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HARVARD LAW REVIEW

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ARTICLES

FORESEEABILITY AND COPYRIGHT INCENTIVES

Shyamkrishna Balganesh

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FORESEEABILITY AND COPYRIGHT INCENTIVES

*Shyamkrishna Balganesh**

Copyright law's principal justification today is the economic theory of creator incentives. Central to this theory is the recognition that while copyright's exclusive rights framework provides creators with an economic incentive to create, it also entails large social costs, and that creators therefore need to be given just enough incentive to create in order to balance the system's benefits against its costs. Yet, none of copyright's current doctrines enable courts to circumscribe a creator's entitlement by reference to limitations inherent in the very idea of incentives. While the common law too relies on providing actors with incentives to behave in certain ways, it recognizes that its incentive structure has outer limits and that failing to calibrate an entitlement or liability with these limits in mind is likely to prove inefficient. The principal mechanism that it employs to this end is the concept of foreseeability. Premised on the idea that individuals do not ordinarily consider consequences that are temporally or causally far removed from their actions, foreseeability allows courts to balance a regime's ex ante incentive effects against its ex post costs when determining liability.

This Article argues that if copyright law is to remain true to its theory of incentives, and thereby the need to balance monopoly control with the social costs that are central to the theory, it needs to internalize the idea that creators, like actors elsewhere, are incapable of fully anticipating all future contingencies associated with their actions, which in turn limits the effectiveness of incentives. To this end, this Article proposes a test of "foreseeable copying" to limit copyright's grant of exclusivity to situations where a copier's use was reasonably foreseeable at the time of creation — the point when the incentive is meant to operate. Adopting a test of foreseeability is thus likely to better align copyright law with its underlying purpose and provide courts with a mechanism by which to give effect to copyright's theory of incentives in individual cases — thereby according the theory more than just rhetorical significance.

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I. INTRODUCTION

As an instrumentally driven entitlement, copyright has its limits. If, as most agree, copyright law's primary purpose lies in providing individuals with an incentive to generate creative expression, its grant of exclusivity must be limited by that purpose.¹ Yet, courts almost never look to copyright's incentive structure in delineating its scope. They routinely assume that its property-like nature automatically entitles its holder to internalize *all* possible benefits associated with the work — whether or not the creator was responsible for them beyond just creating the work. This issue becomes most pressing in cases involving markets for new uses — uses that either employ the work in the context of a new technology or creatively employ the work for an altogether new purpose.²

An overwhelmingly large number of copyright cases, both historically and in the recent past, have involved markets for new uses — most prominently, uses involving new technologies.³ The printing press, photocopiers, cable retransmission, audio and video recorders, digital conversion, and filesharing, to name a few, each presented copyright law with essentially the same question: do a copyright owner's exclusive rights in a work extend to its use with a new technology that was not in existence when the work was created? A somewhat similar issue often arises in relation to derivative works, where an existent work is modified to create an altogether new one.⁴

¹ See U.S. CONST. art. I, § 8, cl. 8 (authorizing Congress "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 285 (1996) ("To encourage authors to create and disseminate original expression, copyright law accords them a bundle of proprietary rights in their works.").

² For a discussion of new uses in the context of new technologies, see Jane C. Ginsburg, *Copyright and Control over New Technologies of Dissemination*, 101 COLUM. L. REV. 1613 (2001).

³ See, e.g., BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 101-25 (1967) (discussing the evolution of copyright in light of contemporary and future technologies); MARK ROSE, AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT 3-5 (1993) (discussing the emergence of copyright in the era of the printing press). Many prominent cases have faced the question of markets for new uses. See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (dealing with the video recorder); *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968) (dealing with cable retransmissions); *White-Smith Music Publ'g Co. v. Apollo Co.*, 209 U.S. 1 (1908) (dealing with the market for piano rolls); *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003) (dealing with the market for thumbnails of copyrighted photographs); *Ty, Inc. v. Publ'ns Int'l Ltd.*, 292 F.3d 512 (7th Cir. 2002) (dealing with the photographic cataloging of plush toys); *UMG Recordings, Inc. v. MP3.Com, Inc.*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000) (dealing with the market for digital music). Perhaps the best known cases in the recent past include those filed against Google. See *Complaint, McGraw-Hill Co. v. Google Inc.*, No. 05 CV 8881 (S.D.N.Y. Oct. 19, 2005); *Complaint, Author's Guild v. Google Inc.*, No. 05 CV 8136 (S.D.N.Y. Sept. 20, 2005). These two cases have been combined for the purposes of a provisional settlement agreement. Settlement Agreement, *Author's Guild*, No. 05 CV 8136-JES (Oct. 28, 2008), <http://www.googlebooksettlement.com/Settlement-Agreement.pdf>.

⁴ See 17 U.S.C. § 101 (2006) (defining a "derivative work").

On most occasions, courts answer this question in the affirmative, effectively allowing copyright holders to control the development and direction of the new use and thereby the market for it. Occasionally though, they have refused to do so, preferring to draw a limit to copyright's exclusivity and recognizing that a creator's entitlement does not extend to the new use.⁵ Yet in doing so, they have struggled to articulate a coherent, forward-looking principle on which to justify the refusal.⁶

Of the various theories commonly advanced to justify copyright law, the utilitarian incentive-based one continues to dominate among scholars, judges, and policymakers.⁷ In this view, copyright exists primarily (if not entirely) to provide creators with an incentive to produce creative expression through the promise of limited exclusionary control over their creative work. Creators are presumed to be rational utility maximizers and therefore capable of being induced to create by the prospect of controlling a future market for their yet-to-be-created works. For all its reliance on the idea of creator incentives, though, copyright law does very little to instantiate the idea of incentives into its entitlement delineation process. None of copyright's current doctrinal devices enable courts to circumscribe a creator's entitlement by reference to the incentive structure on which the institution is premised. As a direct consequence, creators (and their assignees) are often thought to be rightfully entitled to any revenue stream associated with their creation, whether or not that stream owes its existence solely to the creator and regardless of it having been developed well after the creation of the work.

Interestingly, though, the common law has come to recognize that there are limits to human predictive capacities that in turn impact the extent to which incentives and deterrents influence individual behavior. And as a consequence, the common law allows its liability and entitlement calculations to be shaped by this recognition. Its principal device to this end is the concept of *foreseeability*.⁸ In its simplest formulation, foreseeability restricts a party's recovery by limiting either a plaintiff's entitlement or a defendant's liability to events and conse-

⁵ See *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394 (1974); *Fortnightly Corp.*, 392 U.S. 390; *RIAA v. Diamond Multimedia Sys. Inc.*, 180 F.3d 1072 (9th Cir. 1999).

⁶ See Ginsburg, *supra* note 2, at 1619–26 (noting courts' inconsistency in articulating a basis for these decisions).

⁷ See *infra* section II.A, pp. 1577–81.

⁸ The most prominent use of foreseeability has of course been in tort law. See KENNETH S. ABRAHAM, *THE FORMS AND FUNCTIONS OF TORT LAW* 125 (3d ed. 2007); 3 FOWLER V. HARPER ET AL., *THE LAW OF TORTS* § 16.9, at 467 (2d ed. 1986); Leon Green, *Foreseeability in Negligence Law*, 61 COLUM. L. REV. 1401 (1961). For an analysis of its use in other contexts, see *infra* sections III.A.2–5, pp. 1597–1600.

quences that were objectively capable of being anticipated at a certain point in time.

In each of the contexts where the common law employs foreseeability as a limiting device, its basis for doing so remains somewhat similar. As a process, the common law is both backward- and forward-looking. On the one hand, it allocates the costs arising from a certain event between the litigating parties, but on the other hand, it simultaneously attempts to induce future parties to behave in certain ways in order to avoid those costs and at times obtain benefits.⁹ In this latter guidance function, the common law looks to how individuals behave in different contexts and formulates a set of incentives (entitlements) and deterrents (liability) to direct their future actions.¹⁰ Foreseeability connects here to the notion of bounded rationality. When certain events or consequences are unlikely to have formed a significant part of an actor's decisions for an action, the law characterizes them as unforeseeable and avoids attributing them to the actor. In economic terms, foreseeability thus enables courts to distinguish between events that are likely to have formed part of an actor's ex ante incentives for action and those that are unlikely to have done so, thereby restricting recovery to the former alone.

Copyright law, much like the common law, is concerned with inducing behavior of a certain kind by incentivizing it. By providing creators with an ex post reward, it attempts to incentivize their ex ante production of creative expression. As an entitlement arising from the bilateral context, copyright law is structurally very similar to other common law areas. If the law (in other contexts) readily presumes that actors can only ever factor foreseeable consequences into their decisionmaking process, then logically speaking, copyright law should see little need to give creators an entitlement to unforeseeable ones. Copyright thus needs to internalize the idea that incentives have limits and develop a mechanism by which to eliminate unincentivized gains from a creator's entitlement, especially when including them in the entitlement is likely to produce more costs than benefits.

This Article argues that, following from the common law's use of foreseeability to mark the outer boundaries of its incentive structure in a variety of contexts, copyright law ought to employ a test of foreseeability to determine the point up to which a copyright owner should be allowed to internalize the gains from his work. In determining liability for infringement, applying a test of foreseeability would require a court

⁹ See Frank H. Easterbrook, *The Supreme Court, 1983 Term—Foreword: The Court and the Economic System*, 98 HARV. L. REV. 4, 10 (1984) (describing these as the “ex post” and “ex ante” perspectives, respectively).

¹⁰ See A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 130 (2d ed. 1989) (referring to this as the “incentive question” underlying a rule).

to ask whether the use complained of is one that the copyright owner (that is, the plaintiff) could have reasonably foreseen at the time that the work was created (that is, the point when the entitlement commences). Adopting an approach along these lines is likely to present courts with a solution to the problem of new uses and later-developed technologies, and a rational basis on which to mark the outer boundaries of copyright's grant of exclusive rights — questions that have hitherto been resolved entirely on an ad hoc basis.

Limiting liability for copyright infringement by using foreseeability is also likely to transform the way in which courts think about and apply the doctrine of fair use. At present, the doctrine of fair use remains the primary mechanism of distinguishing between uses of the work in order to determine over which ones the copyright holder should be allowed to claim an exclusive right.¹¹ Courts and scholars have over the years developed formulations of the doctrine that speak directly to this task, such as “transformative use” and “intrinsic use.”¹² These formulations suffer from a host of well-documented problems, almost all of which derive from the structural reality that, as a defense to liability, fair use inevitably focuses on the defendant. In doing so, the doctrine ignores altogether the plaintiff's entitlement, and the reasons for it, once the work is brought into existence. Tying these questions to the initial question of liability would serve to mark the outer boundaries of copyright exclusivity by connecting it to the ex ante incentive that copyright is meant to generate.

This Article proceeds as follows. Part II examines copyright law's principal justificatory theory: the theory of creator incentives. It sets out the core assumptions central to the theory, analyzes the failure of copyright doctrine to instantiate its avowed reliance on it, and lays out the consequence of this failure. It thus attempts to make the case for a new limiting device within copyright law that recognizes how incentives are (and indeed are *not*) capable of impacting actual decision-making among creators. Part III illustrates how the idea of foreseeability — used in other contexts to structure actor incentives and limit windfalls that are thought to be inefficient or unfair — can serve that

¹¹ It remains common consensus among copyright scholars that the fair use doctrine — as it is structured and applied today — remains deeply flawed. See, e.g., Paul Goldstein, *Fair Use in a Changing World*, 50 J. COPYRIGHT SOC'Y U.S.A. 133, 133–34 (2003); Wendy J. Gordon, *Keynote: Fair Use: Threat or Threatened?*, 55 CASE W. RES. L. REV. 903 (2005); Lydia Pallas Loren, *Redefining the Market Failure Approach to Fair Use in an Era of Copyright Permission Systems*, 5 J. INTELL. PROP. L. 1 (1997); Glynn S. Lunney, Jr., *Fair Use and Market Failure: Sony Revisited*, 82 B.U. L. REV. 975 (2002); David Nimmer, *“Fairest of Them All” and Other Fairy Tales of Fair Use*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 263; Sara K. Stadler, *Copyright As Trade Regulation*, 155 U. PA. L. REV. 899 (2007).

¹² See LEON E. SELTZER, EXEMPTIONS AND FAIR USE IN COPYRIGHT 24–25, 37–38 (1978) (identifying certain kinds of uses as “intrinsic”); *infra* section II.B.2, pp. 1584–89.

very purpose. It begins by looking to foreseeability's assumptions about human predictive capabilities (deriving from the idea of bounded rationality) and proceeds to analyze foreseeability's use in different areas of the law, all in recognition of the limited behavioral modification the law expects to induce. Part IV then attempts to introduce foreseeability to copyright law using a test of "foreseeable copying." It starts by setting out how the test would operate as part of the infringement inquiry and illustrates how, given its use in the licensing context, extending the test to the infringement inquiry is likely to present few issues of workability. Part IV then proceeds to argue that a test of foreseeability remains perfectly compatible with, and in many ways is mandated by, copyright's theory of incentives. Part V responds to four potential objections to the use of foreseeability as an idea in copyright law: (1) that it is likely to render copyright's current term of protection redundant, (2) that it might result in a significant amount of indeterminacy in its application, (3) that it will result in temporally differentiated entitlements, and lastly, (4) that it will inevitably involve a significant degree of hindsight in its application. Part VI concludes.

II. COPYRIGHT LAW AND CREATOR INCENTIVES

As a property right — understood as a set of exclusive use privileges protected by an exclusionary right — copyright is premised on the idea of allowing its holder to capture (or internalize) the benefits associated with the use of his work.¹³ In spite of copyright's status as a property right, its scope and reach remain significantly limited. Using a host of internal doctrines, copyright law limits the circumstances and ways in which an owner is permitted to exercise its grant of exclusivity.¹⁴

While personality- and desert-based theories of copyright abound in the literature,¹⁵ copyright law in the United States has undeniably come to be understood almost entirely in utilitarian, incentive-driven

¹³ For an overview of the copyright-property linkage, see JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY (1996); and Justin Hughes, *Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson*, 79 S. CAL. L. REV. 993, 1046–69 (2006).

¹⁴ See Wendy J. Gordon, *An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory*, 41 STAN. L. REV. 1343, 1365–77 (1989). Some of these doctrines include: the idea-expression dichotomy, the originality requirement, the rule of fixation, and the temporally limited nature of the grant. See 17 U.S.C. §§ 101, 102, 302–05 (2006).

¹⁵ See, e.g., Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287 (1988); Linda J. Lacey, *Of Bread and Roses and Copyrights*, 1989 DUKE L.J. 1532; Alfred C. Yen, *Restoring the Natural Law: Copyright As Labor and Possession*, 51 OHIO ST. L.J. 517 (1990); Barbara Friedman, Note, *From Deontology to Dialogue: The Cultural Consequences of Copyright*, 13 CARDOZO ARTS & ENT. L.J. 157 (1994).

terms.¹⁶ Copyright law is thus thought to exist primarily to give authors (that is, creators) an incentive to create and thereafter disseminate their works publicly. But what is perhaps unique about copyright law is that, in spite of its avowed adherence to this theory of incentives, its internal doctrinal devices do little to give effect to its theoretical basis. Limiting a party's liability or entitlement by reference to its underlying purpose is hardly novel. Tort law routinely does this. This process is also rather well known in antitrust law. As part of the antitrust injury rule, courts ask whether the injury complained of by a plaintiff was of "the type the antitrust laws were intended to prevent" and arose as a consequence of "that which makes the defendants' acts unlawful."¹⁷ Yet, in interpreting and developing different formulations of copyright's doctrinal devices, courts rarely, if ever, make reference to incentives.

A. *Copyright Incentives in Theory and Practice*

Central to all of copyright law is the idea of incentives.¹⁸ Copyright, it is argued, exists to provide creators with an incentive to create and disseminate their works publicly. While copyright scholars have long attempted to make sense of copyright's theory of incentives and its limitations, in practice courts do surprisingly little to give effect to the way in which copyright's incentive structure is meant to influence creativity. As a consequence, few dispute the fact that copyright's theory of incentives today functions as little more than a trope — but ironically enough, one that masks the real tradeoffs that copyright involves.¹⁹

Copyright's incentives story is thought to track the claim about the dynamic efficiency of property rights.²⁰ By providing a creator with limited exclusionary control over creative expression at time T_2 , the system is thought to encourage the production of such expression at time T_1 . Since copyright deals with subject matter that is by nature a nonexcludable public good, the need for such exclusionary control is thought to be particularly pronounced.²¹

¹⁶ Indeed, this instrumental mandate derives from copyright's constitutional origins. See U.S. CONST. art. I, § 8, cl. 8.

¹⁷ *Brunswick Corp. v. Pueblo Bowl-O-Mat Inc.*, 429 U.S. 477, 489 (1977); see Roger D. Blair & Jeffrey L. Harrison, *Rethinking Antitrust Injury*, 42 VAND. L. REV. 1539 (1989).

¹⁸ See, e.g., Justin Hughes, *Fair Use Across Time*, 50 UCLA L. REV. 775, 797 (2003); Joseph P. Liu, *Copyright and Time: A Proposal*, 101 MICH. L. REV. 409, 428 (2002).

¹⁹ See generally Stewart E. Sterk, *Rhetoric and Reality in Copyright Law*, 94 MICH. L. REV. 1197, 1198–1204 (1996) (describing the use of incentives rhetoric to justify copyright since its inception).

²⁰ WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 13 (2003).

²¹ *Id.* at 19.

All the same, the exclusionary control that copyright confers interferes with the extent to which others may access and use that resource in the future. It thus entails both a static and dynamic inefficiency.²² By enabling creators to price their works at a monopoly level, it reduces access to those works by users willing to pay a price lower than that charged by the creator, but above the marginal cost of producing it. This represents a static inefficiency, often referred to as copyright's "deadweight loss."²³ In addition, since creativity is almost always derivative, copyright's phenomenon of exclusionary control also impedes future creativity by restricting access to a creative work for potential creators hoping to use the work as an input for a future creative output. This in turn represents a dynamic inefficiency.²⁴ Copyright thus has to balance the benefits of its incentive structure against its access- and use-limiting functions, which are costs that it imposes on society as a whole. Professor William Landes and Judge Richard Posner summarize this tradeoff well:

Unless there is power to exclude, the incentive to create intellectual property [that is, creative expression] in the first place may be impaired. . . . [T]he result is the "access versus incentives" tradeoff: charging a price for a public good reduces access to it (a social cost), making it artificially scarce . . . but increases the incentive to create it in the first place, which is a possibly offsetting social benefit.²⁵

This tradeoff was first noted by the economist Kenneth Arrow,²⁶ and has since been a central theme in almost all scholarly analyses of copyright incentives.²⁷ While some have analyzed it as a tradeoff be-

²² For a concise discussion of these effects, see YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 35–37 (2006).

²³ See Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93, 99–100 (1997); William W. Fisher III, *Reconstructing the Fair Use Doctrine*, 101 HARV. L. REV. 1659, 1702 (1988).

²⁴ See BENKLER, *supra* note 22, at 36–37.

²⁵ LANDES & POSNER, *supra* note 20, at 20–21.

²⁶ See Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in NAT'L BUREAU OF ECON. RESEARCH, *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609 (1962).

²⁷ Scholarly work in the copyright area has often focused on the tradeoff and attempted to determine the optimal amount of protection (principally through the idea of price discrimination) as a consequence of the tradeoff. See Fisher, *supra* note 23, at 1700–05 ("[T]o avoid underproduction of original works, it is necessary to empower the creators of such works to charge fees for the privilege of using them, but granting the creators that right causes monopoly losses, which vary between types of copyrighted works." *Id.* at 1703.); see also Yochai Benkler, *An Unhurried View of Private Ordering in Information Transactions*, 53 VAND. L. REV. 2063 (2000); James Boyle, *Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination and Digital Intellectual Property*, 53 VAND. L. REV. 2007 (2000); Julie E. Cohen, *Copyright and the Perfect Curve*, 53 VAND. L. REV. 1799 (2000); Glynn S. Lunney, Jr., *Reexamining Copyright's Incentives-Access Paradigm*, 49 VAND. L. REV. 483 (1996); Michael J. Meurer, *Copyright Law and Price Discrimination*, 23 CARDOZO L. REV. 55 (2001); Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 BUFF. L. REV. 845, 869–76 (1997); cf. Louis Kaplow,

tween two endogenous variables within the copyright system, others have argued that it involves a comparison between copyright's purpose and an exogenous variable.²⁸ Yet in either form, the idea that copyright's incentive structure comes with its own set of limits remains well accepted among intellectual property scholars. While scholars certainly disagree on how best to implement these limits — through scope, breadth, or temporal restrictions — at a basic level, the incentives analysis in the public goods context is always understood as being about both expanding and curtailing an exclusionary entitlement.²⁹

When it comes to implementing the theory, though, courts and policymakers tend to view copyright's incentive structure in largely linear (and unipolar) terms.³⁰ In this view, since copyright's purpose lies solely in encouraging creativity, any limitations to it are justifiable only if they do not interfere with its incentive structure, which is in turn presumed to extend to every marginal incentive. Additionally, in this conception, the incentive provided by copyright's promise of exclusivity is also thought to correlate directly with the overall production of creative expression. Professor Jessica Litman aptly notes in describing this model that it assumes “[a]n increase in the scope or subject matter or duration of copyright . . . will inspire more and better authorship, while a limitation on copyright will at the margin result in reduced authorial production.”³¹ The linear conception thus implies that there exists “no good reason” *within the very idea of incentives* (the model's only frame of reference) for “why copyrights should not cover everything and last forever.”³² Not surprisingly then, one begins to see a significant divergence between copyright's theory of incentives as dis-

The Patent-Antitrust Intersection: A Reappraisal, 97 HARV. L. REV. 1813 (1984) (discussing the tradeoff in the patent law context).

