
>
> (c) SECONDARY TRANSMISSIONS BY CABLE SYSTEMS –
>
> (1) Subject to the provisions of clause (2) of this subsection (c), secondary transmissions to the public by a cable system of a primary transmission made by a broadcast station licensed by the [FCC] and embodying a performance or display of a work shall be subject to compulsory licensing upon compliance with the requirements of subsection (d) in the following case:
>
> (B) Where the community of the cable system is in whole or in part within the local service area of the primary transmitter;
>
> (2) notwithstanding the provisions of clause (1) of this subsection (c), the secondary transmission to the public by a cable system of a primary transmission made by a broadcast station licensed by the [FCC] and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by section 502 trough 506, in the following cases:
>
> (B) Where the community of the cable system is in whole or in part within the local service area of one or more television broadcasting stations licensed by the [FCC] and –
>
> (i) the content of the particular transmission program consists primarily of an organized professional team sporting event occurring simultaneously with the initial fixation and primary transmission of the program; and
>
> (ii) the secondary transmission is made for reception wholly or partly outside the local service area of the primary transmitter; and
>
> (iii) the secondary transmission is made for reception wholly or partly within the local service area of one or more television broadcasting stations licensed by the [FCC], none of which has received authorization to transmit said program within such area.

Id.

competition . . . for viewers, listeners, and advertising revenue. . . . Indeed, leading CATV spokesmen state repeatedly that they hope and intend that cable television will largely, if not entirely, replace free broadcast television."[327] Finally (and most surprisingly), David Foster, President of the National Cable Television Association ("NCTA"), acknowledged that nonprofit cable operations should be obligated to pay compulsory fees—even when they operate in large, well-served urban markets, to help inhabitants reach obstructed broadcast signals.[328]

For our purposes, there is one exchange on August 1, 1973 that is worth deeply analyzing. Of all parties, the NCTA initially proposed to the subcommittee that the nonprofit retransmission exception should be eliminated altogether.[329] Specifically, David H. Foster testified:

> By the same token, Section 111(a)(4) exempts non-profit and government owned CATV systems from the requirement to pay fees. Here again, it would seem more prudent public policy, in light of our national policy encouraging private enterprise, to leave these two

[327] *Id.* at 377 (statement of Vincent T. Wasilewski, President, National Association of broadcasters).

[328] *Id.* at 398–399, 424. (statement of David H. Foster, President, National Cable Television Association) ("Mr. Chairman, we have supported the concept of cable television's paving [*sic*] copyright fees since 1968. . . . Continually since the consent agreement . . . [the parties] met in extensive negotiating sessions to determine whether or not there could be a meeting of the minds between the parties on what night [*sic*] be a reasonable copyright fee. . . . We found the parties positions were far apart . . . Primarily because cable television is still in its infancy. It is a very small industry. It is primarily operating in rural areas, in small towns, *and the major big-city markets* . . . The motion picture people have told us time and time again that they are not looking at the small systems for the revenues. They are looking for the large, big city systems that are yet to be built. . . . By the same token, Section 111(a)(4) exempts non-profit and government owned CATV systems from the requirement to pay fees. Here again, it would seem more prudent public policy, in light of our national policy encouraging private enterprise, to leave these two reception and distribution facilities on an even competitive basis by striking Section 111(a)(4).").

[329] *Id.* at 424. (statement of David H. Foster, President, National Cable Television Association) ("By the same token, Section 111(a)(4) exempts non-profit and government owned CATV systems from the requirement to pay fees. Here again, it would seem more prudent public policy, in light of our national policy encouraging private enterprise, to leave these two reception and distribution facilities on an even competitive basis by striking Section 111(a)(4).").

> reception and distribution facilities on an even competitive basis by striking Section 111(a)(4).[330]

In other words, the CATV operators suggested that *all* retransmission devices—including boosters and translators—should be subject to copyright liability. Regardless of whether they operated as a nonprofit. A shocking stance. As the legislative record demonstrates up to this point, all parties were practically unanimous for nearly a decade that boosters and translators deserved immunity if they operated without profit. Frustratingly, however, NCTA failed to rationalize their stance any further.

Even more surprising, Jack Valenti rebuffed the NCTA's offer in a filed statement to the subcommittee:

> NCTA also suggests that . . . Section 111(a)(4) should be eliminated . . . . We agree that the exemption for governmental and nonprofit systems is overly broad, but we do not agree that the provision should be deleted.
>
> In our initial statement filed with the Committee on August 1, 1973, we pointed out that this provision is concerned with the operation of nonprofit "translators" or "boosters" which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception. These translators and boosters have always been subject to FCC regulation and require retransmission consent of the originating station under Section 325(a) of the Communications Act.
>
> However, the language of the exemption contained in Section 111 (a)(4) would be equally applicable to cable systems which are operated by governmental bodies or nonprofit organizations. *Thus, in order to limit the exemption to nonprofit translators and boosters and similar secondary transmitters, we proposed to insert into the text of Section 111(a)(4) the words "... is not made by a cable system ...". Since we continue to believe that the exemption should be maintained for the benefit of the translator and booster systems described*, we submit that complete elimination of this exemption would be improper

[330] *Id.*

> and that the appropriate solution is adoption of the amendment we have submitted . . . .[331]

This exchange is susceptible to multiple readings. On the one hand, Valenti and the rest of the copyright owners were given a perfect opportunity to subject all nonprofit retransmission operations to liability. They instead rejected the offer and settled only for removing nonprofit CATV. On top of that, Valenti explicitly stated that "similar secondary transmitters" should additionally be granted immunity under the Act. Using this background as a lens to interpret the modern language of section 111(a)(5), one could certainly conclude from this exchange that these authors intended for *all* retransmission operations *except* for CATV to be protected. If this is so, then Locast is perfectly legal against this legislative history.

However, the author believes that the record more convincingly demonstrates that the aforementioend reading is incorrect. First, the only retransmission devices that Valenti mentions are then-existing boosters and translators. Although "similar secondary transmitters" is undoubtedly a catch-all phrase, there is no indication that Valenti was thinking of yet-to-be invented retransmission devices. Second, Valenti was not the only representative of the copyright owners and broadcasters present at these hearings. Notably, the CCO and NAB explicitly opposed CATV because of its ability to impinge upon the market exclusivity of the local stations. And it's difficult to imagine that these parties would have supported a yet-to-be invented nonprofit retransmission device that practically does the same thing as nonprofit CATV for the mere fact that it is not literally CATV. Regardless, as demonstrated below, Congress accepted the stance of Valenti, CCO, and NAB when authoring the modern nonprofit retransmission exception:

> § 111. Limitations on exclusive rights: Secondary transmissions.
>
> (a) CERTAIN SECONDARY TRANSMISSION EXEMPTED. –
>
> (4) the secondary transmission *is not made by a cable system but* is made by a governmental body, or other nonprofit organization, without any purpose of direct or indirect commercial advantage, and without any charge to the recipients of the secondary transmission

[331] *Id.* at 611 (statement of Jack Valenti, President, Motion Picture Association of America, Inc.).

> other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service.[332]

No further debate on the retransmission exception occurred. To the extent that the provision was mentioned in the legislative record, it is briefly mentioned in the House Report and Conference Committee Report on the bill.[333] Notably, their language fails to mention yet-to-be invented retransmission devices. Only "boosters" and "translators":

> Clause (4) would exempt the activities of secondary transmitters that operate on a completely nonprofit basis. The operations of non-profit 'translators' or 'boosters,' which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception, would be exempt if there is no charge to the recipients 'other than assessment necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service.' This exemption does not apply to a [CATV].[334]

IV
ANALYSIS

Goodfriend's claim that "[e]very American has the right to access broadcast for free"[335] is hyperbolic. Although access has long been a national priority,[336] Congress has consistently balanced this pursuit against the business needs of copyright owners, networks, and local stations.[337] No better example of this is found than in the legislative history of section 111(a)(5). At the time, CATV provided the best opportunity for achieving limitless television access. Nevertheless, Congress refused to grant it immunity—regardless of whether it operated as a nonprofit. Why? Because the section's authors felt it was unfair that CATV continued to split viewership by impeding upon the market exclusivity of local stations without paying

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[332] S. 1361, 93d Cong., §111 (a)(4), *reprinted in 1973 Senate Hearings*, *supra* note 41, at 15 (now enacted as 17 U.S.C. § 111(a)(5)).