²⁸ For a clear statement of the endogenous version of the tradeoff that identifies incentives and access as the twin, progress-driven goals of the copyright system, see Cohen, *supra* note 27, at 1801. Not surprisingly, those who accept the tradeoff in exogenous terms remain less convinced of its centrality. See Jane C. Ginsburg, *Authors and Users in Copyright*, 45 J. COPYRIGHT SOC'Y U.S.A. 1 (1997).

²⁹ For a sample of some economic literature debating this question, see WILLIAM D. NORDHAUS, *INVENTION, GROWTH, AND WELFARE* (1969), which argues that temporal limits best capture an incentives analysis. See also Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839 (1990) (arguing that incentives analysis necessitates limits on a patent's scope).

³⁰ This phenomenon is often referred to as copyright's “one-way ratchet.” See Jessica Litman, *War Stories*, 20 CARDOZO ARTS & ENT. L.J. 337, 344 (2002); Sara K. Stadler, *Incentive and Expectation in Copyright*, 58 HASTINGS L.J. 433, 435 (2007); Rebecca Tushnet, *Copy This Essay: How Fair Use Doctrine Harms Free Speech and How Copying Serves It*, 114 YALE L.J. 535, 543 (2004); Diane Leenheer Zimmerman, *Adrift in the Digital Millennium Copyright Act: The Sequel*, 26 U. DAYTON L. REV. 279, 290 (2001).

³¹ Litman, *supra* note 30, at 344.

³² *Id.*

cussed in the literature and the idea of incentives as implemented through copyright doctrine.

Professor Neil Netanel ascribes the popularity of this linear model of copyright among courts to the growing influence of what he calls the “neoclassicist” school of economics, which takes the neoclassical assumptions of incentives theory as a starting point, but juxtaposes them with property ideas in an effort to minimize the transaction costs that the system entails.³³ The Supreme Court’s leading opinion on fair use, *Harper & Row, Publishers, Inc. v. Nation Enterprises*,³⁴ is perhaps aptly representative of the way in which courts use the idea of incentives in this linear conception. The question before the Court in *Harper & Row* was whether the defendant’s unauthorized publication of quotations from President Gerald Ford’s unpublished manuscript was a fair use of the work.³⁵ In concluding that it was not a form of fair use, the Court’s analysis focused on the effect that characterizing the defendant’s actions as a form of fair use would have on copyright’s incentive structure.³⁶ In other words, without examining whether copyright’s incentive structure extended to the entitlement that the plaintiff was claiming, it focused on the harm that the defendant’s actions might have on that ephemeral incentive. The idea of “incentives” provided the Court with a rhetorical framework internal to the copyright system by which to justify its decision, rather than a meaningful basis with which to understand the very functioning of that system. The Court found it wholly unnecessary to ask whether extending copyright’s entitlement to the defendant’s actions was necessitated by its idea of incentives.³⁷

³³ Netanel, *supra* note 1, at 306–07. More recently, others have referred to this as the “Demsetzian” turn in copyright law, a reference to the seminal work by Professor Harold Demsetz describing the evolution of ownership and property rights as mechanisms to minimize transaction costs and internalize both positive and negative externalities associated with certain actions. See Brett M. Frischmann, *Evaluating the Demsetzian Trend in Copyright Law*, 3 REV. L. & ECON. 649 (2007). For a response by Professor Demsetz, see Harold Demsetz, *Frischmann’s View of “Toward a Theory of Property Rights,”* 4 REV. L. & ECON. 127 (2008).

³⁴ 471 U.S. 539 (1985). In the twenty-four years since the decision, in excess of fifty federal courts have relied on *Harper & Row*’s fair use analysis in one way or another. As Professor Fisher predicted a few years after the decision in relation to the Court’s reliance on the theory of incentives, “[t]he imprimatur of the majority opinion in *Harper & Row* will undoubtedly contribute to the currency and influence of the theory.” Fisher, *supra* note 23, at 1689 (citation omitted).

³⁵ *Harper & Row*, 471 U.S. at 542–45.

³⁶ *Id.* at 557–59.

³⁷ The Court has, since then, used copyright’s incentive structure purely as a rhetorical device on more than one instance. See, e.g., *Eldred v. Ashcroft*, 537 U.S. 186, 212 n.18 (2003) (“[C]opyright law serves public ends by providing individuals with an incentive to pursue private ones.”); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 593 (1994) (“[S]ubstantial harm to [the market for derivatives] would weigh against a finding of fair use, because the licensing of derivatives is an important economic incentive to the creation of originals.” (citation omitted)). To be sure, courts do occasionally treat the incentives-access tradeoff as a meaningful basis by which to

In the linear model of incentives, then, courts presume that absent exogenously necessitated exceptions, copyright's ownership structure is independently limitless.³⁸ Even if incentives are the reason for the entitlement, they exert little influence on its structure. Neoclassicist thinking apart, though, one suspects that a major contributing factor to this phenomenon lies in the failure of copyright doctrine to instantiate its theory of incentives in any meaningful way. Since courts lack a meaningful mechanism by which to give effect to the way in which incentives operate, and the limitations attendant thereto, they rarely see the need to have the idea of incentives play more than just a rhetorical role.

*B. The Absence of Purpose-Driven
Limits in Copyright Law*

Despite copyright being premised entirely on the idea of incentives, courts never look to its theory of incentives in delineating the scope and extent of a creator's entitlement in individual cases. To the extent that they do ever refer to incentives, they do so to examine whether a finding of no liability is likely to negatively impact *future* incentives, when ironically enough, the structure of this incentive is never determined upfront.³⁹

Copyright remains distinct from other forms of intellectual property, in that the absence of an administrative grantmaking entity (such as the U.S. Patent and Trademark Office) ensures that it falls entirely to courts to delineate the scope and extent of a creator's entitlement. In its most basic sense, copyright's entitlement lies in its promise of exclusivity, a promise that is legally enforceable against interference by third parties. Since courts remain the primary (or rather, sole) determinants of this entitlement in any given situation, they both validate the entitlement and enforce it through either a property or liability rule. The process of validation usually entails examining whether the work in question meets the eligibility requirements to be protected, while the enforcement process then circumscribes the entitlement by

understand copyright's incentive structure, but these decisions are rare. A few notable examples include *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984); and *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257 (11th Cir. 2001).

³⁸ See, e.g., *Ringgold v. Black Entm't Television, Inc.*, 126 F.3d 70, 73 (2d Cir. 1997) ("In the absence of defenses, these exclusive rights normally give a copyright owner the right to seek royalties from others who wish to use the copyrighted work."); *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 929 (2d Cir. 1995) ("It is indisputable that, as a general matter, a copyright holder is entitled to demand a royalty for licensing others to use its copyrighted work . . ."); *D.C. Comics Inc. v. Reel Fantasy, Inc.*, 696 F.2d 24, 28 (2d Cir. 1982) ("[O]ne of the benefits of ownership of copyrighted material is the right to license its use for a fee . . .").

³⁹ See, e.g., *Campbell*, 510 U.S. at 598 (Kennedy, J., concurring); *Harper & Row*, 471 U.S. at 557.

reference to the defendant's actions. Both processes operate as *limits* on the entitlement. While the latter is correlative, the former is in a sense absolute.⁴⁰ Yet, none of the doctrinal devices that courts use in either process attempt to connect the entitlement to its underlying purpose.

Copyright's absolute limiting doctrines concern themselves most directly with the need to limit a creator's monopoly power in order to minimize the deadweight losses associated with its exercise.⁴¹ In one sense, they therefore do give effect to the incentives-access tradeoff discussed earlier. Yet, they function by making an a priori assumption about where and how that tradeoff should lie, rather than allowing for it to be examined in individual cases. To the extent that they relate to incentives, then, they do so in somewhat inflexible, rule-utilitarian terms. The purpose behind their limiting function is therefore largely extrinsic to their operation in individual cases, and as a consequence they do little to enable courts to circumscribe a creator's entitlement purposively.

Copyright law's correlative limiting devices, on the other hand, seem better placed to internalize its incentive theory. Since they involve determining the outer boundaries of a creator's entitlement only by reference to a specific action (the defendant's), they might be used to eliminate from the scope of the entitlement actions that were not part of the incentive. Yet, neither of copyright law's two principal correlative doctrines — substantial similarity and fair use — rely on its attempt to induce creativity.

1. *Substantial Similarity*. — As part of the infringement inquiry, the law requires a plaintiff to establish that the defendant *copied* the protected work.⁴² Absent copying, liability for copyright infringement is practically nonexistent.⁴³ While copying certainly does entail a factual element (whether the defendant took elements of the plaintiff's work), it involves more than just that and carries with it a significant

⁴⁰ By "correlative" here, I mean that the inquiry is done relationally, by reference to the plaintiff and the defendant. The idea of correlativity is generally used to describe tort law's entitlement structure, where liability is an attempt to connect the defendant's actions to the plaintiff's harm through the law's underlying normative goals. Professor Ernest Weinrib's account of correlativity is perhaps the most widely accepted exposition of the idea. See ERNEST J. WEINRIB, *THE IDEA OF PRIVATE LAW* (1995); Ernest J. Weinrib, *Punishment and Disgorgement As Contract Remedies*, 78 CHI.-KENT L. REV. 55 (2003).

⁴¹ See Sterk, *supra* note 19, at 1210-13 (1996).

⁴² *Perris v. Hexamer*, 99 U.S. 674, 675-76 (1879); 4 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 13.01[B] (2007).

⁴³ 2 NIMMER & NIMMER, *supra* note 42, § 8.01[A], at 8-15 ("[A]bsent copying, there can be no infringement of copyright, regardless of the extent of similarity." (footnotes omitted)).

normative dimension.⁴⁴ This occurs as part of the rule of substantial similarity, or as some call it, “actionable” copying.⁴⁵

The doctrine of substantial similarity requires a plaintiff to establish not just that the works in question are similar, but that the similarity relates to the fundamental essence or structure of the work under copyright.⁴⁶ It thus entails establishing that what the defendant took from the plaintiff’s work is protected by copyright law to begin with. As one court sought to define the process: “The traditional test for substantial similarity is ‘whether the accused work is so similar to the plaintiff’s work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff’s protectible expression by taking material of substance and value.’”⁴⁷ This definition is replete with subjective terms of art (for example, “ordinary reasonable person,” “unlawfully appropriated,” and “substance and value”), each of which requires further elucidation for the definition to be complete. This result is aptly indicative of the complexity that the process entails.⁴⁸ All the same, courts have over the years sought to develop myriad formulations of the test to be applied to individual cases.

In attempting to classify these different formulations, Nimmer usefully divides them into two broad categories. The first, “comprehensive nonliteral similarity,” involves situations where the essence of the work is copied, even if the copying is not literal (that is, not verbatim).⁴⁹ Here, the tests all focus on extracting the essence of the plaintiff’s work without running afoul of the idea-expression dichotomy, and then examining whether the defendant’s work copied the same. The second category, “fragmented literal similarity,” involves cases where the defendant’s work uses parts of the plaintiff’s work.⁵⁰ The copying is literal (that is, verbatim), but partial and dispersed. Substantial similarity here, Nimmer argues, cannot be decided except by reference to the defendant’s purpose behind the copying, which un-

⁴⁴ 4 *id.* § 13.01[B], at 13-8 (noting that “few courts or commentators have historically differentiated” between the factual and normative dimensions of copying (footnote omitted)).

⁴⁵ See *id.* at 13-9.

⁴⁶ ROBERT C. OSTERBERG & ERIC C. OSTERBERG, SUBSTANTIAL SIMILARITY IN COPYRIGHT LAW § 1:1, at 1-1 to -4 (2008).

⁴⁷ *Country Kids ’N City Slicks, Inc. v. Sheen*, 77 F.3d 1280, 1288 (10th Cir. 1996) (quoting *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 614 (7th Cir. 1982)).

⁴⁸ See OSTERBERG & OSTERBERG, *supra* note 46, § 1:1, at 1-2 (“Substantial similarity is an elusive concept.”); see also *Peter Pan Fabrics, Inc. v. Martin Weiner Corp.*, 274 F.2d 487, 489 (2d Cir. 1960) (L. Hand, J.) (noting that the determination must “inevitably be *ad hoc*”).

⁴⁹ See 4 NIMMER & NIMMER, *supra* note 42, § 13.03[A][1], at 13-36.

⁵⁰ *Id.* § 13.03[A][2].

fortunately is a question usually reserved for the fair use inquiry.⁵¹ Consequently, courts usually focus on whether what the defendant took was of significant value to the plaintiff's (though not the defendant's) work in determining whether to characterize the copying as substantial.

What should be most apparent from these tests, though, is that the substantial similarity test always involves comparing the *works themselves*.⁵² To the limited extent that it looks to the defendant's use or purpose, it does so exclusively to compare the components of the two similar works.⁵³ Nowhere does it look to the *plaintiff's* purpose or intent in creating the work to elucidate a possible incentive and compare it in turn to the defendant's. Thus, while it relates the defendant's (infringing) work to the plaintiff's protected one, any inquiry into copyright's overall purpose (generally or specifically) is considered altogether extraneous.

2. *Fair Use*. — Questions of *purpose* are ordinarily understood as being a part of the fair use inquiry. Using a list of four statutorily delineated nondispositive factors, courts have significant leeway to conclude that a defendant's use of the copyrighted work is insufficiently harmful to the plaintiff's interests.⁵⁴ While the fair use inquiry was originally meant to focus on parties' purposes in using the work, in practice it too places large reliance on the amount and significance of the defendant's copying, with the result that an independent substantial similarity requirement often becomes superfluous or subsumed within the fair use inquiry.

Further, even as a recognized limit on a creator's property interest in the expression, fair use exhibits several structural infirmities. Perhaps the most important of these lies in the fact that it is an "affirmative defense," meaning that the burden is placed on the defendant to prove that his use satisfies some or all of the statutory requirements.⁵⁵ This is unlike even the rule of substantial similarity, which, as an element of the infringement inquiry, is a recognized part of the plaintiff's burden. The doctrine thus works to limit the copyright grant by de-

⁵¹ *Id.* at 13-54. He notes that, as a consequence, the line between the two requirements often gets blurred. *But see* Nelson v. PRN Prods., Inc., 873 F.2d 1141, 1143 (8th Cir. 1989) (rejecting an attempt to conflate the two and alter the burden of proof).

⁵² *See* OSTERBERG & OSTERBERG, *supra* note 46, § 2:1, at 2-1 (observing that substantial similarity always entails a "comparison of the works").

⁵³ The substantial similarity requirement is applied even to derivative works, which by their very nature involve a different purpose, pointing to the general irrelevance of the purpose and use to which the work is put. *See id.* § 15:1, at 15-1, 15-2 n.2.

⁵⁴ *See* 17 U.S.C. § 107 (2006). In general terms the four factors are: (1) the purpose and character of the defendant's use; (2) the nature of the protected work; (3) the amount and substantiality of the portion of the work used; and (4) the impact of the defendant's actions on the actual and potential market for the protected work. *Id.*

⁵⁵ 3 NIMMER & NIMMER, *supra* note 42, § 12.11[F].

pending entirely on the defendant's ability to convince a court that his activities are unlikely to impact a creator's otherwise protected interest. The copyright owner is thus deemed *entitled* to internalize all possible benefits, until the fair use determination concludes otherwise.⁵⁶ In focusing on this presumptive entitlement by itself, fair use does very little in practice to link the defendant's actions (that is, copying) with the creator's original incentive.

While fair use is today codified in the Copyright Act,⁵⁷ its intrinsic open-endedness has resulted in few general principles being discernible in both its theory and its practice. Courts have characterized fair use as the "most troublesome [doctrine] in the whole law of copyright"⁵⁸ and as "defy[ing] definition."⁵⁹ Yet, a few specific formulations stand out that might be thought to have some connection to copyright's incentive structure.

(a) *Transformative Use or Purpose*. — Since the first part of the fair use test revolves around the "purpose" for which the defendant uses the protected work,⁶⁰ some have suggested that courts should look beyond just the binary distinction between the commercial and non-commercial nature of the defendant's use to answer this question. The transformative use test requires courts to examine whether a use complained of is *transformative*, in its being "productive" and "employ[ing] the [protected] matter in a different manner or for a different purpose from the original."⁶¹ Under this approach, courts are to see if the defendant's use adds value to the plaintiff's original use — value being understood outside of its purely commercial sense.⁶²

At first glance, one might see "transformative use" as having some connection to creator incentives, especially in its reliance on parties' purposes in using the work. If a defendant's use is so different (that is,

⁵⁶ Thus, if the defendant were not to raise the defense, courts would operate on the assumption that the plaintiff is entitled to control the market in which the defendant is operating. For a recent example, see *Twentieth Century Fox Film Corp. v. Cablevision Systems Corp.*, 478 F. Supp. 2d 607 (S.D.N.Y. 2007). There, the defendant agreed not to raise the defense of fair use, *id.* at 616, with the consequence that the court merely had to conclude that the defendants had copied or performed the plaintiff's work. See *id.* at 616, 622.

⁵⁷ Interestingly, fair use originated as a common law doctrine, see *Folsom v. Marsh*, 9 F. Cas. 342 (1841), and was codified in the 1976 Copyright Act, 17 U.S.C. § 107 (2006).

⁵⁸ *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661, 662 (2d Cir. 1939); see also *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 475 (Blackmun, J., dissenting).

⁵⁹ *Princeton Univ. Press v. Mich. Document Servs., Inc.*, 99 F.3d 1381, 1392 (6th Cir. 1996) (quoting *Time Inc. v. Bernard Geis Assocs.*, 293 F. Supp. 130, 144 (S.D.N.Y. 1968)) (internal quotation mark omitted).

⁶⁰ 17 U.S.C. § 107(1).

⁶¹ Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1111 (1990).

⁶² *Id.* The Supreme Court endorsed Judge Leval's test in *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994), drawing a distinction between superseding and transformative uses of a work based on market substitution. See generally Christopher S. Yoo, *Copyright and Public Good Economics: A Misunderstood Relation*, 155 U. PA. L. REV. 635, 711–12 (2007).

transformative) from the plaintiff's, one might think it illogical to conclude that the possibility of controlling it was any part of the plaintiff's ex ante incentive. In reality, though, the existence of a transformative purpose is only ever understood *through* the content and never as an independent variable.⁶³ Thus, for uses that do not directly interact with the substantive content of the work (by either altering it directly, critiquing or commenting on it, or summarizing it), the transformative use test becomes somewhat meaningless.⁶⁴ Uses that involve converting a work from one format to another (regardless of what this entails),⁶⁵ or that employ large portions of it within a broader business model (for example Google's Library Project⁶⁶), are unlikely to satisfy even the transformative use standard.⁶⁷

⁶³ The Second Circuit's decision in *Castle Rock Entertainment v. Carol Publishing Group, Inc.*, 150 F.3d 132 (2d Cir. 1998), is aptly illustrative of this trend. In concluding that the defendant's use of the protected work, which involved creating an aptitude test centering around a well-known television series, was not a form of transformative use, the court concluded that the defendant had failed to discharge its burden of showing that its use involved a significant "transformative purpose." *Id.* at 143. Without specifying what a legitimate transformative purpose entailed, the court concluded that since the defendant's work was substantially similar to the plaintiff's and had only "minimally alter[ed]" it, there was no legitimate transformative purpose. *Id.* The purpose, in other words, was to be examined via the content. See Matt Williams, *Recent Second Circuit Opinions Indicate that Google's Library Project Is Not Transformative*, 25 CARDOZO ARTS & ENT. L.J. 303, 318 (2007) (arguing that the Supreme Court's decision in *Campbell* is necessarily restricted to such an examination).

⁶⁴ This conclusion derives from the Court's emphasis in *Campbell* on the fact that the test is whether the defendant creates a "new work [that] is 'transformative,'" by "altering the first with new expression, meaning, or message." *Campbell*, 510 U.S. at 579 (quoting Leval, *supra* note 61, at 1111); see also Stadler, *supra* note 11, at 906-07 (noting how the *Campbell* Court intended the standard to apply only when a defendant "takes expression from a copyrighted work and adds expression of her own"); Williams, *supra* note 63, at 319-30. Additionally, cases that have found the standard to have been satisfied seem to emphasize this fact. See *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006); *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605 (2d Cir. 2006).

Two recent decisions of the Ninth Circuit, however, seem to have glossed over this requirement altogether. It is not clear that they apply the test as formulated in *Campbell*. See *Perfect 10, Inc. v. Amazon.com, Inc.*, 487 F.3d 701 (9th Cir. 2007); *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003); see also 4 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 10:21, at 10-79 n.33 (2008) (characterizing the *Kelly* holding as "novel" and its reliance on public benefit as part of the transformative use test as "perplexing"); Justin Hughes, *Size Matters (or Should) in Copyright Law*, 74 FORDHAM L. REV. 575, 619 n.254 (2005) (noting that the *Kelly* decision "sits uneasily" with the Supreme Court's interpretation of "transformative"); Williams, *supra* note 63, at 317-19 (characterizing the *Kelly* case as a "misapplication").

⁶⁵ Thus, translations of a work from one language to another have been held insufficient to meet the standard. See, e.g., *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, 166 F.3d 65, 72 (2d Cir. 1999). Converting a work from one media format to another is considered equally nontransformative. See, e.g., *Infinity Broadcast Corp. v. Kirkwood*, 150 F.3d 104, 108 (2d Cir. 1998); see also Hughes, *supra* note 64, at 619 n.254 ("[I]t is the work, not the distribution mechanism, that needs to be transformative.").

⁶⁶ See generally Jonathan Band, *The Google Library Project: Both Sides of the Story*, 1 PLAGIARY 1, 3-7 (2007) (describing Google's fair use argument in the actual litigation).

⁶⁷ See Williams, *supra* note 63, at 330-32.

Transformative use, as it is understood today, does nothing to connect fair use to a creator's incentive. The overbearing emphasis placed on the work itself, and the rendering of the "purpose" element of the test practically meaningless, aptly reflect this.

(b) *Market Failure*. — The second and arguably more influential attempt to give the fair use doctrine a rational basis employs an economic model of market failure and is commonly associated with the work of Professor Wendy Gordon.⁶⁸ In this conception, the fair use doctrine exists exclusively to remedy situations of market failure.⁶⁹

Fair use, in this formulation, is to be permitted by courts only when (1) the existence of a market failure is shown; (2) a defendant's access to (and use of) the work is socially desirable; and, most important for our purposes, (3) it would not interfere substantially with the plaintiff's original incentive.⁷⁰ On the face of it, the market failure model appears to relate fair use to creators' incentives in its third requirement. On closer analysis, though, it does not. Much like its assumption about the creator's original entitlement, the model starts from the assumption that a creator's incentive lies in unfettered control over *all possible* uses and that anything that detracts from such control is necessarily an interference with that incentive. The creator's entitlement is thus thought to consist of all market-based uses of a work; anything short of that is presumed to be an insufficient inducement. Yet the market failure model does not give us a basis for this assumption, except in terms of a general preference for authors.⁷¹ The market failure model, then, does little more than refer to the potential impact that a finding of noninfringement might have on the incentive, and does little to tell us what the contours of that incentive are.

(c) *Time-based Proposals*. — More recently, others have argued that a commitment to copyright's incentive structure necessitates calibrating the fair use analysis to fluctuations in the market value for a

⁶⁸ See Wendy J. Gordon, *Fair Use As Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600 (1982) [hereinafter Gordon, *Fair Use*]. The dissenting opinion in *Sony Corp.* (arguing that the defendant's use was not fair use) relies on Gordon's article. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 478 (1984) (Blackmun, J., dissenting). More recently, Gordon has clarified her position. See Wendy J. Gordon, *Market Failure and Intellectual Property: A Response to Professor Lunney*, 82 B.U. L. REV. 1031 (2002).

⁶⁹ Gordon, *Fair Use*, *supra* note 68, at 1614–15; Robin A. Moore, Note, *Fair Use and Innovation Policy*, 82 N.Y.U. L. REV. 944, 950 (2007).

⁷⁰ Gordon, *Fair Use*, *supra* note 68, at 1614.

⁷¹ The following is perhaps illustrative:

New technologies will make certain copyrighted works more valuable If copyright protection is denied because of an otherwise curable market failure, then the additional revenues that would have flowed from the new technological use will not appear. If the authors' revenues fail to reflect the additional value that new technology gives to such works, then insufficient resources may be drawn into their creation.

Id. at 1621.

creative work across its lifespan.⁷² Professor Justin Hughes, for instance, notes that the fair use analysis needs to look to the present value of a work at the time the decision was made to invest into its creation or distribution.⁷³ Hughes' argument recognizes that fair use in its current iteration does absolutely nothing to connect a creator's entitlement to the ex ante incentive. All the same, his proposal would do no more than have courts be more accepting of fair use arguments as a work grows older, rather than have them concretely adhere to the idea of creator incentives in constructing the initial entitlement.⁷⁴ His solution thus does not quite force copyright to be "true to [its] ex ante incentive structure," as he claims it should.⁷⁵

(d) *Limiting the Elusive Fourth Factor.* — Perhaps more importantly, though, courts too have occasionally tried to understand fair use as a purpose-driven limit on creators' entitlement. Yet, this purpose has never directly been tied to a creator's ex ante incentive. In the context of the fourth statutory fair use factor, which requires identifying a potential market for the plaintiff's work and the impact of the defendant's use on that market,⁷⁶ plaintiffs often seek to argue that their market entitlement includes a market for licenses to use the work.⁷⁷ In this construction, every use of the work by the defendant has a substitutive effect on the plaintiff's market — for even if the plaintiff's use is not in direct competition with the defendant's, the plaintiff's ability to license that use certainly is.⁷⁸

To avoid this circularity, courts have occasionally observed that the market inquiry needs to be limited to "traditional, reasonable, or likely to be developed" markets for the work.⁷⁹ All the same, without an

⁷² See Hughes, *supra* note 18, at 778. A somewhat more elaborate version of the proposal was made around the same time by Professor Joseph Liu. See Liu, *supra* note 18. Yet, unlike Hughes, Liu bases his proposal not on the need to bring copyright doctrine closer to its theory of incentives, but rather on the problems associated with the extension of copyright's term of protection. *Id.* at 411–12 & n.10 (noting this difference).

⁷³ Hughes, *supra* note 18, at 782–83.

⁷⁴ *Id.* at 778.

⁷⁵ *Id.* at 782.

⁷⁶ See 17 U.S.C. § 107(4) (2006) (listing as a factor for fair use "the effect of the use upon the potential market for or value of the copyrighted work").

⁷⁷ See, e.g., *Ringgold v. Black Entm't Television, Inc.*, 126 F.3d 70, 81 (2d Cir. 1997); *Princeton Univ. Press v. Mich. Document Servs., Inc.*, 99 F.3d 1381, 1388 (6th Cir. 1996); *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 929–30 (2d Cir. 1994).

⁷⁸ For more on this circularity problem, see 4 NIMMER & NIMMER, *supra* note 42, § 13.05[A][4], at 13-196 to -198; Matthew Africa, *The Misuse of Licensing Evidence in Fair Use Analysis: New Technologies, New Markets, and the Courts*, 88 CAL. L. REV. 1145, 1160 (2000); Fisher, *supra* note 23, at 1671; Mark Lemley, *Should a Licensing Market Require Licensing?*, LAW & CONTEMP. PROBS., Spring 2007, at 185, 190; Loren, *supra* note 11, at 38–41; Lunney, *supra* note 11, at 1021; and Stadler, *supra* note 11, at 903–04.

⁷⁹ *Am. Geophysical Union*, 60 F.3d at 930; see also *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 568 (1985) (using a similar "normal market" criterion).

identifiable basis by which to identify a market as traditional or reasonable, the limit becomes meaningless. *How* and *when* should this determination be made? Courts have thus based the determination on plaintiffs' post-creation ability, motive, interest, or expectation to enter a certain market — but never on their *ex ante* incentive in creating the work, which is the inducement that copyright is meant to be about. Unless “traditional” or “reasonable” are related back to the time of creation — the point when the incentive to create is meant to operate — they bear little connection to the idea of creator incentives.⁸⁰

Fair use in its myriad formulations, both judicial and academic, thus remains a weak basis by which to limit copyright by reference to its underlying theory of incentives. Indeed, the complexity and incoherence that its jurisprudence seems to have generated might be enough reason to look elsewhere.

C. *The Social Costs of Copyright Windfalls*

To reiterate, because there exists no independent basis by which courts can relate copyright's entitlement structure to its underlying purpose, markets that use the work in ways that are unlikely to have formed a significant part of the creator's incentive in creating it are nonetheless deemed part of the creator's exclusionary entitlement. Uses for a work that are either temporally or causally disconnected from the creator's actions inevitably then get attributed and allocated to the creator.

In numerous other contexts, courts and scholars have long characterized as windfalls the unexpected gains and losses that accrue to individuals independent of any possible effort they could have exerted to bring them about.⁸¹ Central to the idea of a windfall is the recognition that the actual value of an event after its occurrence is far in excess of its estimated value before it occurs, such that an individual is unlikely to have been incentivized to bring it about (or avoid it).⁸² Windfalls

⁸⁰ As a historical matter, interestingly, the common law standard seems to have required relating fair use to the time of publication. See *Harper & Row*, 471 U.S. at 550 (“[The] fair use doctrine was predicated on the author's implied consent to ‘reasonable and customary’ use *when he released his work* for public consumption.” (emphasis added)).

⁸¹ See Eric Kades, *Windfalls*, 108 YALE L.J. 1489, 1491 (1999) (defining windfalls as “economic gains independent of work, planning, or other productive activities that society wishes to reward” (emphasis omitted)).

⁸² See Gideon Parchomovsky, Peter Siegelman & Steve Thel, *Of Equal Wrongs and Half Rights*, 82 N.Y.U. L. REV. 738, 756 (2007) (describing windfalls in terms of the perceivable costs and benefits of undertaking an action to bring about or avoid an event). Professors Parchomovsky, Siegelman, and Thel connect their description to tort law's well-known formulation of incentives to take care (that is, the Learned Hand formula). *Id.* at 756 n.66. Thus windfalls represent situations where the costs *C* of bringing about an event causally exceed the expected benefits from the event, measured by the probability of its occurrence *P* multiplied by any gains *G*

thus represent *unincentivized* gains and losses that were neither obtainable nor avoidable *ex ante*. In this sense, then, providing creators with an entitlement beyond what would have incentivized them in the creative process represents a similar windfall.⁸³

Why is this necessarily harmful? As an exclusionary mechanism over an otherwise nonrivalrous resource, copyright is known to impose significant social costs. As noted earlier, it creates both static and dynamic inefficiencies, encourages rent-seeking, and entails costs associated with its enforcement by courts.⁸⁴ In general, these costs are believed to be outweighed by the social benefits that the system produces, in the nature of the inducement to produce creative works of expression, rendering them tolerable.⁸⁵ In relation to windfalls, though, these costs are not necessarily counterbalanced by the incentive to create, since these windfalls represent, by their very nature, unincentivized gains. To be sure, windfalls do occur in other contexts and are very often tolerated when they are thought unlikely to interfere significantly with an institution's overall goals and purposes.⁸⁶

In practical terms, copyright windfalls allow creators to engage in monopolistic pricing in new markets that are unlikely to have formed a crucial part of their incentives in creating the work. In addition, in relation to new uses and later-developed technologies, these windfalls give creators control over markets that they clearly are not best positioned to develop. Thus, providing creators with control over new mediums of distribution⁸⁷ or new devices that use their creations⁸⁸ (both of which are usually developed by third parties) does little more than actively facilitate a potential holdout, raising the transaction costs

from the event, in the *ex ante* world. $C_{ex\ ante} > G \cdot P$. The expected benefits are therefore insufficient *ex ante* to independently generate an incentive to bring about the event causally.

⁸³ Indeed, in *Mills Music, Inc. v. Snyder*, 469 U.S. 153 (1985), a dissenting minority of four justices made the exact same argument. *Id.* at 187–88 (White, J., dissenting). The Court there was concerned with the allocation of royalties between an author and a publisher following the partial termination of a license. The work had been created and licensed well in advance of the Copyright Act of 1976, which extended the term of protection by an additional period. *Id.* Consequently, the parties could not have acted in “reliance” on the additional benefits since they were not anticipated, and the gains thus represented a “windfall” that needed to be allocated. *Id.* at 188.

⁸⁴ See Wendy J. Gordon & Robert G. Bone, *Copyright*, in 2 *ENCYCLOPEDIA OF LAW AND ECONOMICS* 189, 194–96 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 *TEX. L. REV.* 1031, 1058–59 (2005) (elaborating on these costs).

⁸⁵ See William W. Fisher III, *Property and Contract on the Internet*, 73 *CHI.-KENT L. REV.* 1203, 1249 (1998).

⁸⁶ See Kades, *supra* note 81, at 1521.

⁸⁷ See, e.g., *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394 (1974); *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968); see also Tim Wu, *Copyright's Communications Policy*, 103 *MICH. L. REV.* 278, 279 (2004).

⁸⁸ See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

for developers of new media and devices and stifling innovation in the process.

III. FORESEEABILITY AND LIMITS TO INCENTIVES

If copyright is to be true to its theory of incentives, it needs a doctrinal device that limits its grant of exclusivity by reference to the ex ante incentive that it is meant to generate. In a host of other areas, the common law employs incentives to produce behavioral modification among individuals, and in the process actively employs a device to objectively shape its incentive structure and balance its ex ante purpose against its ex post effects: foreseeability. Foreseeability is commonly understood as “[t]he quality of being reasonably anticipatable.”⁸⁹ In the common law, however, courts use it to identify the point beyond which the possibility of an entitlement or liability accruing is unlikely to have influenced an actor’s ex ante behavior, thereby rendering the occurrence unforeseeable — or, a windfall. Windfalls thus represent unincorporated gains and losses, and the law uses foreseeability to dislodge them from the liability or entitlement determination. Foreseeability is thus likely to provide copyright law with a logical basis by which to limit its grant of exclusivity by reference to the idea of incentives.

A. *Foreseeability and the Common Law*

Foreseeability provides courts with a basis on which to mark the outer boundaries of liability in different contexts, by differentiating between events that were likely to have been anticipated by individuals and those that were not. It is worth emphasizing, though, that foreseeability adds little normative content on its own. In other words, the reasons *why* only events or outcomes that could have been anticipated ought to be attributed to an actor as part of the liability or entitlement determination remain external to the idea of foreseeability itself. They derive instead from the different policies and principles underlying the legal regime in question.

Across different areas of the common law, foreseeability does exhibit one important functional similarity. This similarity relates to the common law’s use of economic incentives to regulate future behavior. While the common law is concerned with the allocation of losses arising from an event, its basis for doing so is at the same time forward-looking.⁹⁰ It thus attempts additionally to induce loss-avoiding (or

⁸⁹ BLACK’S LAW DICTIONARY 660 (7th ed. 1999).

⁹⁰ Some scholars refer to this process as the “social engineering” function of the common law. See Howard A. Latin, *Problem-Solving Behavior and Theories of Tort Liability*, 73 CAL. L. REV. 677, 677 n.2 (1985). Others refer to it as an issue of incentives. See POLINSKY, *supra* note 10, at

cost-minimizing) behavior by similarly situated actors in the future.⁹¹ The possibility of liability for harm, or indeed the absence of the same, is thought to provide rational individuals with an incentive to modify their behavior *ex ante*, that is, prior to the occurrence of the chain of events that would result in the harm. The same holds true for benefits. The likelihood of a benefit-maximizing entitlement, the common law assumes, will lead actors to modify their behavior in such a way as to be able to claim the entitlement.

Interestingly, though, the behavioral modification that the law expects as a result of this incentive effect is not infinite. Foreseeability comes into play here. The law recognizes that given what individuals are cognitively capable of factoring into their *ex ante* decisionmaking, events that are incapable of being anticipated — and consequently the costs and benefits associated with them — are likely to have little influence on their decisions. It thus characterizes them as unforeseeable, in the recognition that they form no part of individuals' *ex ante* incentives for action.

What implicitly seems to motivate the common law's deployment of foreseeability across different areas, however, is a common understanding of the way in which individuals process information under conditions of extreme uncertainty. This understanding is connected to the idea of "bounded rationality."⁹² Bounded rationality is today commonly associated with the field of behavioral economics and is used there to refer to the empirical task of identifying various cognitive shortcuts or biases that individuals use in their decisionmaking — shortcuts that often result in inefficient (or suboptimal) outcomes.⁹³ Independent of its use there, however, bounded rationality also refers to a basis by which to comprehend the ways in which individuals behave in situations of complexity and uncertainty. Its use in this con-

130; Marcel Kahan, *Causation and Incentives To Take Care Under the Negligence Rule*, 18 J. LEGAL STUD. 427 (1989).

⁹¹ See Latin, *supra* note 90, at 677 (laying out the basic postulates of the idea of behavioral modification).

⁹² Professor Herbert Simon is credited with developing the idea of bounded rationality, beginning in the 1950s. See Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99 (1955); Herbert A. Simon, *Human Nature in Politics: The Dialogue of Psychology with Political Science*, 79 AM. POL. SCI. REV. 293 (1985); Herbert A. Simon, *On the Behavioral and Rational Foundations of Economic Dynamics*, 5 J. ECON. BEHAV. & ORG. 35 (1984); Herbert A. Simon, *Rationality in Psychology and Economics*, 59 J. BUS. 5209 (1986).

⁹³ See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124 (1974). For work extending these ideas to the analysis of law, see Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051 (2000); and Thomas S. Ulen, *The Growing Pains of Behavioral Law and Economics*, 51 VAND. L. REV. 1747 (1998). See also RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008).

text is seen most prominently in the economics of organization, also referred to as transaction cost economics (TCE), beginning with the work of Professor Oliver Williamson.⁹⁴ Here, the idea operates as a descriptive (rather than empirical) claim about the way in which individuals do and do not process information. Since individuals are incapable of predicting all future contingencies associated with their actions, they are believed to act in ways that reflect this limitation (referred to by some as “predictive uncertainty”⁹⁵). Predictive uncertainty is especially applicable when events are highly complex, or indeed stochastic.⁹⁶ Organizational economics uses this idea as a premise by which to understand all contracting as necessarily incomplete, as far as future contingencies go.⁹⁷

More importantly, though, what remains distinctive about the use of bounded rationality in this organizational context is that here it remains perfectly compatible with the basic idea that actors are indeed utility maximizers. The inability to foresee (or predict) the future is taken to be a transaction cost on which the system attempts to economize.⁹⁸ The only modification it thus makes is to say that individuals have limited information in situations of uncertainty or complexity, causing them in turn to economize with this limited information rather than acquire additional information to eliminate this uncertainty. The distinction between the idea here and its use in the modern context of behavioral economics is that the latter is concerned directly with “deci-

⁹⁴ See OLIVER WILLIAMSON, ANTITRUST ECONOMICS: MERGERS, CONTRACTING, AND STRATEGIC BEHAVIOR 74–78 (1987); OLIVER E. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS 21–26 (1975); Oliver E. Williamson, *The New Institutional Economics: Taking Stock, Looking Ahead*, 38 J. ECON. LITERATURE 595, 600 (2000) (“There is close to unanimity within the [new institutional economics] on the idea of limited cognitive competence — often referred to as bounded rationality.”).

⁹⁵ For uses of this term in different contexts deriving from bounded rationality, see RICHARD R. NELSON & SIDNEY G. WINTER, AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE 88 (1982); Adam B. Badawi, *Interpretive Preferences and the Limits of the New Formalism*, 6 BERKELEY BUS. L.J. (forthcoming 2009) (manuscript at 9, on file with the Harvard Law School Library); and Tomas Hellström & Merle Jacob, *Uncertainty and Values: The Case of Environmental Impact Assessment*, 9 KNOWLEDGE & POL’Y 70, 76 (1996).

⁹⁶ Indeed, its use in this context has spawned a secondary body of literature attempting to understand the role it plays in the overall analysis. See, e.g., John Conlisk, *Why Bounded Rationality?*, 34 J. ECON. LITERATURE 669 (1996); Nicolai J. Foss, *Bounded Rationality in the Economics of Organization: Present Use and (Some) Future Possibilities*, 5 J. MGMT. & GOVERNANCE 401 (2001); Oliver Hart, *Is “Bounded Rationality” an Important Element of a Theory of Institutions?*, 146 J. INSTITUTIONAL & THEORETICAL ECON. 696 (1990). Some scholars additionally attempt to distinguish between bounded rationality and “indeterminacy,” the situation where multiple solutions to a single problem exist. See, e.g., Roy Radner, *Bounded Rationality, Indeterminacy, and the Theory of the Firm*, 106 ECON. J. 1360 (1996).

⁹⁷ See, e.g., Oliver Hart & John Moore, *Foundations of Incomplete Contracts*, 66 REV. ECON. STUD. 115 (1999); Eric Maskin & Jean Tirole, *Unforeseen Contingencies and Incomplete Contracts*, 66 REV. ECON. STUD. 83 (1999).