[333] H.R. REP. NO. 94-1476, at 88 (1976); H.R. REP. NO. 94-1733 (1976).

[334] H.R. REP. NO. 94-1476, at 92.

[335] *See* Answer to Amended Complaint, *supra* note 14, at 2; *see also* 17 U.S.C. § 111(a)(5) (2012).

[336] As shown by the opening text of the Communications Act of 1934, 47 U.S.C. § 151.

[337] The FCC has consistently held that local station stability was key to achieving national access to television. *See* Stern, *supra* note 216, at 188 n.57 (1981).

for copyright fees.[338] In other words, CATV's lack of "passivity" made it unworthy of immunization under section 111(a)(5).[339] And this understanding is encapsulated in the House Report discussing its language:

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[338] *See, e.g.*, *1965 House Hearings*, *supra* note 24, at 1226 (statement of Ernest W. Jennes, General Counsel, Maximum Service Telecaster, Inc.) ("Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served cities of the signals from stations in other markets means that the exclusivity of the local stations to many—if not most—of its programs, will be destroyed. To the extent that a program is viewed on imported channel, the benefit of exclusivity, for which the local station has bargained, is destroyed—to the damage of the local station, the copyright owner and, ultimately, the public."); *Id.* at 1335 (statement of Arthur B. Krim, President, United Artists Group) ("The usual [network] license contract in syndication does not grant the right to authorize the telecast of our programs over additional stations and prevent the licensee station or sponsor from authorizing a community antenna to perform the program. *These restrictions are in keeping with the underlying principle of geographical limitation that is central to all television release*. . . . [I]t can readily be seen [then] that when a CATV system brings programs from a distant city, it plays havoc with every existing licensing system and either seriously downgrades or utterly destroys the property of the copyright owner." (emphasis added)); *1973 Senate Hearings*, *supra* note 41, at 303 (statement of Jack Valenti, President, Motion Picture Association of America, Inc.) ("Section 111 would exempt completely from any copyright law provisions secondary transmissions when made at cost by either governmental bodies or nonprofit organizations. . . . [T]his provision was concerned with the operations of "nonprofit 'translators' or 'boosters' *which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception*. . . ." These translators and boosters have always been subject to FCC regulation and require retransmission consent of the originating station under § 325(a) of the Federal Communications Act. However, the language of the exemption as formulated in § 111 would be equally applicable to cable systems which are operated by governmental bodies or nonprofit organizations. . . . There are a large number of nonprofit organizations in the United States. Many of them operate big enterprises. Moreover, there are already in existence at least 15 municipally-owned CATV systems and there is an increasing drive across the country for municipal ownership of cable systems. . . . The copyright owners are concerned that increasing governmental or non-profit ownership of cable systems may deprive them of license fees for the use of their product. *A free ride for these entities cannot be squared with the achievement of the public purpose which underlies the copyright system*. That purpose is to promote the useful arts by granting compensation adequate to foster creativity. A legal requirement that copyrighted film programs be available to nonprofit and governmental users for free is no less repugnant to the purpose of the copyright system because the user does not intend to make a profit.").

[339] *See* 112 CONG. REC. 24066 (1966) ("Except for . . . *passive* common carrier activities covered by subsection (a), a secondary transmitter is fully liable if he does any of the following: (1) alters program content; (2) originates programs (with some limited exceptions); (3) charges for particular transmissions; (4) picks up primary transmissions not intended for reception by the

> [The clause] would exempt the activities of secondary transmitters that operate on a completely nonprofit basis. The operations of nonprofit "translators" or "boosters," *which do nothing more than amplify broadcast signals and retransmit them to everyone in an area for free reception*, would be exempt if there is no "purpose of direct or indirect commercial advantage," and if there is no charge to the recipients "other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service." *This exemption does not apply to a cable television system*.[340]