⁹⁸ See Maskin & Tirole, *supra* note 97, at 83–84.

sion processes” — the ways in which individuals react to contingencies — while the former is directed at modeling “governance structures” and economizing on costs as part of that process.⁹⁹ In the latter context, it thus functions principally as an explanatory vehicle internal to the standard economic account of the law rather than as an empirical assertion about individuals being irrational in their behavior.¹⁰⁰

It is in this second, limited context — via the idea of predictive uncertainty — that foreseeability connects to bounded rationality. It instantiates the idea across two (often interconnected) dimensions: one *causal*, and the other *temporal*. Individuals are thought incapable of anticipating all the consequences that their actions cause, especially consequences that extend far into the future. Foreseeability thus requires a court to evaluate future uncertain events as they would have occurred to the individual at the time the decision to act was made and to classify those events and outcomes into (1) those that were capable of being causally and temporally anticipated at the time (foreseeable) and (2) those that were not (unforeseeable). The law then factors only those likely to be anticipated during the decisionmaking process into the liability or entitlement determination. This general framework characterizes the common law’s use of foreseeability across numerous areas.

1. *Tort Law: Negligence.* — Foreseeability is perhaps most prominently used in the area of tort law, specifically in the context of liability for negligence. Foreseeability is used to determine the existence of a duty of care to the plaintiff, or alternatively the existence of proximate causation between the defendant’s actions and the harm caused.¹⁰¹ In both contexts, it helps courts draw an outer limit to causal attribution.

⁹⁹ See OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 46 (1985).

¹⁰⁰ Indeed, Williamson notes that the use of bounded rationality in the organizational context actually “enlarges . . . the scope for rationality analysis” in the traditional economic account. Oliver E. Williamson, *Assessing Contract*, 1 J.L. ECON. & ORG. 177, 180 (1985). Some refer to this as the “thin” conception of bounded rationality, as opposed to its use as a “thick” conception in the world of behavioral economics. See Nicolai J. Foss, *Bounded Rationality in the Economics of Organization: “Much Cited and Little Used,”* 24 J. ECON. PSYCH. 245, 246 (2003); Foss, *supra* note 96, at 402. Indeed, some believe that since it does little independent work in the analysis, its use is somewhat unnecessary. See Hart, *supra* note 96, at 700–01. Yet, as its advocates continue to emphasize, it provides rhetorical support to an otherwise intuitive part of the basic model. Foss, *supra* note 96, at 406. It is in principally the same vein that I attempt to connect it to the idea of foreseeability. Additionally, scholars in the tradition of organizational economics attempting to model bounded rationality in legal terms have long made this connection in the literature. See Paul L. Joskow, *Commercial Impossibility, the Uranium Market and the Westinghouse Case*, 6 J. LEGAL STUD. 119, 157 (1977) (“The foreseeability requirement may only make sense if we introduce the concept of ‘bounded rationality.’”).

¹⁰¹ See W. Jonathan Cardi, *Purging Foreseeability*, 58 VAND. L. REV. 739, 747–50, 755–67 (2005).

In the context of the duty of care, courts ask whether the plaintiff in question was within the scope of the duty imposed on the defendant. They limit the duty of care owed by reference to the consequences that were foreseeable at the time the risk was created.¹⁰² Proximate cause, on the other hand, attempts to connect the defendant's conduct to the plaintiff's injury by eliminating from the liability calculus consequences whose attribution to the defendant would be impractical or unjust.¹⁰³ Foreseeability reappears here, when courts assert that proximate causation does not exist because the injury that occurred was not foreseeable to the defendant.¹⁰⁴

In both contexts, foreseeability helps courts "sort[] consequences into the set of those payable by the tortfeasor, and the set of those found too distant . . . to be attributed to the tortfeasor."¹⁰⁵ In the absence of this sorting, tort liability would be unlimited. Individuals would be liable for outcomes that could be attributed to them through an unending chain of factual events.¹⁰⁶ Foreseeability limits such absurdities.

Through a system of liability, tort law attempts to create an ex ante incentive for individuals to take adequate precautionary measures and exercise due care when their actions entail risks. When the cost of liability (multiplied by the probability of its occurrence) exceeds the cost of precaution or prevention, it is thought to generate an incentive for due care.¹⁰⁷ Unforeseeable consequences, disastrous as they may be, are characterized by low probabilities of occurrence and possibly additional costs associated with detecting, predicting, and guarding against them.¹⁰⁸ Liability for unforeseeable consequences is thus unlikely to create an incentive for greater care, because rational individuals will

¹⁰² See, e.g., *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99 (N.Y. 1928).

¹⁰³ See DAN B. DOBBS, *THE LAW OF TORTS* § 180, at 443 (2001); W. PAGE KEETON ET AL., *PROSSER AND KEETON ON THE LAW OF TORTS* § 41, at 264 (5th ed. 1984) ("'Proximate Cause' — in itself an unfortunate term — is merely the limitation which the courts have placed upon the actor's responsibility for the consequences of the actor's conduct. . . . Some boundary must be set to liability for the consequences of any act, upon the basis of some social idea of justice or policy.").

¹⁰⁴ See, e.g., *Ballard v. Uribe*, 715 P.2d 624, 628 n.6 (Cal. 1986) (en banc); *Neering v. Ill. Cent. R.R. Co.*, 50 N.E.2d 497, 503 (Ill. 1943); *Osborne v. Atl. Ice & Coal Co.*, 177 S.E. 796, 796 (N.C. 1935); *Mudrich v. Standard Oil Co.*, 90 N.E.2d 859, 863 (Ohio 1950); *Read v. Scott Fetzer Co.*, 990 S.W.2d 732, 737 (Tex. 1998); *Doe v. Boys Clubs of Greater Dallas, Inc.*, 907 S.W.2d 472, 478 (Tex. 1995).

¹⁰⁵ Saul Levmore, *The Wagon Mound Cases: Foreseeability, Causation, and Mrs. Palsgraf*, in *TORTS STORIES* 129, 132 (Robert L. Rabin & Stephen D. Sugarman eds., 2003).

¹⁰⁶ See KEETON ET AL., *supra* note 103, § 41, at 264 (noting that "the consequences of an act go forward to eternity, and the causes of an event go back to the dawn of human events, and beyond," so that the lack of a limiting rule "would result in infinite liability for all wrongful acts").

¹⁰⁷ See *id.* § 4, at 25–26.

¹⁰⁸ For an elaboration of this idea, see Mark F. Grady, *Proximate Cause and the Law of Negligence*, 69 IOWA L. REV. 363, 385–91 (1984); and Benjamin C. Zipursky, *Rights, Wrongs, and Recourse in the Law of Torts*, 51 VAND. L. REV. 1, 46–47 (1998).

not factor them into their risk-creating activities.¹⁰⁹ Allowing recovery for them would result in a costly transfer payment rather than a beneficial allocative effect.¹¹⁰ Negligence law therefore eliminates unforeseeable consequences from the calculus. This omission is attributed to the limitations inherent in human predictive capabilities, which in turn derive from the prohibitive costs associated with the process of acquiring information about these events. Foreseeability thus ensures that a defendant is expected neither to have perfect information nor to remain perfectly ignorant, but instead to be in possession of the amount of information that he is capable of possessing and is likely to use.¹¹¹

2. *Contract Law: Consequential Damages and Impossibility.* — Contract law employs foreseeability in two unrelated contexts: consequential damages and the doctrine of impossibility of performance. Its basis for doing so remains the same in each context.

Consequential damages are understood as damages for those losses that arise not directly from the party's breach, but rather as an indirect consequence of it.¹¹² As a matter of rule, courts limit consequential damages to those losses that were capable of being "in the contemplation of both parties, at the time they made the contract, as the probable result of the breach of it."¹¹³ Consequential losses are thus recoverable only if they were foreseeable to both parties when the contract was actually made.¹¹⁴

The idea here is that unless a party is made aware of grounds for liability beyond direct losses, that party is unlikely to have bargained for such liability, and consequently, the consideration underlying the contract is unlikely to reflect the additional risk involved. Since liability in contract law is meant to be tied to the actual bargain — the basis of the contract — courts look to foreseeability at the time of the bargain. Unless a contracting party was likely to have foreseen a consequence, she is unlikely to have assumed the risk for it as part of the bargain.

Additionally, contract law exempts one or both parties from performance of the contract when an unanticipated supervening event

¹⁰⁹ See WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* 246–47 (1987); Grady, *supra* note 108, at 388; Steven Shavell, *Liability and the Incentive To Obtain Information About Risk*, 21 J. LEGAL STUD. 259 (1992).

¹¹⁰ See LANDES & POSNER, *supra* note 109, at 247.

¹¹¹ Grady, *supra* note 108, at 388–89.

¹¹² See Melvin Aron Eisenberg, *The Principle of Hadley v. Baxendale*, 80 CAL. L. REV. 563, 565 (1992).

¹¹³ *Hadley v. Baxendale*, 9 Ex. 341, 156 Eng. Rep. 145, 151 (1854).

¹¹⁴ See Jeffrey M. Perloff, *Breach of Contract and the Foreseeability Doctrine of Hadley v. Baxendale*, 10 J. LEGAL STUD. 39 (1981).

renders performance impossible or commercially impracticable.¹¹⁵ Courts here often employ the test of foreseeability to determine (objectively) whether an event was capable of being anticipated in order to excuse nonperformance.¹¹⁶ The foreseeability test thus holds a party to “the terms of a contract unless her performance is rendered impracticable by an event that was unforeseeable at the time the contract was made.”¹¹⁷ The idea here is that it is unobjectionable to have parties incur losses (as a result of nonperformance) arising from consequences they ought to have foreseen and are therefore deemed to have been compensated for.¹¹⁸ Central to the idea is the proposition that unforeseeable risks are unlikely to have formed any part of the contractual bargain, whereas foreseeable ones are likely to have played such a role. Here, unsurprisingly, scholars have long tied the law’s use of foreseeability to its reliance on limited information processing by individuals under conditions of predictive uncertainty (that is, bounded rationality, in the organizational context).¹¹⁹ The law remains reluctant to allow recovery for eventualities and risks that parties are unlikely to have foreseen when entering into a contract.¹²⁰

¹¹⁵ For more on the doctrine and its development, see William Herbert Page, *The Development of the Doctrine of Impossibility of Performance*, 18 MICH. L. REV. 589 (1920); Michelle J. White, *Contract Breach and Contract Discharge Due to Impossibility: A Unified Theory*, 17 J. LEGAL STUD. 353 (1988); John D. Wladis, *Common Law and Uncommon Events: The Development of the Doctrine of Impossibility of Performance in English Contract Law*, 75 GEO. L.J. 1575 (1987); and John D. Wladis, *Impracticability As Risk Allocation: The Effect of Changed Circumstances upon Contract Obligations for the Sale of Goods*, 22 GA. L. REV. 503 (1988).

¹¹⁶ See, e.g., *Waldinger Corp. v. CRS Group Eng’rs, Inc.*, 775 F.2d 781 (7th Cir. 1985); *Lloyd v. Murphy*, 153 P.2d 47 (Cal. 1944); *Farm Credit Bank of St. Louis v. Dorr*, 620 N.E.2d 549, 555–56 (Ill. App. Ct. 1993); *City of Starkville v. 4-County Elec. Power Ass’n*, 819 So.2d 1216, 1223 (Miss. 2002); *Alamance County Bd. of Educ. v. Bobby Murray Chevrolet, Inc.*, 465 S.E.2d 306, 311 (N.C. Ct. App. 1996); *Grady v. Grady*, 504 A.2d 444, 447 (R.I. 1986); see also E. Allan Farnsworth, *Disputes Over Omission in Contracts*, 68 COLUM. L. REV. 860 (1968); Mary Sue Bloomfield, Comment, *The Role of Foreseeability in Allocation of Risk Under U.C.C. 2-615, Excuse by Failure of Presupposed Conditions*, 21 S. TEX. L.J. 441 (1981); Charles G. Brown, Note, *The Doctrine of Impossibility of Performance and the Foreseeability Test*, 6 LOY. U. CHI. L.J. 575 (1975). This test came to be codified in the Uniform Commercial Code. See U.C.C. § 2-615 (2003).

¹¹⁷ John Eloffson, *The Dilemma of Changed Circumstances in Contract Law: An Economic Analysis of the Foreseeability and Superior Risk Bearer Tests*, 30 COLUM. J.L. & SOC. PROBS. 1, 4 (1996).

¹¹⁸ *Id.*

¹¹⁹ See Joskow, *supra* note 100, at 157 (“The foreseeability requirement may only make sense if we introduce the concept of ‘bounded rationality.’”); see also Shirley R. Brener, Comment, *Outgrowing Impossibility: Examining the Impossibility Doctrine in the Wake of Hurricane Katrina*, 56 EMORY L.J. 461, 469, 477–80 (2006); Aaron J. Wright, Note, *Rendered Impracticable: Behavioral Economics and the Impracticability Doctrine*, 26 CARDOZO L. REV. 2183, 2200 (2005).

¹²⁰ See Joskow, *supra* note 100, at 157.

3. *Family Law: Premarital Agreements.* — Courts often treat premarital agreements very differently from other contracts.¹²¹ When it comes to enforcing them, courts routinely examine their actual content for substantive fairness.¹²² As part of this process they often use a foreseeability test, which asks whether the situation upon divorce seems to be one that the parties could have anticipated when they entered into the agreement.¹²³ In situations where parties' circumstances have changed since the agreement was entered into, courts remain reluctant to enforce the agreement.¹²⁴

In many ways the test operates in the exact same way as the doctrine of impossibility, except that foreseeability of the event is now a condition precedent to enforcement, rather than nonenforcement. The driving idea is again that individuals make incomplete predictions — that is, that there exists a limit to the changes to their situations that parties are likely to have contemplated prior to their marriage.¹²⁵

4. *Property Law: Coming to the Nuisance.* — Premised on the principle of temporal priority, the doctrine of coming to the nuisance is used to preclude nuisance actions by plaintiffs who move to a location where a defendant's activities have been going on well before their move.¹²⁶

As part of this inquiry, to determine whether a plaintiff should have been aware of the defendant's prior activities when moving, courts often use a test of foreseeability. They ask if the injury being complained of was foreseeable to the plaintiff at the time of the move, and if answered in the affirmative, weigh this finding against the plaintiff.¹²⁷ Even in situations where the defendant's actions were subsequent to the plaintiff's move, courts disallow the nuisance action when the defendant's activities were unambiguously im-

¹²¹ See generally UNIF. PREMARITAL AGREEMENT ACT § 1(1), 9C U.L.A. 39 (1983); 2 AL-EXANDER LINDEY & LOUIS I. PARLEY, LINDEY AND PARLEY ON SEPARATION AGREEMENTS AND ANTENUPTIAL CONTRACTS § 110.70(2)(d) (2d ed. 2002).

¹²² See Allison A. Marston, Note, *Planning for Love: The Politics of Prenuptial Agreements*, 49 STAN. L. REV. 887, 897–901 (1997).

¹²³ See Karen Servidea, Note, *Reviewing Premarital Agreements To Protect the State's Interest in Marriage*, 91 VA. L. REV. 535, 545 (2005).

¹²⁴ See, e.g., *McKee-Johnson v. Johnson*, 444 N.W.2d 259, 267 (Minn. 1989); *Gant v. Gant*, 329 S.E.2d 106, 115 (W. Va. 1985); *Button v. Button*, 388 N.W.2d 546, 552 (Wis. 1986).

¹²⁵ See Servidea, *supra* note 123, at 547, 549 (referring to this approach as the “bounded-rationality” approach).

¹²⁶ For more on the doctrine, see Roy E. Cordato, *Time Passage and the Economics of Coming to the Nuisance: Reassessing the Coasean Perspective*, 20 CAMPBELL L. REV. 273 (1998); Rohan Pitchford & Christopher M. Snyder, *Coming to the Nuisance: An Economic Analysis from an Incomplete Contracts Perspective*, 19 J.L. ECON. & ORG. 491 (2003); and Donald Wittman, *First Come, First Served: An Economic Analysis of “Coming to the Nuisance,”* 9 J. LEGAL STUD. 557 (1980).

¹²⁷ See RESTATEMENT (SECOND) OF TORTS § 840D (1979) (noting that the preexistence of the nuisance is but one of several factors to be considered, and not by itself a bar to relief).

minent — or, reasonably foreseeable.¹²⁸ This often comes into play in situations where the precise nuisance complained of originated after the plaintiff's move, but where the general category of activities (of which the defendant's nuisance was but one) was known to be in the vicinity.¹²⁹

As with other areas of law discussed, the operating idea here is that reasonably foreseeable consequences ought to be part of an individual's motives for action, while unforeseeable ones simply are not. Consequently, limiting liability for foreseeable nuisances is meant to create an ex ante effect on individuals' moving decisions by forcing them to factor the possibility of such nuisances into their decisions.

5. *Patent Law: Prosecution History Estoppel.* — In patent law, the doctrine of equivalents allows courts in infringement actions to look beyond a patent's exact claims and to enjoin as part of the patent's exclusivity “unimportant and insubstantial changes”¹³⁰ that do nothing more than take a defendant's actions outside the terms of a patent's literal coverage.¹³¹ The rule of prosecution history estoppel in turn places a limit on a patentee's use of the doctrine of equivalents. It applies when a patentee surrenders or narrows a claim during the prosecution process.¹³² The rule then operates as a rule of abandonment, barring the patentee “from later invoking the doctrine of equivalents to recapture the lost ground.”¹³³

In determining how much a patentee surrenders each time a claim is modified, courts have recently come to use foreseeability to differentiate between abandoned and unabandoned equivalents.¹³⁴ As used

¹²⁸ See Wittman, *supra* note 126, at 565. The case of *East St. John's Shingle Co. v. City of Portland*, 246 P.2d 554 (Or. 1952), is illustrative. There, the plaintiff acquired a parcel of land adjoining a slough that was being polluted by the city's sewage system. After moving onto the land, the plaintiff complained that an increase in sewage levels in the slough was interfering with its business and causing a special nuisance to it. The court concluded that since the pollution, its continuance, and its increase were all “reasonably foreseen” by the plaintiff, the claim was barred. *Id.* at 563–64.

¹²⁹ See *Bove v. Donner-Hanna Coke Corp.*, 258 N.Y.S. 229, 233 (App. Div. 1932); *Gau v. Ley*, 38 Ohio Ct. App. 235, 239 (1916); Wittman, *supra* note 126, at 565 n.20.

¹³⁰ *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950).

¹³¹ See *id.* at 607–08.

¹³² See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 30–31 (1997).

¹³³ Douglas Lichtman, *Rethinking Prosecution History Estoppel*, 71 U. CHI. L. REV. 151, 153 (2004).

¹³⁴ For early analyses of this trend, see Matthew J. Conigliaro et al., *Foreseeability in Patent Law*, 16 BERKELEY TECH. L.J. 1045 (2001); and Andrew C. Greenberg & Jeffrey R. Kuester, *The “Palsgrafting” of Patent Law: Foreseeability and the Doctrine of Equivalents*, INTELL. PROP. TODAY, June 1998, at 17. See also *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420 (Fed. Cir. 1997); Michael J. Meurer & Craig Allen Nard, *Invention, Refinement and Patent Claim Scope: A New Perspective on the Doctrine of Equivalents*, 93 GEO. L.J. 1947, 1970 (2005). The test was adopted by the Supreme Court in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002).

now, the rule allows patentees to use the doctrine of equivalents to claim equivalents that were unforeseeable to them when they narrowed their claims, but not those that were foreseeable.¹³⁵ The rationale is that when a patentee could not have foreseen an equivalent, he is unlikely to have abandoned it, whereas a foreseeable equivalent may be deemed consciously abandoned unless expressly claimed. Unforeseeable equivalents are thus unlikely to have been factored into the claim drafting process.

B. Foreseeability and Limits to Behavioral Modification

In each of the areas discussed above, foreseeability performs a similar function. Courts attempt to reconstruct actors' decisionmaking at the time of the triggering event — that is, the event that triggers either the liability or the entitlement. In so doing, courts use foreseeability, either directly or through the test of reasonable foreseeability, to eliminate from the reconstruction certain low-probability outcomes that are unlikely to have formed a significant part of the decisionmaking process. As a functional matter, then, foreseeability limits the behavioral modification that the law expects to induce among actors.

Additionally, foreseeability as used in these different areas of the law entails both a descriptive and a normative dimension. Its descriptive side derives from a belief about human behavior: that individuals do not ordinarily consider events and outcomes of low probability in making decisions. Consequently, the law does not expect its system of incentives and deterrents to extend to these events and outcomes. Its liability structure focuses exclusively on events likely to have formed part of an actor's deliberations and thus capable of legitimate attribution to that actor during the cost-benefit allocation process. In a sense, this descriptive dimension follows from the law's concern with windfalls. Allocating the costs and benefits arising from events that individuals were incapable of anticipating *ex ante* (and therefore avoiding and inducing, respectively) remains incongruent with the idea of *ex post* liability as a system of outcome responsibility.¹³⁶ Thus, holding a defendant liable only for harms that objectively could have been anticipated and deeming a patentee to have abandoned only variations of a patent's claims during the drafting process that could have been pre-

¹³⁵ See *Festo*, 535 U.S. at 738; Lichtman, *supra* note 133, at 154; Richard Warburg et al., *What Territory Is Surrendered?*, 21 BIOTECH. L. REP. 551, 552 (2002).

¹³⁶ Outcome responsibility argues that liability does no more than attribute legal responsibility for specific outcomes to identifiable individuals, as a reflection of the law's basic commitment to human agency and moral authorship of individual actions. See John Gardner, *Obligations and Outcomes in the Law of Torts*, in RELATING TO RESPONSIBILITY: ESSAYS FOR TONY HONORÉ ON HIS EIGHTIETH BIRTHDAY 111 (Peter Cane & John Gardner eds., 2001); Tony Honoré, *Responsibility and Luck*, 104 LAW Q. REV. 530 (1988).

dicted both derive from a common belief that the attribution of outcomes to individuals should conform to the way in which individuals ordinarily perceive the world.¹³⁷

Foreseeability's normative side, on the other hand, relates to the law's forward-looking (or *ex ante*) function. Here, foreseeability tempers the law's model of inducements for future actors by making an entitlement or liability contingent on something being either foreseeable or unforeseeable. It thus encourages actors to acquire, disclose, or limit their information gathering by reference to the foreseeability limit. The descriptive and normative aspects almost always go together, for the latter derives from the former. Nonetheless, bifurcating the two helps shed light on the interaction between foreseeability and the law's incentive structure in each setting.

Foreseeability thus attempts to balance the law's *ex ante* and *ex post* effects. Certain low-probability outcomes are thought incapable of playing a significant role in inducing *ex ante* behavior; when allocating the costs or benefits associated with them one way or the other is thought to produce inefficiencies *ex post*, foreseeability allows courts to disregard them during the calculus. The table that follows attempts to separate the descriptive and normative roles that foreseeability plays in each of the contexts discussed in section A. What it shows is that in each setting foreseeability shapes the law's liability or attribution structure, and at the same time influences individual behavior to conform to the law.

Thus, in different areas of the common law, foreseeability ably instantiates the idea that individuals have limited predictive capabilities that in turn influence their decisionmaking. It does so in recognition of the law's objective of influencing future behavior among actors and eliminating socially inefficient windfall gains and losses.

¹³⁷ Professor Stephen Perry, a well-known proponent of outcome responsibility, connects this to the idea of "avoidability" — that liability should be limited to events and outcomes that might in a sense be considered avoidable *ex ante*. Avoidability, for Perry, involves an agent having the "ability and opportunity to take steps" to avoid the harm "on the basis of what could have been foreseen." Stephen R. Perry, *Responsibility for Outcomes, Risk, and the Law of Torts*, in *PHILOSOPHY AND THE LAW OF TORTS* 72, 91 (Gerald J. Postema ed., 2001). Foreseeability thus plays a major role here, based on the notion of "epistemic probability" — or the idea that individuals base their decisions not on objective assessments of probability, but rather on intersubjective standards of inductive reasoning. *Id.* at 97–98. To impose liability for (that is, to have people internalize the costs or benefits of) events that were not objectively avoidable then becomes a matter of chance, or a windfall, since it bears no connection to the actor's actual behavior.

TABLE 1. FORESEEABILITY AS A DESCRIPTIVE AND NORMATIVE LIMIT

	FORESEEABILITY RULE & POINT OF INQUIRY	DESCRIPTIVE DIMENSION (EX POST)	NORMATIVE DIMENSION (EX ANTE)
TORT LAW: NEGLIGENCE	Defendant's liability limited to harm <i>reasonably foreseeable</i> at the time of action.	Unforeseeable consequences (harms) unlikely to have been part of the decision to act.	Actors should take precautions only against predictable (causally connected) harms.
CONTRACT LAW: CONSEQUENTIAL DAMAGES	Consequential damages limited to losses <i>reasonably foreseeable</i> to parties at the time of contracting.	Unforeseeable losses unlikely to have formed part of the consideration bargained for.	Parties with special information about the possibility of objectively unpredictable losses encouraged to disclose it.
CONTRACT LAW: IMPOSSIBILITY	Performance rendered impossible only if triggering event <i>unforeseeable</i> at the time of contracting.	Unforeseeable contingencies unlikely to be allocated in the contractual consideration.	Risks tied to predictable interferences with performance ought to be allocated in the contractual bargain.
PREMARITAL AGREEMENTS	Agreement enforceable only if state of affairs <i>reasonably foreseeable</i> at the time of agreement.	Unforeseeable contingencies unlikely to have been factored into the terms of the agreement.	Agreement ought to best reflect parties' predictions of their situation at the time of divorce.
COMING TO THE NUISANCE	Nuisance action disallowed if injury <i>foreseeable</i> at the time of relocation.	Possibility of unforeseeable injury unlikely to have been any part of the decision to relocate.	At the time of relocation, a party ought to determine the nature of the locality and predictable events there.
PROSECUTION HISTORY ESTOPPEL	<i>Reasonably foreseeable</i> equivalents deemed abandoned during the patent prosecution process.	Unforeseeable equivalents unlikely to have been anticipated and therefore abandoned.	Patentees ought to pay close attention to predictable variants of abandoned claims during the prosecution process.

IV. FORESEEABILITY IN COPYRIGHT LAW

What might copyright law look like if a test of foreseeability were introduced into its infringement inquiry as a mechanism by which to eliminate any unincorporated benefits (that is, windfalls), thereby balancing the system's ex ante incentive effects against its ex post social costs? This Part attempts to answer that question by proposing a new test of "foreseeable copying" that would require a plaintiff to establish that the defendant's copying was *objectively foreseeable* at the time of creation — the point at which copyright's incentive structure is meant to have influenced a creator's behavior. It would thus place the burden on a plaintiff to establish, in addition to actual copying and substantial similarity, that the defendant's copying was *of a form and for a purpose* foreseeable to a reasonable, informed creator at the time when the work was created. The test would thus operate as part of the entitlement delineation process, rather than as an exception to it (unlike fair use), thereby forcing courts to structure copyright's grant of exclusivity by reference to the outer bounds of a creator's incentive. Thus, in situations where a defendant's form of copying (or use) was not known, in existence, or capable of being anticipated at the time the work was created, the test would limit a plaintiff's claim by acknowledging that the creator's control over this new use (or copying) could not have formed a necessary part of the creator's set of incentives in creating it. This Part outlines in greater detail the shape this test might take.

A. The Foreseeability Limit

If the law is willing to assume in other areas that unforeseeable events are not motivational concerns, it would seem inconsistent with this basic premise to have a system of copyright that assumes otherwise. Unforeseeable uses are *unlikely* to be part of a creator's inducement to create in exactly the same way that unforeseeable consequences are unlikely to be part of an individual's decision whether to act. A test of "foreseeable copying" would operationalize this idea.

In the abstract, foreseeability may appear to be an unworkable idea — one that is likely to either prove indeterminate in practice or interfere significantly with creators' incentives. Gordon, one of the earliest to consider its applicability to copyright, rejects it as a useful device in copyright law, observing that it is likely to present "intractable proof problems" and "dilute economic incentives."¹³⁸ This treatment ignores

¹³⁸ Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutory Impulse*, 78 VA. L. REV. 149, 238 & n.337 (1992) [hereinafter Gordon, *On Owning Information*]. Gordon does not specify what foreseeability might indeed come to mean in the copyright context (specifically given its use elsewhere) and seems to equate foreseeability with the idea of "expected

altogether the nuance with which foreseeability has come to be routinely used as an objective indicator in a host of other areas, and more importantly, the basic idea underlying its use in different contexts: the existence of an outer limit to any expected behavioral modification.

1. *Copyright's Theory of Foreseeability: "Foreseeable Copying."* — Under the current law, copyright protection begins the moment a work is created, with creation being defined as the point when a work, eligible for protection, is fixed in a tangible medium for the first time.¹³⁹ Protection is automatic, with there being no obligation on the creator to comply with any formalities as a prerequisite for protection. The law grants the creator a finite set of exclusive rights in relation to the work and allows the creator to initiate an action for infringement when someone interferes with one of those rights.¹⁴⁰

When the creator (plaintiff) commences an action for infringement against a defendant, the law places the burden on the plaintiff to establish two main elements: (1) ownership of a valid copyright and (2) copying by the defendant of the original (that is, protected) elements.¹⁴¹ To establish ownership, the plaintiff usually has to establish that the work is entitled to protection per the statutory requirements and that he is the valid owner of the rights in it.¹⁴² However, the law requires that the work be registered with the Copyright Office *before* an action for infringement is brought, and this registration serves as

markets," thereby converting it into a subjective test, specific to individual creators. Gordon, *supra* note 14, at 1385 (internal quotation marks omitted); *see also id.* at 1385 nn.192–93; Gordon, *On Owning Information*, *supra*, at 238 n.337. She does note, however, that the idea is "perhaps desirable in the abstract" since new markets might be irrelevant to creative incentives. *Id.* at 238. Interestingly, Gordon recognizes in her later work that the idea of foreseeability as used in tort law does represent an outer limit to incentives. However, she argues that copyright's limited term gives effect to this limit independently, seemingly obviating the need for its independent incorporation into copyright doctrine. *See* Wendy J. Gordon, *Copyright As Tort Law's Mirror Image: "Harms," "Benefits," and the Uses and Limits of Analogy*, 34 MCGEORGE L. REV. 533, 538–39 (2003).

In a similar vein, Landes and Posner note that eliminating "unforeseen" markets from the copyright entitlement is likely to dampen creator incentives since an incentive ordinarily extends to a "class of markets." William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 476 n.14 (2003). It would appear that an objective (as opposed to subjective) foreseeability test would function precisely in this manner, allowing a creator to capture not just present markets, but also those cognately related to them. *See* Shyamkrishna Balganes, *Rethinking Copyright: Property Through the Lenses of Unjust Enrichment and Unfair Competition*, 156 U. PA. L. REV. PENNUMBRA 345, 349–50 & n.23 (2008), <http://www.pennumbra.com/responses/01-2008/Balganes.pdf>; *see also* Christina Bohannon, *Copyright Harm, Foreseeability, and Fair Use*, 85 WASH. U. L. REV. 969, 973–74 (2007) (using the idea indirectly in arguing that the fair use analysis should focus on the occurrence or absence of "copyright harm" to the plaintiff).

¹³⁹ *See* 17 U.S.C. § 101 (2006).

¹⁴⁰ *Id.* §§ 106, 501.

¹⁴¹ *See* 4 NIMMER & NIMMER, *supra* note 42, § 13.01, at 13-4 to -5.

¹⁴² *See id.* § 13.01[A], at 13-6 to -7.

prima facie evidence of ownership and satisfaction of the statutory prerequisites for protection.¹⁴³ Consequently, during infringement actions courts focus on the second of the two elements: copying.

Since the question of copying is not entirely factual, a plaintiff needs to convince a court not just that the defendant appropriated part of his work, but also that the portion appropriated is protectible as such.¹⁴⁴ This is done using the substantial similarity requirement, discussed previously. After this, the requirement of foreseeability would have courts go one step further and require the plaintiff to show not just factual and wrongful copying, but additionally foreseeable copying.

Foreseeability would thus operate as a third element in the determination of copying. The requirement of “foreseeable copying” would ask *whether the defendant’s use (that is, copying) of the protected work was foreseeable to the plaintiff — in form and purpose — when the work was created*. It is critical to note that the question posed is one of foreseeability and not foresight. It is not relevant whether the plaintiff actually foresaw the defendant’s form of copying; it only matters that the copying was foreseeable, in light of the information available to him at the stage of creation. In addition, by focusing the inquiry on the point of creation (and not after), it minimizes the effect of hindsight bias on the inquiry.¹⁴⁵

It is worth emphasizing that the foreseeability here relates to the form and purpose of the defendant’s copying and not to other factors, such as its magnitude or monetary consequences. In some ways this aspect of the test would track tort law’s rule on “eggshell skull” plaintiffs, where a defendant is not allowed to argue that the magnitude or extent of the harm or loss suffered by the plaintiff was not foreseeable because it depended on attributes specific to the plaintiff, such as a preexistent medical condition.¹⁴⁶ Thus, if harm was a foreseeable consequence of the defendant’s actions, it matters little that the plaintiff was an ailing old woman, rather than a teenager in perfect health. In a similar vein, it should matter little to the foreseeability determination that the defendant copied the entire book, or made a million copies of it, rather than a few. Foreseeability in copyright, under the test, would ignore magnitude.

¹⁴³ 17 U.S.C. §§ 410(c), 411.

¹⁴⁴ 4 NIMMER & NIMMER, *supra* note 42, § 13.01[B], at 13-8 to -9.

¹⁴⁵ Hindsight bias is a phenomenon that many scholars argue influences the infringement question in all of intellectual property law. See *infra* section V.D., pp. 1630–32.

¹⁴⁶ See *Benn v. Thomas*, 512 N.W.2d 537 (Iowa 1994); *Vosberg v. Putney*, 47 N.W. 99 (Wis. 1890).

In this formulation, foreseeability would focus on the defendant's actions (that is, the copying), rather than function as an open-ended device that courts might then connect to the notions of "harm" or "market." Any reliance on these ideas as independent concepts, even when prefaced by the question of foreseeability (that is, as "foreseeable harm" or "foreseeable market"), will inevitably depend on a set of first-order assumptions that need to be justified on their own.¹⁴⁷ Questions of appropriate baselines, market substitutability, remoteness, and the like enter the equation as independent variables with the result that the inquiry begins to focus less on the creator's incentive at the time of creation and more on these other elements.¹⁴⁸ "Foreseeable copying," on the other hand, obviates any reliance on first-order assumptions and connects foreseeability as a behavioral device with the act of copying that is always at the core of an infringement dispute.

Given that copying in one form or another is central to every action for infringement, the test of foreseeability would operate regardless of which exclusive right the plaintiff alleges the defendant to have infringed. Thus, in most situations where substantial similarity is easily satisfied, the foreseeability test would be, too. But in situations where the defendant's copying is a consequence of an innovative use that does not owe its existence to the creator, foreseeability begins to play a significant role. Thus, uses such as the Google Library Project¹⁴⁹ that employ prior works in a new way are likely to satisfy the substantial similarity test; whether they constitute copying would then depend on the plaintiff's ability to establish that the use was within the realm of foreseeable uses when the work was created. The same would be the case for uses involving new media such as cable television, home recording, or the digitization of music.

Under current doctrine, questions of this nature are relegated to the fair use inquiry. Given that fair use is an affirmative defense, the burden then falls to the defendant to show how his actions (of copying) were not harmful to the plaintiff.¹⁵⁰ It places the entire focus on the defendant, glossing over the uses that the plaintiff might have legitimately expected to control *in creating the work*. Foreseeable copying

¹⁴⁷ See, e.g., Bohannon, *supra* note 138, at 1003 (attempting to understand copyright harm as "foreseeable harm"). Professor Christina Bohannon seems to implicitly connect the idea to inferences of market substitutability. As a consequence, foreseeability ceases to function as an independent behavioral limit, since unforeseeable uses in her model could still form part of the entitlement upon an independent showing of substitution. See *id.* at 989.

¹⁴⁸ For a useful discussion of some of these ideas as applied to copyright, see Wendy J. Gordon, *Of Harms and Benefits: Torts, Restitution, and Intellectual Property*, 21 J. LEGAL STUD. 449 (1992).

¹⁴⁹ See Band, *supra* note 66, at 6.

¹⁵⁰ 3 NIMMER & NIMMER, *supra* note 42, § 12.11[F].

shifts the burden onto the plaintiff to establish this point as part of the infringement inquiry.

Foreseeable copying would thus function as an objective proxy for a creator's anticipated markets. Yet it relies on copyright's bipolar (that is, private law) structure as a pivot around which to construct those markets. It would in a sense function analogously to antitrust law's "relevant market" determination, where courts attempt to construct the outer bounds of a notional market for a good or service in order to assess an entity's influence therein.¹⁵¹ The process there is both factual and normative, with the determination often expressly informed by antitrust law's goals and objectives.¹⁵² In a similar vein, foreseeable copying would have courts undertake a nearly identical reconstruction of the notional market, but now by reference to copyright's purpose: inducing creativity. It would draw attention to the centrality of identifying a probability distribution of future markets at the time of creation, in order to eliminate those that were unlikely to have formed a necessary part of a creator's set of future markets that together constituted the incentive.

The elements of *form* and *purpose* that make up the test in turn connect to two central determinants of future market structure in the copyright context: technology and use. One could thus posit four possible configurations based on these indicators. In the first, both use and technology are foreseeable; in the second, neither is; in the third, use is foreseeable while technology is not; and finally in the fourth, vice versa. The first situation represents those markets that were clearly within a creator's objectively anticipated revenue streams for the work. The second, by contrast, represents markets that are truly stochastic and therefore incapable of being anticipated in any sense. In the third and fourth configurations, however, the interaction between form and purpose (that is, technology and use) becomes crucial. Where a change in either form or purpose is independently significant enough that it impacts the other (that is, purpose or form, respectively) so as to alter the structure of the market, one might posit that the market as a whole was unforeseeable. Yet in other situations where the unforeseeability is solely either of use or technology and is self-contained, the market might be classified as foreseeable.¹⁵³ For exam-

¹⁵¹ See generally Robert G. Harris & Thomas M. Jorde, *Antitrust Market Definition: An Integrated Approach*, 72 CAL. L. REV. 1 (1984); William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981).

¹⁵² See Harris & Jorde, *supra* note 151, at 18–19.

¹⁵³ This might be graphically represented by the following table:

ple, the mere transition to a newer, more efficient technology (for example, Blu-ray from DVDs) would fit the latter category, for the technology may have been unforeseeable yet it is likely to have little impact on the structure of the market and the use to which the creative work is put. By contrast, the move from broadcast television to VCRs, though principally a technological development, reoriented the market and uses therein — through the idea of time-shiftable home viewership — and would, under the test, come out as unforeseeable.

The distinction between these last two situations is particularly important because it allows the test to be mapped onto a concern often voiced in the copyright context — namely, that of market substitution. If a new technology (and the market it creates) has the effect of replacing the demand for the creative work in existent markets, should not that harm be accounted for by the copyright system? While harm from substitution certainly is not copyright's core concern, to the extent that it is likely to impact a creator's *ex ante* incentive (that is, where a substitute was foreseeable), it certainly ought to remain a relevant consideration. Foreseeable copying, through its use of form and purpose as indicators, allows for this by differentiating between markets that are primarily a result of demand diversion and those that arise largely out of the creation of new demand.¹⁵⁴ The latter includes markets dependent largely on consumers who were not previously buying the work, while the former includes markets that rely on diverting customers away from existent markets.¹⁵⁵ Future markets that are structurally different in form and purpose from existent ones — that is, markets for unforeseeable uses — are likely to derive largely from the creation of new demand rather than from cannibalizing exist-

	FORESEEABLE PURPOSE (USE)	UNFORESEEABLE PURPOSE (USE)
FORESEEABLE FORM (TECHNOLOGY)	Scenario 1 (F, F)	Scenario 4 (F, U)
UNFORESEEABLE FORM (TECHNOLOGY)	Scenario 3 (U, F)	Scenario 2 (U, U)

It is also perhaps worth mentioning that situations in Scenario 4 typically are also the subject of the transformative use defense under current fair use law. *See supra* pp. 1585–86. The foreseeable copying test would not replace transformative use, but would posit a preliminary question: whether the creator's entitlement extends to the market for the transformation to begin with (in simple terms, a question of whether the specific market for that transformation was foreseeable). Only if the question is answered in the affirmative would the foreseeable copying test allow the transformative use defense to proceed to a social welfare analysis to decide whether to find the existence of infringement or exempt the action as independently creative. Thanks to Adam Badawi and Arden Rowell for discussions that resulted in this table.

¹⁵⁴ Harm from market substitution derives largely (if not entirely) from demand diversion, making this distinction very relevant. *See* Christopher S. Yoo, *Copyright and Product Differentiation*, 79 N.Y.U. L. REV. 212, 272 (2004) (noting the connection between the two).

¹⁵⁵ *Id.* at 260.

tent demand, thereby allowing the concern with substitutability to be given some salience in the entitlement structuring process. To give the concern with substitutability any more significance than this (for example, by attempting to control for all substitutes, not just foreseeable ones) would collapse the system back into its current state, devoid of any connection to incentives and the probability distribution that is central to them.

2. *Working Foreseeable Copying.* — Does the theory of foreseeability, as contained in the “foreseeable copying” test, actually present courts with a workable basis on which to construe copyright’s grant of exclusivity? In other words, is it likely to complicate copyright law by introducing an altogether new conceptual device, the use of which would entail additional costs?