The plaintiffs accuse Locast of importing foreign signals into well-served markets and stripping the Nielsen watermark of the seized transmission.[341] At this time, it is undetermined whether either are true. Undoubtedly, if the former is valid, then Locast is impinging upon the market exclusivity of the local stations in an identical fashion that CATV did and thus, would be inconsistent with the purposes behind section 111(a)(5). As for the latter, Goodfriend seemingly concedes that Locast strips the watermark in his amended answer.[342] If so, then viewership would effectively be split between standard broadcast users and Locast users

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public at large; (5) operates outside the primary transmitter's normal area and has not recorded his identity in the Copyright office; (6) operates outside the primary transmitter's normal area and within an area adequately served by other primary transmitters; or (7) operates in any area normally encompassed by one or more transmitting facilities other than the primary transmitter, if he has received notice that one of them has already acquired the exclusive right to transmit the copyrighted work in that area." (emphasis added)); *1965 House Hearings*, *supra* note 24, at 36 (statement of George D. Cary, Deputy Register, United States Copyright Office) ("A community antenna system is *much more than a passive device or service*. It is an extremely complex transmission system which does essentially what a regular television broadcaster does; namely, it transmits programs to the public. . . . CATV systems effectively deprive the copyright owner of control over his work. In many cases, for example, motion pictures or syndicated series, where the broadcasting of a work is licensed for a particular limited territory and audience, a CATV transmission of a broadcast to subscribers in another area can mean the actual loss of the market for broadcasts in that other area. Multiplied many times throughout the country this loss can be very serious." (emphasis added)).

[340] H.R. REP. NO. 94-1476, at 92 (emphasis added).

[341] Amended Complaint, *supra* note 6, at ¶ 12.i-iii ("Locast departs from the activities of a mere booster of broadcast signals in a variety of ways. Among other things, Locast . . . strips from the over-the-air broadcast signals the Nielsen watermarks that measure viewing for local and national advertisers, thereby endangering broadcasters' advertising revenue.").

[342] In response to this accusation, Goodfriend claims that he "den[ies] that [Locast] *purposefully* strips . . . the Nielsen watermarks." Answer to Amended Complaint, *supra* note 14, at ¶ 12.iii (S.D.N.Y. Nov. 13, 2020) (emphasis added).

An anonymous white paper—posted on Locast's website—disagrees with this conclusion.[343] This paper instead argues that the authors of section 111(a)(5) intended to distinguish their grant of immunity solely based on whether the retransmission device was nonprofit or for-profit:

> Congress balanced competing concerns. It recognized the public interest in expanding access to free broadcast television. At the same time, it believed that *for-profit* retransmission services should, in fairness, share their profits with the programs' creators. *Non-profit* retransmission services, by contrast, generate no such profits to share, so Congress exempted them from copyright liability altogether. The distinction the statute draws thus is not between Internet-based systems and over-the-air boosters and translators. It is between for-profit and non-profit systems. Locast falls squarely on the non-profit side of that line.[344]

This cannot be correct. Because if this were true, then nonprofit CATV would have remained immune under section 111(a)(5). The legislative record instead demonstrates that the authors of the section intended to distinguish between "passive" and disruptive nonprofit retransmission devices. Devices that acted as mere signal boosters for local stations were granted immunity. Devices used to impinge upon their market exclusivity and split viewership were contrarily denied. Thus, if plaintiffs' accusations are found true, then calling Locast a "digital translator" is a misnomer at best and disingenuous at worst.[345] Locast would not be acting as a signal strengthener. Instead, it would be directly competing against local stations in well-served, urban markets.[346] In fact, Locast's urban-focused growth and alleged competitive tendencies are eerily similar to what was witnessed with

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[343] *See* LOCAST: NON-PROFIT RETRANSMISSION OF BROADCAST TELEVISION (2018), https://www.locast.org/news/press-releases/locast-white-paper/.

[344] *See id.* at ii.

[345] Authors of the Locast white paper repeatedly refer to the service as a "digital translator." *Id. passim*.