Interestingly enough, the idea of foreseeability is not completely alien to copyright law and its treatment of new uses. It remains somewhat common for courts to use the idea in construing the scope of rights granted by a licensor to the licensee under a license for the work.¹⁵⁶ Its use in that context is likely to provide courts with a directly relevant way in which to operationalize the test, making the transition to the new approach much simpler than one might imagine.

Foreseeability in the licensing context can be traced back to Judge Friendly, whose opinion in *Bartsch v. Metro-Goldwyn-Mayer, Inc.*¹⁵⁷ used foreseeability to determine whether an assignment of motion picture rights included the right to telecast a copyrighted work. Observing that knowledgeable people knew of television’s potential at the time that the license was entered into, the court concluded that the licensor had “reason to know” of the new technology and was therefore deemed to have included it in the grant.¹⁵⁸ In *Bartsch*, the district court had relied on expert testimony to the effect that “[t]he processes of theatre and home television exhibition [were] markedly similar”¹⁵⁹ from both commercial and technical perspectives in the industry when the contract was entered into — thirty-seven years prior to the actual litigation.¹⁶⁰ The Second Circuit endorsed this approach to construing

¹⁵⁶ See Sidney A. Rosenzweig, Comment, *Don't Put My Article Online!: Extending Copyright's New-Use Doctrine to the Electronic Publishing Media and Beyond*, 143 U. PA. L. REV. 899, 915 (1995) (“In determining whether the new technology falls within the scope of the explicitly granted or preexisting technology, courts examine the foreseeability of the new medium.”).

¹⁵⁷ 391 F.2d 150 (2d Cir. 1968). For a more recent application of the doctrine, see *Boosey & Hawkes Music Publishers, Ltd. v. Walt Disney Co.*, 145 F.3d 481, 486 (2d Cir. 1998).

¹⁵⁸ *Bartsch*, 391 F.2d at 154 (finding that the law “will not charge a grantor with the duty of expressly saving [some] rights when he could not know of the invention’s existence” and finding “no case holding that an experienced businessman” is “not bound by the natural implications of the language he accepted when he had reason to know of the new medium’s potential”).

¹⁵⁹ *Bartsch v. Metro-Goldwyn-Mayer, Inc.*, 270 F. Supp. 896, 900 (S.D.N.Y. 1967).

¹⁶⁰ *Id.* at 900–01.

the license, concluding that the work's use in the context of a telecast was therefore plainly foreseeable.¹⁶¹ As a seemingly natural corollary, in situations where the technology or use in question was not publicly known at the time that the license was entered into, or where circumstances imply that there exists no reasonable basis on which to impute knowledge of the same to the licensor at the time of the licensing, courts construe the grant narrowly to exclude the new use in dispute from its scope.¹⁶²

The logic for this attempt to limit the grant resonates with foreseeability's use as a bounded rationality-driven device. Thus, one court noted that a new use may need to be excluded from the contractual grant when it "was completely unforeseeable and therefore *could not possibly* have formed part of the bargain between the parties at the time of the original grant."¹⁶³ Since contract law is concerned with linking liability for breach with parties' intent in entering into the contract, factors and possibilities that could not have possibly formed part of this intent are excluded, and liability is correspondingly limited. As a matter of contract law, this approach appears reasonable and perfectly logical, given contract law's focus on the parties' "bargain."¹⁶⁴

All the same, the approach is also often justified in noncontractual terms as deriving from the need to avoid giving one party an unjustified windfall. In explaining this rationale, one court has noted that the foreseeability test prevents the licensee from reaping "the entire windfall" associated with the unforeseen use.¹⁶⁵ Allowing a licensee to benefit from exogenous technological developments that were not part of the bargain is deemed a windfall and perhaps rightly so. But why then is not the licensor's (that is, creator's) benefiting from similar exogenous developments a windfall too? In other words, why should the unforeseeable use not remain outside the reach of the original copyright grant to begin with?

Foreseeability is thus used to limit a licensee's copyright grant but not the licensor's original one, which remains somewhat of an anomaly — especially given that over the years courts have developed tools by

¹⁶¹ *Bartsch*, 391 F.2d at 154.

¹⁶² For different approaches to this corollary, see, for example, *Rey v. Lafferty*, 990 F.2d 1379, 1388 (1st Cir. 1993); *Cohen v. Paramount Pictures Corp.*, 845 F.2d 851, 854 (9th Cir. 1988); *ABKCO Music, Inc. v. Westminster Music, Ltd.*, 838 F. Supp. 153, 156 (S.D.N.Y. 1993); *Platinum Record Co. v. Lucasfilm, Ltd.*, 566 F. Supp. 226, 227 (D.N.J. 1983); and *Kirke La Shelle Co. v. Paul Armstrong Co.*, 188 N.E. 163, 165–66 (N.Y. 1933).

¹⁶³ *Rey*, 990 F.2d at 1388 (citing *Cohen*, 845 F.2d at 854; *Kirke La Shelle Co.*, 188 N.E. at 163).

¹⁶⁴ See Melvin Aron Eisenberg, *The Bargain Principle and Its Limits*, 95 HARV. L. REV. 741 (1982); cf. Rosenzweig, *supra* note 156, at 917 (noting that the open-ended nature of the analysis allows courts to "manipulate" the determination).

¹⁶⁵ *Cohen*, 845 F.2d at 854 (quoting Neil R. Nagano, Comment, *Past Copyright Licenses and the New Video Software Medium*, 29 UCLA L. REV. 1160, 1184 (1982)) (internal quotation mark omitted).

which to answer the retrospective inquiry in the contractual context. They look to popular media, trade journals, expert testimony, industry practice, and at times, simple logic to assess the foreseeability of a specific use. Each of these mechanisms is capable of direct application in construing copyright's original grant of exclusivity during the infringement inquiry as well. Perhaps more importantly, though, they map rather well onto the form and purpose indicators that are central to the foreseeable copying test.

In addition, the bipolarity of copyright disputes is likely to ensure that, in the infringement context, parties will advance opposing constructions of foreseeability in much the same way as they do in the contractual setting. Thus, in the contractual setting, there are three parties in the overall scheme of things: (1) the original grantor of rights, the state; (2) the original grantee, who is also the contractual grantor (the licensor); and (3) the contractual grantee, the licensee.

When a court is called upon to interpret the scope of an assignment, the dispute is between the author in his capacity as contractual grantor and the licensee, as contractual grantee. Courts use foreseeability as an objective proxy for parties' intentions, to determine whether or not the disputed use was part of the assignment. What is critical, however, is that both parties to the dispute have opposing interests in interpreting the grant. The grantor prefers a narrow construction (to limit the assignment), while the grantee naturally prefers a broader one.

In an infringement action, by contrast, the author as original grantee would now prefer an expansive construction of the grant, while the original grantor, the state, would not be a party to the proceeding. In the state's place would be the defendant, whose interests, interestingly enough, track those of the contractual grantor in the bilateral setting. The defendant's interest would thus be to narrow the grant, and thereby minimize or avoid liability for infringement. Thus, the absence of a grantor seeking a narrow construction of the grant is accounted for by the presence of the defendant. Given the bipolar setting within which the entitlement and its scope are determined, it replicates the exact same process and interests that are at play in the contractual one.

It is worth emphasizing that even though it may appear as if the foreseeability inquiry is one of subjective intent — that is, whether one or both parties actually expected the grant to cover a use — in reality, the determination is always objective.¹⁶⁶ Since parties' intentions on

¹⁶⁶ Indeed, much of contract law has concerned itself with the move from a model of subjective intention to one of objective intention, which some view as in itself problematic and detracting from contract law's avowed emphasis on the ideas of consent and party autonomy. For more on objective intention in construing contractual terms, see LARRY A. DIMATTEO, *CONTRACT*

the issue are not readily apparent from the terms of the contract, courts impute foresight (or the lack thereof) to parties based on external circumstantial evidence. The test is thus entirely objective and has little to do with parties' actual intentions. Consequently, the mere fact that, unlike in the contract setting, one of the parties (the state, the original grantor) is not present and able to advance a construction of its actual intent is completely irrelevant. The bipolar nature of the dispute before the court ensures that opposing constructions of the grant are advanced in both contexts, even when either grantor or grantee is not a party to the proceedings before the court.

Foreseeability as a limiting basis, then, is perfectly well known in the world of copyright. Expanding it beyond its current use in the bilateral context, to construing copyright's original grant of exclusivity as well, is likely to face few conceptual hurdles.

3. *Mirroring Nonobviousness.* — The foreseeable copying test requires a court to go back in time to the year in which the work was created (and copyright attached to it) in order to determine whether the defendant's present use was capable of being anticipated then. In many ways, its retrospective nature mirrors patent law's requirement of nonobviousness. The law requires courts to invalidate a patent if the subject matter of the invention would have been obvious to a "person having ordinary skill in the art" (that is, the PHOSITA) "at the time the invention was made."¹⁶⁷ To determine whether inventions were nonobvious, courts are thus required to put themselves not just in the shoes of potential inventors, but to base their finding on inventors' likely awareness at the time of the invention.¹⁶⁸ In constructing the entitlement — that is, the patent — courts thus go back in time to assess what should have been known to the inventor when the invention was made and thereupon validate the invention only if it was not obvious *then*.

Foreseeable copying would have courts do just the opposite. The test asks courts to determine whether the defendant's present use

THEORY: THE EVOLUTION OF CONTRACTUAL INTENT (1998); LON L. FULLER & MELVIN ARON EISENBERG, BASIC CONTRACT LAW 743–46 (7th ed. 2001); Larry A. DiMatteo, *The Counterpoise of Contracts: The Reasonable Person Standard and the Subjectivity of Judgment*, 48 S.C. L. REV. 293 (1997); and Nancy Kim, *Mistakes, Changed Circumstances and Intent*, 56 U. KAN. L. REV. 473 (2008).

¹⁶⁷ 35 U.S.C. § 103(a) (2006). For more on the PHOSITA standard, see Rebecca S. Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA*, 19 BERKELEY TECH. L.J. 885 (2004).

¹⁶⁸ See *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000) (noting the importance of relying on "then-accepted wisdom in the field" in making the determination); *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (noting the importance of "casting the mind back to the time of invention"); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1574 (Fed. Cir. 1986) (emphasizing the importance of focusing the decisionmaker's mind on what would have been obvious "when the invention was made").

should have been “obvious” to the creator (the plaintiff) at the time of the creation, not to constrict the entitlement, but rather to expand it. Courts, in working the test, might thus adopt an equivalent of the PHOSITA standard that is calibrated to the world of creators. Such a standard would presume creators are, at a minimum, *informed* — in the sense that the creator knows of the different mediums in existence in which the work can be employed — and *rational* — in that the creator intends to either directly or indirectly control the markets for those different mediums.

* * *

Based on this discussion, consider the following hypotheticals:

Example 1: *K*, a composer, creates a musical work in the year 1955. At the time, television and broadcast technology are well known, as is the process of using music for motion pictures. All the same, the videocassette recorder (VCR) has not been developed yet. In 1985, a few years after VCRs become commercially available, *S* makes a copy of *K*'s work on a VHS tape when it airs on television. In addition, *P*, a producer, uses the work in a television broadcast without a license. These uses implicate *K*'s exclusive right to reproduce the work. Assume that in 1990, *K* were to commence an action for copyright infringement against *P* and *S*. Under the proposed requirement of foreseeability, the onus would be on *K* to establish that both *P*'s and *S*'s uses of the work constitute forms of “foreseeable copying” — uses that were foreseeable in 1955, that is, when *K* created the work. *K* would have little problem doing this in relation to *P*'s actions, given that television broadcasts were well known in 1955, but vis-à-vis *S* his case would be more difficult, since VCRs were neither known nor invented in 1955.¹⁶⁹ A court is thus likely to conclude that since video recording is “markedly different” from mere television viewing, the use of the work therein was not foreseeable and *S*'s use is not foreseeable copying.¹⁷⁰

Example 2: *C*, a software developer, creates a short software program to diagnose system errors. *N* comes along and, finding the code employed to be aesthetically pleasing, begins using large parts of it on a line of bed linen that he begins to market. *N*'s use is likely to implicate *C*'s exclusive rights to reproduce and (perhaps) adapt the work. Here, foreseeable copying would place the burden on *C* to establish that *N*'s use of his literary work as part of a new line of bed linen was foreseeable (even if as a derivative work) at the time of creation.

¹⁶⁹ The hypothetical here tracks the facts of a well-known licensing dispute, in which the question was whether the grant of television rights covered the right to distribute the content on videocassettes. The court, using a foreseeability standard, answered the question in the negative. *Cohen*, 845 F.2d at 851.

¹⁷⁰ See *id.* at 854.

While the inquiry does not assume the question to be answered one way or the other, a court is perhaps more likely than not to find against *C* on the issue of foreseeability.¹⁷¹

Example 3: *JK*, an author, writes a bestselling work of fiction in the year 1970, at which time motion picture and related technologies are well known. In 1997, *W* produces a motion picture based entirely on *JK*'s novel, and in 1998 *G* develops a computer video game based on the novel. Both *W*'s and *G*'s actions implicate *JK*'s exclusive adaptation right. Here, however, the outcomes are likely to be different. Since motion picture technology and the use of literary works as storylines therein might have been well-established practices (and the market for them objectively anticipatable) when *JK* created the work, a court is likely to conclude that *W*'s use was indeed foreseeable. As for *G*, however, the market for video gaming and the technology on which it relies were neither in existence nor anticipated in 1970, and a court is likely to conclude that *G*'s actions were unforeseeable in form and purpose.

JK's case serves to highlight an important point. Merely because a defendant's use is different from the creator's does not mean that it automatically comes to be exempted from liability. Not all new uses are unforeseeable. Where new uses are indeed foreseeable, as in the case of traditional derivatives, the foreseeability test is likely to come out in favor of the plaintiff, with few exceptions. The reason for this is simple: the possibility of a movie adaptation might have formed some part of *JK*'s incentive in creating the work.

B. Compatibility: Foreseeability and Copyright's Incentive Structure

A test of foreseeability is likely to limit a creator's control over the uses to which his creation may be put. Specifically, it would eliminate those uses that are objectively unforeseeable at the time of creation from the scope of the entitlement. What effect, if any, is this likely to have on creators' ex ante incentives to create? Is knowing that they are unlikely to be able to control unanticipated uses of their work likely to affect their inducement to create the work to begin with? Alternatively, will it impact their incentive to distribute the work?

This section argues that a foreseeability-based limit is perfectly compatible with copyright's basic structure as an incentive. Specifi-

¹⁷¹ A secondary, yet important, question relates to the defendant's — that is, *N*'s — own creativity and the way in which the copyright system needs to evaluate that as part of the process. Once foreseeable copying works to delineate a creator's incentive-driven markets, the analysis of whether the social utility from *N*'s creation is enough reason to generate an exception, in light of the costs and benefits of giving a creator control over it, is best accomplished by the traditional fair use analysis.

cally, it looks to how foreseeability might interact with two prominent ways in which incentives are often modeled in the copyright context. The first is the tendency to equate the idea of incentives with creators' optimistic expectations, even when devoid of any objective basis. The second derives from the "prospect theory," which is used to justify patent law's grant of an early, tailored monopoly to an inventor once a minimal threshold of inventiveness is crossed, in the belief that this is likely to incentivize additional investment into the invention.

1. *Open-ended Expectations.* — Given the development of technological media over the last several decades and the incremental extension of copyright terms by Congress that has followed, one might argue that creators today rightfully *expect* such developments to occur, and are indeed driven (that is, incentivized) by the expectation.¹⁷² If they tend to factor these expectations into their ex ante creative decisionmaking, why should copyright now vindicate them ex post?

To begin with, it is worth noting that these open-ended expectations differ from the paradigmatic incentive. Unlike incentives that are grounded in ascertainable market indicators, expectations rely almost entirely on predictions that derive from events in the past that have no independent reason to repeat themselves in the future. Thus, a creator's expectation in creating a work today, hoping that at some time in the future Congress is likely to retroactively extend the copyright term simply because it has done so before, is markedly different from her incentive in creating the work: attempting to satisfy an identifiable demand for works of that nature and generating profits from the process. Similarly, a creator's belief that her work will come to be used in association with some *wholly unforeseeable* medium, merely because such unforeseeable media emerged in the past, represents an expectation that is not necessarily grounded in anything other than a bald prediction that a historical contingency is likely to repeat itself.¹⁷³ It is not readily apparent that copyright needs to validate every ex ante estimate or expectation of a creator.

Yet, one might still want such expectations to form some part of copyright's incentive structure, in the same way as a lottery with fluctuating odds does in the end provide individuals with an incentive of some kind. Indeed, current policy tends to favor their inclusion. As

¹⁷² Indeed, the Supreme Court seems to have adopted precisely such an argument in its validation of the Sonny Bono Copyright Term Extension Act. See *Eldred v. Ashcroft*, 537 U.S. 186, 215 (2003). The Court there recognized the possibility of future term extensions forming a part of copyright's incentive structure. In addition, the Court referred to Congress's "consistent historical practice" of extending copyright's term and applying the extension retroactively. *Id.* at 204.

¹⁷³ To the extent that it is indeed grounded in an awareness of the industry in question and technological developments therein, it is likely to be characterized as foreseeable under the standard and test described earlier. The discussion here, therefore, is restricted to predictions and expectations that are not grounded in such an awareness.

Professor Sara Stadler notes, courts and legislators are often driven by creators' "expectations" (determined *ex post*) in constructing copyright's actual incentive, creating a cycle that results in the outward expansion of copyright's exclusive rights regime.¹⁷⁴ The process of determining the incentive is then indirectly delegated to creators — who equate their open-ended expectations with their incentives — resulting in anything short of perfect control being viewed as less than optimal.¹⁷⁵ A large part of this problem derives from the obvious use of hindsight to reconstruct the *ex ante* incentive. Having brought the work into existence, creators argue that they would not have done so had they known that their open-ended expectations would not be realized, causing courts and policymakers to impute this *ex post* realization into their *ex ante* decisionmaking.

Leaving aside the question of whether this expectation should at all be a part of copyright's incentive structure if indeed we remain concerned with a satisfactory (as opposed to optimal or maximal) incentive, the question that persists is whether the test of foreseeable copying is likely to interfere directly with or diminish that expectation. Here, the fact that the test is structured as an uncertain standard rather than as a bright-line rule is likely to make a major difference.¹⁷⁶

Unlike rules, standards are characterized by their relegating the process of giving content to the law and its application to a point in time after an action has taken place, that is, *ex post*.¹⁷⁷ Rules are generally more costly to create upfront (given the precision they involve), while standards transfer those costs to the adjudicative process.¹⁷⁸ Viewed *ex ante*, then, standards tend to be somewhat indeterminate (or fuzzy), characterized by the uncertainty of their applicability to a specific context. This uncertainty, though, is responsible for minimizing the law's impact on creative decisionmaking.

Intellectual property laws — patent and copyright in specific — contain innumerable vague standards.¹⁷⁹ In many ways this is largely beneficial. Standards enable courts to calibrate the scope of the enti-

¹⁷⁴ Stadler, *supra* note 30, at 454–56. For a slightly different argument on how expectations influence risk aversion, thereby feeding back into the scope of the rights granted, see James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882 (2007).

¹⁷⁵ Stadler, *supra* note 30, at 440.

¹⁷⁶ For an overview of the rule-standard distinction, see Ronald Dworkin, *The Model of Rules*, 35 U. CHI. L. REV. 14, 22–29 (1967); Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557 (1992); Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685, 1687–1701 (1976); Kathleen M. Sullivan, *The Supreme Court, 1991 Term—Foreword: The Justices of Rules and Standards*, 106 HARV. L. REV. 22 (1992); and Cass R. Sunstein, *Problems with Rules*, 83 CAL. L. REV. 953 (1995).

¹⁷⁷ See Kaplow, *supra* note 176, at 560.

¹⁷⁸ *Id.*

¹⁷⁹ Gideon Parchomovsky & Kevin A. Goldman, *Fair Use Harbors*, 93 VA. L. REV. 1483, 1503 (2007).

tlement to its underlying purpose and function.¹⁸⁰ This is especially true when it comes to standards that work to limit an entitlement. Incentives tend to vary from one inventor or creator to another or one area of application to another, necessitating significant contextual fine-tuning.¹⁸¹ In these contexts, a bright-line rule would prove insufficient for creators and inventors who need ex ante incentives in excess of the curtailed entitlement, since the curtailment would be known upfront. While a standard would not necessarily limit the entitlement any less than an equivalent rule, it would only ever curtail the entitlement ex post, thereby providing the creator or inventor with the necessary (but probabilistic) incentive upfront. One might thus call this the perverse effect of uncertainty on incentives. Because a creator or inventor does not know ex ante that the entitlement is likely to exclude certain things, the impact that the standard has on his incentive is minimal.