[346] As of this writing, Goodfriend has strategically placed antennas in 31 well-populated cities, seven of which are amongst the most populated ten cities in the United States. *Select your city*, LOCAST, https://www.locast.org/cities/501 (last visited Mar. 20, 2021); *The 200 Largest Cities in the United States by Population 2021*, World Population Review, https://worldpopulationreview.com/us-cities (last visited Mar. 20, 2021).

"unlimited" CATV—which caused the copyright owners, networks, and local stations to lobby Congress for changes to the Act in the first place.[347]

Goodfriend argues that Locast's placement in well-served cities nonetheless results in protection under the section because it helps urban users—whose signals are obstructed by "tall buildings or other obstructions"—gain access to broadcasting.[348] But, as previously discussed, nonprofit CATV did this too. Cable uniquely helped urban television viewers because it got around the problem of over-the-air signal obstruction through the use of cable infrastructure. Locast does the same thing, except via digital stream.[349] The former was denied immunity. Why should the latter be treated differently?

Finally, if these allegations are true, then Locast would not only be impinging upon the local station's market exclusivity, but it would also be impinging upon the very purpose for why we have copyright:

> Under its dominant justification, copyright "contributes to the 'progress of Science' by maintaining adequate incentives to engage in the production of new artistic and literary works. Creating anew is often expensive and copying, cheap. Without copyright . . . copyists who don't face the same costs of creation that originators do will underprice originators and compete away the profits from new artistic and literary

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[347] *See, e.g.*, *1965 House Hearings*, *supra* note 24, at 1226 (statement of Arthur B. Krim, President, United Artists Corp.) ("In short, 'CATV unlimited' is a new type of CATV with capabilities and operations only faintly resembling historic CATV. As CATV's purpose and operations expand beyond providing an *auxiliary* service, CATV becomes a threat to the public interest in free, diverse, and competitive, local and area television broadcast services. In essence, this threat derives from CATV's ability to import multiple television signals from many distant stations into cities where local and area television stations are already reaching the viewing public. Because the same television programs are broadcast in many different markets, the importation by CATV into such well-served "cities of the signals from stations in other markets means that the exclusivity of the local station as to many—if not most—of its programs will be destroyed.").

[348] *See* Answer to Amended Complaint, *supra* note 14, at ¶¶ 4, 12.ii, 44, 46, 48 (S.D.N.Y. Nov. 13, 2020).

[349] *See id*. at ¶¶ 12.i ("Defendants admit that in any given local DMA that Locast serves, [it] functions by capturing the over-the-air signals, transcoding the signals into digital formats viewable on internet-connected devices, and then streaming the signals over the internet to registered users at the users' requests on internet-connected devices located within the local market.").

> creativity, thereby suppressing incentives to create new artistic and literary works in the first place.[350]

CONCLUSION

After analyzing whether the nature of Locast is consistent with the text and legislative history of section 111(a)(5), the author arrives at conflicting conclusions. Although Locast appears to fall within its text (absent further factual discovery), examination of section 111(a)(5)'s legislative history may lead to the opposite conclusion. The authors of section 111(a)(5)—the major copyright owners, networks, and their affiliated local stations—sought to strike a balance between national television access and the viability of standard broadcasting. In doing so, section 111(a)(5) was authored to distinguish between "passive" and disruptive nonprofit retransmission services. Passive nonprofit retransmission devices were seen as signal strengtheners—e.g., the boosters and translators that existed during the time of the Act's adoption. Disruptive nonprofit retransmission devices were contrarily used to impinge upon the market exclusivity of local stations by splitting viewership—e.g., CATV. If Locast imports foreign signals into well-served markets or strips Nielsen watermarks during signal retransmission, then Locast's nonprofit nature is meaningless under the Act because Locast would effectively be appropriating content paid for by the local stations, competing against them over the same audiences, and endangering their advertising revenue by splitting viewership in the same way that CATV did. Thus, if true, Locast would be a disruptive retransmission device inconsistent with the purposes behind section 111(a)(5).

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[350] JEANNE C. FROMER & CHRISTOPHER JON SPRIGMAN, COPYRIGHT LAW: CASES AND MATERIALS 10 (2d ed. 2020).