Indeed, this has long been recognized to be true in the patent law context. Patent law, much like copyright law, is concerned with providing inventors with an incentive in the nature of an exclusionary right. Since the process of innovation with which patent law is concerned tends to entail greater investment of time and effort, the incentive that it needs to provide to innovators has to be much stronger — as manifested in the scope and coverage of its exclusionary rights framework.¹⁸² Anything weaker than these broad incentives is unlikely to result in the necessary investment of resources into the process of innovation. Notwithstanding the need for these strong incentives, scholars have argued that standards-based ex post limits on patent law's grant of an exclusionary right are likely to have little impact on the original incentive. This analysis is particularly instructive here.

Patent rights are inherently probabilistic by nature. Their existence, validity, and scope are contingent on a host of considerations,

¹⁸⁰ This distinction between rules and standards translates most directly into the difference between the strategies of “exclusion” and “governance” that property law uses to allocate and enforce its grant of rights. See Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. 5453 (2002). Exclusion strategies such as trespass, much like rules, entail high upfront delineation costs and low ex post enforcement costs, while governance strategies such as nuisance do just the opposite. See Henry E. Smith, *Exclusion and Property Rules in the Law of Nuisance*, 90 VA. L. REV. 965 (2004). Governance strategies enable courts to carry out balancing exercises as circumstances demand and thereby contextualize the entitlement to an exogenously defined purpose.

¹⁸¹ Michael Carroll identifies this as the problem of “uniformity cost” in intellectual property law and notes that context-specific standards serve to minimize these costs. See Michael W. Carroll, *One For All: The Problem of Uniformity Cost in Intellectual Property Law*, 55 AM. U. L. REV. 845, 856–61, 890–92 (2006).

¹⁸² This is seen most prominently in the absence of an independent invention defense and a fair use limitation in patent law. For more on this, see Maureen A. O'Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177, 1184–87 (2000).

most of which are outside the owner's (that is, creator's) control.¹⁸³ Uncertainty thus manifests itself in more ways than one until the right is adjudicated. Consequently, contingent ex post limits have little impact on the original incentive, given the extent of uncertainty that already exists. In a counterintuitive move, Professors Ian Ayres and Paul Klemperer argue that increasing patent law's overall uncertainty through underinclusive standards, as opposed to overinclusive rules, in order to reduce the system's predictability, is likely to curb monopolistic pricing *without impacting a patentee's original incentive*.¹⁸⁴ They thus advocate the use of standards-based doctrines such as the "reverse doctrine of equivalence," which allows a defendant to avoid liability ex post by showing that his actions were not within the "principle" of the claimed invention, even though they fall within its scope when literally construed.¹⁸⁵ Such doctrines, they argue, have little effect on a patentee's original incentive to invest resources into the innovation process, even though the possibility of their being used later on (to diminish the entitlement) is known upfront.¹⁸⁶ Since their invocation and use depend on events, the occurrence of which are inherently unpredictable — that is, unforeseeable — they have little impact on a patentee's ex ante incentives.

To be sure, Ayres and Klemperer recognize that this increase in the uncertainty of enforcement needs to be compensated in order to avoid interfering significantly with an innovator's incentive.¹⁸⁷ Consequently, they advocate extending a patent's duration — again ex post — to offset any increased uncertainty, using a system of Ramsey pricing.¹⁸⁸ They propose implementing this part of their model by allowing patentees to leverage their power into the future, or alternatively expanding the geographic or product scope of the patent.¹⁸⁹ In the copyright context, the Ramsey intuition side of their model could be imple-

¹⁸³ On the probabilistic nature of property and intellectual property rights, see Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75 (2005); and Keith Leffler & Christopher Leffler, *The Probabilistic Nature of Patent Rights: In Response to Kevin McDonald*, ANTI-TRUST, Summer 2003, at 77.

¹⁸⁴ See Ian Ayres & Paul Klemperer, *Limiting Patentees' Market Power Without Reducing Innovation Incentives: The Perverse Benefits of Uncertainty and Non-Injunctive Remedies*, 97 MICH. L. REV. 985 (1999).

¹⁸⁵ *Id.* at 1025.

¹⁸⁶ *Id.* at 1025–26.

¹⁸⁷ *Id.* at 1001.

¹⁸⁸ *Id.* at 1026–27. Ramsey pricing involves pricing goods inversely to the elasticity of demand for the firm's products but without a profit constraint. See LANDES & POSNER, *supra* note 20, at 40 n.6. Translated to the intellectual property context, this concept implies that if a monopolist's profits are held constant, "consumers would be better off living under oligopolistic pricing for a longer period than monopoly pricing for a shorter period." Ayres & Klemperer, *supra* note 184, at 991. The deadweight losses, then, get spread over a long duration, but their severity at any given point in time is reduced.

¹⁸⁹ Ayres & Klemperer, *supra* note 184, at 1026–28.

mented in more ways than one. First, if enhancing copyright's term of protection is indeed a possible offset, one might argue that this effect is in some ways already in place, given the periodicity with which Congress extends terms retroactively without a valid empirical basis for the extension. Using the Ayres-Klemperer framework, current copyright policy already reflects elements of staggered-duration Ramsey pricing, making the introduction of additional uncertainty, via a foreseeability test, the equivalent of their "stationarity intuition."¹⁹⁰ In the alternative, another option would certainly lie in minimizing reliance on the currently incomprehensible fair use doctrine — something the foreseeability test is likely to achieve on its own by moving most of these fair use–related issues to the entitlement delineation process.

In more simple terms, Professor Robert Merges argues that the reverse doctrine of equivalents, as an *ex post* limit, is likely to have no more than a minimal effect on the original incentive, given the numerous other contingencies that the patentee is faced with even before that stage is reached.¹⁹¹ The inherently probabilistic nature of the rights bundle thus generates sufficient uncertainty on its own, such that the uncertainty that the vague standard adds to it is marginal.

Others such as Professors Michael Meurer and Craig Nard go one step further. They argue that limiting patent law's doctrine of equivalents — which allows a patentee to control uses of the invention that were not foreseeable and therefore not literally covered by the patent's claims — is likely to have little to no impact on the original incentive.¹⁹² They argue that as long as the entitlement allows the inventor to cover her "appreciation of industry and technology trends," curtailing the entitlement *ex post*, by eliminating unforeseeable developments from its coverage, is unlikely to have an appreciable impact on incentives.¹⁹³ They thus observe that the "incentive is not harmed much when, *ex post*, [an inventor] is denied [protection] over technology that she did not foresee *ex ante*."¹⁹⁴

Since carving unforeseeable uses out of the entitlement *ex post* is not thought to be problematic in the context of patents, where the in-

¹⁹⁰ See *id.* at 989–90. This is the intuition that small deviations from a monopolist's profit-maximizing price or quantity will have less of an effect on a monopolist's overall benefits, but will have a larger effect on minimizing deadweight losses, thereby producing a net welfare gain.

¹⁹¹ Robert Merges, *Intellectual Property Rights and Bargaining Breakdown: The Case of Blocking Patents*, 62 TENN. L. REV. 75, 101–03 (1994).

¹⁹² See Michael J. Meurer & Craig Allen Nard, *Invention, Refinement and Patent Claim Scope: A New Perspective on the Doctrine of Equivalents*, 93 GEO. L.J. 1947, 1996–97 (2005); see also Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CAL. L. REV. 1, 50 (2001).

¹⁹³ Meurer & Nard, *supra* note 192, at 1997.

¹⁹⁴ *Id.* at 1998.

centive is much closer to the ideal of perfect control, it is indeed more than plausible that a similar limit is likely to be even less problematic in the copyright context. First, copyright's entitlement structure is certainly more contingent or probabilistic than is its equivalent in patent law. The absence of an administrative agency validating the grant at first instance, coupled with copyright's emphasis on a showing of actual and actionable copying, make its grant more uncertain. Second, our focus here is on the impact that a foreseeability limit is likely to have on unpredictable expectations. To the extent that these expectations are not based on industry and technology trends but rather on stochastic occurrences whose probabilities are not ascertainable, they only ever enter the equation with a very high initial level of uncertainty. Consequently, any additional uncertainty that the test as an ex post standard will introduce so as to diminish the overall incentive is likely to be insignificant.

Additionally, ex post, indeterminate constraints on exclusivity are rather well known in copyright law, in the form of the fair use doctrine.¹⁹⁵ Structured as a standard, it too renders copyright's grant of exclusivity contingent on factors that are often outside a creator's control and in many ways unpredictable.¹⁹⁶ In circumstances where a court concludes that the defendant's use is sufficiently transformative, or substantially noninfringing, fair use effectively circumscribes the grant ex post. Few argue that fair use needs to be eliminated *because* its contextual ex post uncertainty interferes with creator incentives.¹⁹⁷ The uncertainty of the standard, if anything, is likely to deter potential users (that is, potential infringers) from treading too close to the boundaries of impermissible copying.¹⁹⁸ Indirectly, therefore, the uncertainty associated with the foreseeable copying test is likely to preserve creators' original incentives by deterring significant infringement.

What *is* more likely to interfere with creators' original incentives is a bright-line rule that limits copyright's grant ex ante. Proposals aimed at contextually limiting a copyright holder's bundle of rights ex

¹⁹⁵ See 17 U.S.C. § 107 (2006).

¹⁹⁶ See Douglas Lichtman, *Property Rights in Emerging Platform Technologies*, 29 J. LEGAL STUD. 615, 637–38 (2000) (observing that fair use excuses infringement whenever “public policy favors that result,” *id.* at 637, and that it is an “all-inclusive, equitable inquiry,” *id.* at 638).

¹⁹⁷ To the contrary, the dominant view appears to be that the fair use doctrine stifles innovation by not allowing defendants sufficient leeway to use protected works. See, e.g., Kevin M. Lemley, *The Innovative Medium Defense: A Doctrine To Promote the Multiple Goals of Copyright in the Wake of Advancing Digital Technologies*, 110 PENN. ST. L. REV. 111, 128–29 (2005); Adrienne J. Marsh, *Fair Use and New Technology: The Appropriate Standards To Apply*, 5 CARDOZO L. REV. 635, 643–44 (1984).

¹⁹⁸ See Parchomovsky & Goldman, *supra* note 179, at 1498 (noting that “the vagueness of the fair use standard” causes actors to “err on the side of safety and either overcomply (by minimizing the use of protected works) or overinvest in precautions”).

ante suffer from this drawback. Consequently, an ex post standard is preferable to a bright-line rule that would limit the grant ex ante and thereby interfere with a creator's incentives, as others have noted in the patent context.¹⁹⁹

If copyright's incentive structure thus entails avoiding any harm to creators' expectations, regardless of their bases, structuring the foreseeability test as a fuzzy standard will ensure that any impact it is likely to have on these expectations is, at best, marginal.

2. *Prospect Theory*. — A second argument derives from a variant of incentive theory that finds application in the world of patents and is commonly referred to as the "prospect theory."²⁰⁰ According to this theory, the exclusive rights regime operates much like a mineral prospecting system with the creator being given an incentive to invest further in the creation and improve upon it, without fear that free-riders will appropriate the benefits of it.²⁰¹ While the theory originated in the context of patents, it is often employed as a justificatory device in copyright law.²⁰²

The prospect argument assumes that giving creators greater control ex ante incentivizes *their own* actual development of efficient uses ex post.²⁰³ It thus ties in with what some describe as copyright's distributional incentive — the idea that copyright exists to give creators an incentive to both create *and distribute* their work publicly. Control over

¹⁹⁹ See Ayres & Klemperer, *supra* note 184, at 1024 (noting how underinclusive standards are preferable to rules and overinclusive standards). Quite apart from interfering with creator incentives, replacing the current standards-based approach with a rule-based one would also likely alter a copyright owner's willingness to bargain with a potential user, as a consequence of the uncertainty being eliminated altogether. See Dan L. Burk, *Muddy Rules for Cyberspace*, 21 CARDOZO L. REV. 121, 140 (1999); cf. Jason Scott Johnston, *Bargaining Under Rules Versus Standards*, 11 J.L. ECON. & ORG. 256, 258 (1995). But cf. Parchomovsky & Goldman, *supra* note 179, at 1502 (advocating the introduction of specific contextual fair use rules into copyright doctrine).

²⁰⁰ The prospect theory is attributed to the work of Professor Edmund Kitch. See Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265 (1977); see also John F. Duffy, *Rethinking the Prospect Theory of Patents*, 71 U. CHI. L. REV. 439 (2004). This theory bears no connection to the prospect theory in behavioral economics. See Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979).

²⁰¹ Kitch, *supra* note 200, at 266.

²⁰² See Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1047 (1997) ("While Kitch makes his argument in the patent context, it is copyright rather than patent law that seems to have taken his theory to heart."). Professor Michael Abramowicz argues that the dominant theme in the prospect theory is the idea of avoiding wasteful rent dissipation, and attempts to use it to explain copyright law's protection for derivative works. See Michael Abramowicz, *A Theory of Copyright's Derivative Right and Related Doctrines*, 90 MINN. L. REV. 317, 351, 355–56 (2005).

²⁰³ See Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. REV. 129, 132–35 (2004) (describing the use of this theory to justify copyright's retrospective term extension under the CTEA).

unforeseeable uses, it might be argued, gives them an incentive to develop aftermarket uses that were not obvious to them at the time of creation. One might thus characterize the argument as one relating to an *ex post* incentive.²⁰⁴

First, it is not readily apparent why a creator is best placed to control and direct future development of the creation.²⁰⁵ Historically, the most beneficial new uses for works and ideas have almost never come from creators and inventors of the originals.²⁰⁶ Most new uses entail the development of new technologies of distribution and thus involve inventive processes unconnected with those of a creator, which are more likely to be artistic or literary. Consequently, barring entities that engage in both creativity and research into new mechanisms of distribution — unquestionably a small minority — the two are unlikely to go together. The process of creation in copyright law is additionally far less resource intensive than is the process of developing new mechanisms (that is, technologies) of distribution. As a result, there seems little reason to believe that the creator of an expressive work is best placed to invest in the management or development of new uses for that work, when that investment is likely to be orthogonal to, and far in excess of, the one made for the original creation. Thus, for instance, it is not clear why the Beatles (or any music group) might have been expected to invest in the development of digital recording just because they created the expressive work that is the subject of the recording. Unlike in patent law, there remains little basis to believe that the original creator is best positioned to develop new uses, a fact that is borne out vividly in copyright cases involving new uses.²⁰⁷

In response, it might be argued that even if creators themselves are not best placed to invest in further development, they might license this out to others; copyright's grant of exclusivity then becomes necessary to incentivize these others to invest in the development process. In this formulation, exclusivity in the post-creation market functions as a distributional incentive, not for creators, but rather for independent distributors such as record companies.

²⁰⁴ *Id.* at 132.

²⁰⁵ *Id.* at 135–36. As Professor Mark Lemley rightly notes, this logic flies in the face of the fundamental idea that competition — and deconcentration in markets — is preferable for simple efficiency reasons. Indeed, this principle dominates antitrust law's prohibition on tying and other forms of exclusive dealing arrangements. For a few academic articles discussing tying, see Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 *YALE L.J.* 19 (1957); Jay Pil Choi, *Tying and Innovation: A Dynamic Analysis of Tying Arrangements*, 114 *ECON. J.* 83 (2004); and Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 *ANTITRUST L.J.* 469 (2001).

²⁰⁶ See Lemley, *supra* note 203, at 137 & n.29. He notes: "Creators are often terrible managers. They frequently misunderstand the significance of their own invention and the uses to which it can be put." *Id.* at 137.

²⁰⁷ See cases cited *supra* note 3.

Even if distributors do need an incentive to invest in developing the market for new distribution mechanisms, it seems to make little sense to vest it in the creator on the assumption that the rights will come to be allocated most efficiently. In a world of zero transaction costs, this would indeed make no difference, but where these costs are significant and remain coupled with the problem of potential holdouts (for example, a creator refusing to license the work to a distributor for whimsical reasons), the argument seems fairly problematic. If distributional incentives are indeed necessary, a more plausible basis for them might lie in creating an independent entitlement and vesting it in the distributor directly.²⁰⁸

One of the main concerns motivating the prospect theory in the patent context is the idea that if an inventor is not allowed to control future uses and development of the invention early on, this is likely to result in wasteful duplicative efforts among inventors. An improver might decide to take the inventor's nascent idea and develop and commercialize it, regardless of the fact that the inventor is doing the exact same thing (perhaps in the belief that he is likely to be the first to do so). This, the prospect theory argues, results in a redundancy, or deadweight loss, that has no social benefit.²⁰⁹ Multiple inventors might expend resources, not just to get the initial patent monopoly, but also later on, to improve and commercially develop the invention. Since such efforts are likely to be wasteful, the prospect theory argues for a forward-looking patent regime that extends a patentee's grant beyond the immediate idea to unforeseeable uses of it as well.²¹⁰

This concern with redundancy sits somewhat oddly within the broader scheme of copyright policy, which otherwise actively encourages such redundancies. Copyright's defense of independent creation has long been identified as one of its defining features, and one that sets it apart from patent.²¹¹ Perhaps more importantly, copyright law

²⁰⁸ Indeed, a new set of rights referred to as "neighboring rights" or "related rights" attempts to do precisely this by giving distributors exclusionary control over their investments. See Shyamkrishna Balganesh, *The Social Costs of Property Rights in Broadcast (and Cable) Signals*, 22 BERKELEY TECH. L.J. 1303, 1305–06 (2008). The most well-known neighboring rights are performers' rights, phonogram producers' rights, and broadcasters' rights. See *id. passim*; George H.C. Bodenhausen, *Protection of "Neighboring Rights,"* LAW & CONTEMP. PROBS., Winter 1954, at 156.

²⁰⁹ See Abramowicz, *supra* note 202, at 352 ("In the absence of patent protection . . . [m]ore inventors may pursue a particular line of research than is socially optimal.")

²¹⁰ See Mark F. Grady & Jay I. Alexander, *Patent Law and Rent Dissipation*, 78 VA. L. REV. 305, 318–20 (1992).

²¹¹ For an overview of the doctrine and an economic explanation for it in terms of information cost theory, see Clarisa Long, *Information Costs in Patent and Copyright*, 90 VA. L. REV. 465, 528–29 (2004); and Henry E. Smith, *Intellectual Property As Property: Delineating Entitlements in Information*, 116 YALE L.J. 1742, 1810–11 (2007). For an attempt to extend the idea to patent

has long avoided according protection to ideas, with the result that expressive variations that rely on a single idea are tolerated, even when actively copied.²¹² If the law recognizes and tolerates multiple versions in these different contexts, it seems unlikely to find the development of a use that the creator could not identify as being problematic or redundant in the sense that patent law might. In addition, the law actively tolerates (and encourages) duplicative expressions of the same idea. Indeed, when the possibility of such redundancy is not deemed sufficient to interfere with copyright's original incentive (that is, to create), its interference with *ex post* incentives through a loosening of control over unforeseeable uses is likely to be negligible, if not nonexistent.

In many ways, then, the prospect theory operates on assumptions that seem alien to copyright's general structure, and perhaps more importantly, to the peculiarities of unforeseeable uses in the context of expressive works.

* * *

A requirement of foreseeability — whereby a creator is denied control over unforeseeable uses of the work — is unlikely to interfere significantly with his original incentive to create the work. The impact it is likely to have, if any, is marginal. To the contrary, one might argue, the rule is likely to generate a new kind of incentive among creators.

The foreseeability test is in the end an *objective* one, dependent on the general state of knowledge at the time of creation, which is then imputed to the creator. Consequently, in situations where the creator is best positioned to generate this level of knowledge, the test incentivizes the creator to actually make it widely known. Take the case of a company that invests in the development of both software and hardware technologies. Assume that the company were to develop a new software program that meets the requirements for copyright protection, and that it foresees the possibility of the program finding application in a new platform (in addition to those in existence) that it is in the process of developing. Instead of being able to keep the new platform (or the technology that it is likely to employ there) completely secret, the requirement would force it to generate an objective level of knowledge about the platform. This could include simple trade journal publications or other research disclosures where it describes the basis of the new platform's use of the copyrighted work (that is, the

law, see Samson Vermont, *Independent Invention As a Defense to Patent Infringement*, 105 MICH. L. REV. 475 (2006).

²¹² See Abramowicz, *supra* note 202, at 355 (referring to the idea-expression dichotomy in copyright).

software).²¹³ Disclosures of this kind are likely to be of immense benefit socially, and the principle of foreseeability would create an active incentive for it. By making the scope of liability depend on the plaintiff's disclosure of possible uses in situations where the plaintiff is indeed in the best position to foresee new uses, the requirement would create an ex ante incentive to disseminate information relating to possible uses widely.

Foreseeability as an information-generating incentive performs a function that is the mirror image of its role in tort law. In the absence of a foreseeability limit, tort law would have individuals devoting needless time and energy to assessing the probabilities of remote events in order to avoid liability.²¹⁴ In the copyright context, by contrast, there is a potential benefit (as opposed to liability) and perhaps more importantly, a basic recognition that the additional information generated (or likely to be generated) is socially beneficial rather than wasteful. In this latter respect, foreseeable copying resembles the rule in *Hadley*.²¹⁵ A creator's acquisition of knowledge that his work could be used in relation to a new platform technology that is in the process of being developed is clearly different from a potential tortfeasor spending resources to know that his actions could trigger an infinite variety of harms or injuries among individuals in the vicinity of his actions. A foreseeability rule in the context of copyright creates an incentive to generate the former, just as a foreseeability rule in the context of torts operates to deter the latter.

V. OBJECTIONS

Having examined how a test of foreseeability might work in the copyright context, its likely impact on creator incentives, and the manner in which courts might implement it, this Part examines four potential objections that may be raised to such a test. They are that: (1) a foreseeability limit renders copyright's term of protection meaningless, (2) as a standard it is indeterminate, (3) it will result in the scope of protection varying with the point in time that a work was created, and finally (4) it is likely to rely heavily on hindsight.

²¹³ Of course, the system would not want inventors to disclose information such that other systems of intellectual property (that is, patents and trade secrets) might later deny them protection. An alternative might thus be a mechanism for creators to make these disclosures to an administrative agency under conditions of secrecy; here, however, the social benefits of the disclosure are unlikely to be realized.

²¹⁴ See Zipursky, *supra* note 108, at 47 (noting how the acquisition of such information is "socially inefficient").

²¹⁵ See Lucian Ayre Bebbchuk & Steven Shavell, *Information and the Scope of Liability for Breach of Contract: The Rule of Hadley v. Baxendale*, 7 J.L. ECON. & ORG. 284, 286 (1991) (observing that when one party's communication of information to the other is "socially desirable," the foreseeability requirement in *Hadley* provides an incentive for it).

A. Term Redundancy

Since 1950, Congress has extended copyright's term of protection twelve times, and today works are protected for the life of the author plus seventy years.²¹⁶ On its face, one might argue, a test of foreseeability will by necessity come to limit this duration. No creator can expect to foresee uses to which the work may be put nine decades into the future; consequently, copyright's long term of protection becomes somewhat redundant. The existence of an extended period of protection might be taken as evidence of an intent to protect unforeseeable uses as well.

It is precisely the existence of this abnormally long period of protection that justifies nontemporal limits on copyright. In the world of intellectual property, the existence of tradeoffs between term and extent remains somewhat well known. Thus, while patent law gives inventors a set of exclusive rights for no more than twenty years (unlike copyright's seventy), the extent and coverage of those rights are far wider than those of copyright.²¹⁷ Unlike copyright, patent rights are not limited by numerous subject-matter limits and purpose-based exceptions, which is taken to justify the correspondingly short term of protection.²¹⁸ Copyright's extended term is therefore a policy reason to *relax* rather than strengthen its coverage nontemporally.

The frequency with which Congress has extended copyright's term, yet left intact its basic entitlement structure — without seeking to take it in the direction of patent law — is perhaps additionally indicative of its acceptance of (or acquiescence in) judicially created, non-term related, limiting devices.

In addition, tailoring the scope of the entitlement bundle on a case-by-case basis (instead of tinkering around with duration) does, from a policy perspective, address an added concern: *uniformity costs*, or the fact that different types of creativity and different creators have vastly different incentive structures, which a one-size-fits-all approach to entitlement delineation glosses over.²¹⁹ Thus, a life-plus-forty year term of protection may be well in excess of what a movie producer needs as an incentive to produce the work, but may on the other hand be in-

²¹⁶ 17 U.S.C. § 302 (2006). For anonymous works, the term of protection is 95 years from the year of first publication, or 120 years from the year of its first creation, whichever expires earlier. *Id.* § 302(c). The most recent extension, the Sonny Bono Copyright Term Extension Act (CTEA), was the subject matter of a well-known Supreme Court decision. *See Eldred v. Ashcroft*, 537 U.S. 186 (2003).

²¹⁷ *See* Smith, *supra* note 211, at 1806–14 (discussing these differences); *see also* William M. Landes & Richard Posner, *An Economic Analysis of Copyright Law*, in *ECONOMIC ANALYSIS OF THE LAW* 83, 94–96 (Donald A. Wittman ed., 2003).

²¹⁸ *See* Smith, *supra* note 211, at 1812.

²¹⁹ *See* Carroll, *supra* note 181, at 852–56; *see also* Glynn S. Lunney, Jr., *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 *SUP. CT. ECON. REV.* 1, 5 (2004).

adequate for a musician.²²⁰ Here, a foreseeability limit allows the entitlement to track the incentive on a significantly more granular basis. Indeed, one might argue that it compensates for the intrinsic redundancy of a uniform term limit.

B. Potential Indeterminacy

A second and perhaps more basic objection to the proposed model derives from the flexibility inherent in the idea of foreseeability. This objection might proceed as follows. Ascertaining whether a defendant's copying is foreseeable or not is dependent on the specificity with which the form or mechanism of copying is described. Consequently, the same action might be classified as foreseeable or unforeseeable depending on a judge's *description* of it — rendering its application grossly inconsistent.

An argument along these lines is somewhat well known in relation to foreseeability's use in tort law.²²¹ Referred to as the "multiple description" problem, it postulates that speaking of foreseeability is meaningless in the absence of individuals having a system of shared meaning that they adhere to in their description of an event.²²² Given the fact that the foreseeability of an event (or use) is only ever reconstructed *ex post*, when additional details are known, judges and juries are likely to come to different conclusions on the same set of facts, depending entirely on their descriptions of the event.

To the extent that foreseeability depends on an individual's description of an event, it certainly is subject to some amount of indeterminacy.²²³ Yet the fact of the matter remains that at some basic level, individuals do share a common set of conceptual meanings in understanding the way the world works. Most of tort law, and indeed the common law, takes this for granted, and it would seem somewhat inconsistent to argue that foreseeability will fall prey to a level of indeterminacy any greater than that fostered by current common law devices. In the context of tort law, Professors H.L.A. Hart and Tony Honoré thus argue:

[T]o avoid fallacies, the first question to ask is not "Was this harm foreseeable?" but "Under what specific description which fits this harm has

²²⁰ See Carroll, *supra* note 181, at 856–57 (distinguishing between Type I and Type II errors associated with uniformity).

²²¹ See Perry, *supra* note 137, at 99–101; see also Richard A. Epstein, *Beyond Foreseeability: Consequential Damages in the Law of Contract*, 18 J. LEGAL STUD. 105, 124 (1989) (noting how foreseeability "utterly lacks the descriptive content that allows it to be the principled basis for decision").

²²² See Michael S. Moore, *Foreseeing Harm Opaquely*, in ACTION AND VALUE IN CRIMINAL LAW 125, 126 (Stephen Shute et al. eds., 1993); see also Clarence Morris, *Duty, Negligence and Causation*, 101 U. PA. L. REV. 189, 198 (1952).

²²³ See CLARENCE MORRIS, MORRIS ON TORTS 174–77 (1953).

experience taught us to anticipate harm?" If we have learned from experience to expect a "rainstorm" on seeing dark clouds, then the rainstorm was foreseeable even if, when it occurs, it has other characteristics²²⁴

Foreseeability thus places reliance on the existence of a common meaning system among similarly situated individuals that derives from shared experience. Descriptive variations thus do not correspond to the reality that individuals tend to view the world (and respond to stimuli in it) in similar ways. In studying human perception, noted linguistic philosopher J.L. Austin observes that individuals tend to "perceive" the world and understand themselves to be doing so in roughly similar ways — in terms of what he called "moderate-sized specimens of dry goods" or "familiar objects."²²⁵ The existence of a basic meaning structure is thus central to much of the law's conceptual framework and, to the extent that it might be characterized as indeterminate, so too is foreseeability.

The idea of a shared system of meaning is in many ways central to current copyright doctrine. In the context of substantial similarity, for instance, courts have long recognized that dissimilarities, while relevant to the inquiry, are to be differentiated into trivial and nontrivial ones, the former being understood as those that involve modifications to noncentral parts of the work.²²⁶ Whether something is a trivial modification or not is inevitably a qualitative assessment, based on what a court perceives to be central to the protected work. The test of foreseeable copying would ask courts to do no more than extend that logic beyond just the work, to its broader context or medium of use.

C. *Time-Specific Protection*

Should a work created in 1930 be protected any differently from one created in 1995? The test of foreseeable copying attempts to model a creator's entitlement by reference to objectively anticipated markets at the time a work was created. And as a consequence, the entitlement will certainly vary depending on the point in time that a work was created. A technology (and therefore the market for works that it gives rise to) may not have been capable of anticipation in 1930, but certainly may have been so in 1995. Does this pose problems?

In situations where either the entitlement or liability derives from an individual's awareness or knowledge, the law rather commonly dif-

²²⁴ H.L.A. HART & TONY HONORÉ, CAUSATION IN THE LAW 258 (2d ed. 1985).

²²⁵ J.L. AUSTIN, SENSE AND SENSIBILIA 7–8 (G.J. Warnock ed., 1962) (internal quotation marks omitted).

²²⁶ See 4 NIMMER & NIMMER, *supra* note 42, § 13.03[B], at 13-67 to -73; OSTERBERG & OSTERBERG, *supra* note 46, § 2:6, at 2-32 to -34; *see also* Segrets, Inc. v. Gillman Knitwear Co., 207 F.3d 56, 65 (1st Cir. 2000) (finding an alteration in color to be a trivial and insubstantial modification).

ferentiates based on time in structuring the entitlement. Consequently, describing the problem as one of differential protection begins with the major assumption that uniform protection is indeed universally desirable, which clearly is not the case when the law is directed at generating an ex ante incentive. Thus, for instance, in the context of products liability, a manufacturer is expected to warn consumers about risks and hazards inherent in a product's use and design, to avoid liability for negligence.²²⁷ All the same, these risks and hazards are assessed based on what the manufacturer either knew or should have known at the time of manufacture. Information that becomes available subsequently (that is, as technology develops) is in this conception thought to have no bearing on the question of liability, since a manufacturer could not have been expected to warn consumers about risks that were objectively incapable of being anticipated when the product was manufactured.²²⁸ Indeed, studies have shown that allowing this ex post information to influence the liability determination often skews the ex ante incentive to take due care in making the disclosure — which the regime is directed at generating.²²⁹ To the extent that the regime values the creation of this incentive, fixing a temporal cutoff for information becomes necessary. Since liability here relates to an ex ante action (the failure to warn at the time of manufacture or sale), it is modeled solely on the basis of the “state of the art” at the time of that action. It thus is not considered unfair, from the incentive-generating perspective, that a manufacturer of a product in 1970 is not found liable for a failure to issue a warning based on information that became available in 1980, but a manufacturer of the same product in 1990 certainly is. The same is equally true in the context of professional negligence, where standards often evolve over time, yet liability (based on reasonable foreseeability) is based on information available at the time of action.

²²⁷ See KEETON ET AL., *supra* note 103, § 96, at 685. This position is often referred to as the “state-of-the-art defense” to products liability. It should be noted that courts and scholars have disagreed on whether this approach ought to be abandoned in favor of one dependent entirely on hindsight, given tort law's concern with fairness and compensation. For an analysis of this trend, see James A. Henderson, Jr., *Coping with the Time Dimension in Products Liability*, 69 CAL. L. REV. 919 (1981). See also W. Page Keeton, *Products Liability — Inadequacy of Information*, 48 TEX. L. REV. 398 (1970) (advocating a move away from negligence to strict liability for fairness reasons).

²²⁸ KEETON ET AL., *supra* note 103, § 96, at 685 (“[I]t is the state of the art in the sense of the scientific knowledge and technological information regarding danger that was available to a seller at the time such seller surrendered possession that is relevant and admissible as regards what he should have known.”).

²²⁹ See Omri Ben-Shahar, *Should Products Liability Be Based on Hindsight?*, 14 J.L. ECON. & ORG. 325 (1998) (observing how the use of ex post information often distorts the ex ante incentive to take care, but that it often results in a new ex post incentive after the sale and distribution of the product).

Indeed, this idea is fairly well entrenched in patent law too, where a PHOSITA's knowledge and awareness (that is, the "state of the art" in order to ascertain nonobviousness) are related back to the time the invention was made, thereby disallowing the entry of after-the-event information into the entitlement structuring process.²³⁰

If copyright law is in the end about the ex ante incentive to create, and the entitlement is presumed to come into existence the moment the work is created, it will of necessity vary with time, as the scope and extent of those incentives fluctuate. To posit otherwise would, in a sense, convert copyright into a doctrine of simple misappropriation, where the point at which the entitlement comes into existence becomes irrelevant and the focus of the law shifts entirely to what the defendant copied from the plaintiff.²³¹ In this formulation, as should be apparent, the idea of ex ante incentives as the basis for the entitlement becomes meaningless, since the entitlement only ever comes into existence at the time of the misappropriation. Consequently, to the extent that the institution attempts to take seriously its reliance on ex ante incentives as a justificatory premise, temporally differentiated entitlements are not just unavoidable, but necessary.

D. Hindsight Bias

A fourth possible objection derives from a more nuanced understanding of individual decisionmaking and the cognitive biases that occur therein. Hindsight bias refers to the general tendency among individuals to see an event that has occurred as more probable than it actually was before its occurrence.²³² The presence of information about an outcome thus produces an unjustified increase in its perceived predictability.²³³ Given copyright law's ex post process of enti-

²³⁰ For opinions emphasizing the importance of relating the inquiry back in time to the point of invention, see *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000); and *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

²³¹ See Richard A. Posner, *Misappropriation: A Dirge*, 40 HOUS. L. REV. 621, 622-26 (2003) (rejecting misappropriation as a unifying principle).

²³² For a general overview of the hindsight bias and its influence on judicial decisionmaking, see Jeffrey J. Rachlinski, *A Positive Psychological Theory of Judging in Hindsight*, 65 U. CHI. L. REV. 571 (1998). See also Jay J.J. Christensen-Szalanski & Cynthia Fobian Willham, *The Hindsight Bias: A Meta-Analysis*, 48 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 147 (1991).

²³³ Baruch Fischhoff, *Hindsight ≠ Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty*, 1 J. EXP. PSYCH. 288, 288 (1975). Professor Baruch Fischhoff's work is credited with identifying the bias. See also Baruch Fischhoff, *For Those Condemned To Study the Past: Heuristics and Biases in Hindsight*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 335 (Daniel Kahneman et al. eds., 1982). For studies verifying the existence of hindsight bias, see Erin M. Harley, *Hindsight Bias in Legal Decision Making*, 25 SOC. COGNITION 48 (2007); Kim A. Kamin & Jeffrey J. Rachlinski, *Ex Post ≠ Ex Ante: Determining Liability in Hindsight*, 19 LAW & HUM. BEHAV. 89 (1995); Mark Kelman et al., *Decomposing Hindsight Bias*,

tlement delineation, any attempt to reconstruct a creator's foresight at the time of creation will inevitably be influenced by information possessed by the decisionmaker that was not available to the creator *ex ante*. Judges will therefore be more inclined to view a defendant's copying as foreseeable to the plaintiff at the time of creation when presented with actual evidence of the copying.

In the related context of patent law, while determining the validity of a patent, courts are required to determine whether the patentee's idea was nonobvious (to a skilled person) at the time of its invention.²³⁴ It thus entails a similar retrospective reconstruction of an actor's likely foresight. In that context, studies have shown that hindsight tends to play a major role.²³⁵ Given the structural similarity between the nonobviousness inquiry and the proposed foreseeability test in copyright law, the same consequence is likely to occur in the latter.

As a structural matter, copyright lends itself almost perfectly to the possibility of hindsight bias. Since the existence and scope of the entitlement in a work are only ever decided when the defendant copies parts of it, the presence of actual copying (appropriation) tends to hurt the defendant's case. Indeed, as a historical matter, courts seem to have acknowledged their reliance on hindsight with observations like "what is worth copying is *prima facie* worth protecting."²³⁶ A similar situation, one might argue, is likely to occur in relation to the test of foreseeable copying. Courts would be asked to determine whether a particular form of copying was foreseeable in the past, yet they are likely to make the determination with the market for the form of copying actually before them. To the extent that copyright law remains structurally different from both patent and trademark law in its *ex post* entitlement delineation, the test of foreseeability is likely to play into the deficiencies of the existent system.

As scholars have long noted in several different contexts, hindsight bias is indeed an inevitable consequence of any *ex post* liability and entitlement delineation process.²³⁷ Studies have also shown that debiasing techniques — which often involve information-filtering devices — are largely ineffective in controlling hindsight bias.²³⁸ As a conse-

16 J. RISK & UNCERTAINTY 251 (1998); and Susan J. LaBine & Gary LaBine, *Determinations of Negligence and the Hindsight Bias*, 20 LAW & HUM. BEHAV. 501 (1996).

²³⁴ See 35 U.S.C. § 103(a) (2006) (denying patent protection to inventions that "would have been obvious at the time the invention was made").

²³⁵ See Gregory N. Mandel, *Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational*, 67 OHIO ST. L.J. 1391, 1391 (2006).

²³⁶ *Univ. of London Press, Ltd. v. Univ. Tutorial Press, Ltd.*, (1916) 2 Ch. 601, 610. While U.S. copyright law has since moved away from this model, it is in many ways representative of the general *ex post* structural framework on which copyright is premised.

²³⁷ See Rachlinski, *supra* note 232, at 571.

²³⁸ See *id.* at 573, 586–88.

quence, it has been argued that the most effective way to deal with hindsight bias involves acknowledging its presence in the process and thereupon adapting the process based on this realization,²³⁹ but even this approach cannot wholly eliminate the bias.

A large part of what contributes to hindsight bias in the use of open-ended standards such as “reasonableness” or “foreseeability” generally is the absence of a specific point in time at which to anchor the ex post reconstruction of the ex ante event or action. As a consequence, the presumptive ex ante world begins to assume features of the ex post. One of the most common ways that courts attempt to control the influence of hindsight bias in ex post decisionmaking is through the use of indicators for the determination that are fixed in time. Professor Jeffrey Rachlinski thus notes that courts often develop doctrinal mechanisms that attempt to anchor the determination to the ex ante world — such as ex ante customary norms (for professional negligence), or a long-felt ex ante need for a solution in an industry (in patent law’s nonobviousness setting).²⁴⁰

In a similar vein, foreseeable copying would have the effect of connecting the infringement inquiry to the time at which the entitlement is deemed to commence (as opposed to the time it is interfered with), as a preliminary step. By emphasizing that a defendant’s copying is actionable only if objectively foreseeable to the plaintiff at the time of creation, and thereby forcing courts to acknowledge the importance of the point of creation, it is likely to shift the focus of the inquiry away from the present to the past. Additionally, the indicators for the test that courts would come to use — deriving largely from their deployment of the foreseeability test in the licensing setting (for example, industry trends, the relevant state of the art, and so on) — would force the inquiry to remain temporally anchored to the time of creation in much the same way as other hindsight bias-controlling mechanisms attempt to eliminate the influence of subsequent developments on the process.

As with every ex post reconstruction that is clearly a “second-best strateg[y],”²⁴¹ the problem is not likely to be eliminated altogether. All the same, compared to a world in which there exists no mechanism to either recognize or control for the bias, a system tempered by a time-specific foreseeability limit is an obvious improvement.

²³⁹ See *id.* at 587, 607–24.

²⁴⁰ *Id.* at 607–24.

²⁴¹ *Id.* at 624.

VI. CONCLUSION

Central to much of the preceding argument is the idea that copyright law is not the best way of allocating windfalls associated with unforeseeable uses. In numerous other contexts, the law uses *foreseeability* as a mechanism by which to avoid and reallocate these windfalls, in the belief that the costs and benefits associated with them are incapable of inducing any significant ex ante behavioral modification among individuals. Given the primacy of these behavioral assumptions across different areas of the common law, I have attempted to argue here that copyright law should be no different.

To the extent that copyright law continues to rely on a theory of incentives and the need to provide creators with an incentive to invest time and resources into the creative process, it too attempts to bring about ex ante behavioral modification among individuals. If the behavioral assumptions that the common law relies on in a host of other areas are indeed true, then copyright law should find little reason to be different. Individuals will not (and cannot) factor the unforeseeable consequences of their actions into their ex ante reasons for acting. Consequently, limiting copyright's grant of exclusivity to uses of the creative work that were foreseeable to a creator at the time of creation is likely to better align creators' creative decisionmaking with their incentives. The test of foreseeable copying proposed here would thus provide copyright law with a device by which to doctrinally instantiate its theory of incentives and simultaneously avoid misallocating the windfalls that the current system produces. Using the basic idea that individuals have limited predictive capabilities, especially in relation to stochastic events, the foreseeable copying test remains premised on providing creators with an incentive that is tailored to the exact way in which the law presumes individuals to behave in a variety of other contexts.

For far too long, copyright law and policy have centered around the rhetoric of incentives and inducements but failed to integrate into doctrine the way in which they actually impact human behavior. It is hoped that the present model will contribute to enabling the idea of incentives to be more than just of rhetorical significance, or at the very least, serve to wean copyright away from its reliance on an illusory theory of creator incentives.