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Copyright in an Era of Information Overload: Toward the Privileging of Categorizers

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Copyright in an Era of Information Overload: Toward the Privileging of Categorizers

Frank Pasquale

60 Vand. L. Rev. 135 (2007)

Environmental laws are designed to reduce negative externalities (such as pollution) that harm the natural world. Copyright law should adjust the rights of content creators in order to compensate for the ways they reduce the usefulness of the information environment as a whole. Every new work created contributes to the store of expression, but also makes it more difficult to find whatever work one wants. "Search costs" have been well-documented in information economics and addressed by trademark law. Copyright law should take information overload externalities like search costs into account in its treatment of alleged copyright infringers whose work merely attempts to index, organize, categorize, or review works by providing small samples of them. These categorizers are not "free riding" off the labor of copyright holders. Rather, they are creating the navigational tools and filters that help consumers make sense of the ocean of expression copyright holders have created.

The new scholarship of cultural environmentalism lays the groundwork for a better understanding of the costs, as well as the benefits, of copyrighted expression. Any expression that signals something to one who wants exposure to it may constitute noise to thousands of others. By modeling information overload as an externality imposed by copyrighted works generally, this article attempts to provide a new economic justification for more favorable legal treatment of categorizers, indexers, and reviewers. Information overload is an unintended negative consequence of copyright law's success in incentivizing the production and distribution of expression. If courts grant content owners the right to veto categorizers' efforts to make sense of given fields of expression, they will only exacerbate the problem. Designed to promote the "progress of the arts and sciences," copyright doctrine should privilege the efforts of those who make that progress accessible and understandable. Categorizers fill both those vital roles.

Copyright in an Era of Information Overload: Toward the Privileging of Categorizers

*Frank Pasquale**

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I. INTRODUCTION

What to read? or watch? or listen to? These are hard questions, not because of any scarcity of expression, but rather because of its abundance. Over 100,000 books are published in the United States each year, thousands of movies and CDs are released, and the amount of textual, musical, and visual works on the internet continues to rise exponentially. Whose work can we trust? And who knows what of it

will rank among the best that has been thought and said—or even provide a few moments levity?¹

Admittedly, a bulging bookshelf or surfeit of films prompts an existential crisis in only the most sensitive souls. Most of us, most of the time, drift along a well-trod path of filters and recommenders. The *New York Review of Books* may be a trusted guide to “must-reads” (or “must-avoids”). A favored movie or music critic might act as Beatrice (or Virgil) in our daunting quest for information, entertainment, or a fresh perspective on current events.² As Richard Caves observed in his classic analysis of the “creative industries,” “buffs, buzz, and educated tastes” are indispensable tools for making sense of the world of media around us.³

Such tastemakers have become all the more important—and varied—as content offerings proliferate.⁴ They provide the *metadata* (i.e., data about data) essential to finding the expression one wants. A website such as “Rotten Tomatoes” can quickly aggregate reviews of a movie and present them concisely. Amazon invites anyone to review the books it sells. The iTunes music store posts customer reviews of

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1. The purpose of criticism is to know “the best that is known and thought in the world.” Matthew Arnold, *The Function of Criticism at the Present Time*, in THE NORTON ANTHOLOGY OF ENGLISH LITERATURE 1408, 1417 (M. H. Abrams ed., 5th ed. 1986). Copyright law is one of the most important legal tools for regulating culture in the United States. See Guy Pessach, *Copyright Law as Silencing Restriction on Noninfringing Materials: Unveiling the Scope of Copyright’s Diversity Externalities*, 76 S. CAL. L. REV. 1067, 1079 (2003) (discussing how “copyright regimes deal with cultural and political resources”).

2. In *The Divine Comedy*, Beatrice, one of the blessed, sends Virgil to guide Dante through Hell and Purgatory. Beatrice herself guides him in Heaven. DANTE ALIGHIERI, *THE DIVINE COMEDY, INFERNO*, Canto 2, ll. 52-54, 136-42, at 37 (John Sinclair ed. & trans., Oxford University Press 1961) (1308) (Virgil explaining to Dante, “a lady [Beatrice] called me, so blessed and so fair that I begged her to command me”).

3. RICHARD E. CAVES, *CREATIVE INDUSTRIES: CONTRACTS BETWEEN ART AND COMMERCE* 177-80 (2000) (describing the gatekeeping role of various entities in recommending, and discounting, works).

4. For accounts of the accelerating pace of digitization of data, see PHILIP EVANS & THOMAS S. WURSTER, *BLOWN TO BITS: HOW THE NEW ECONOMICS OF INFORMATION TRANSFORMS STRATEGY* 14 (2000); NICHOLAS NEGROPONTE, *BEING DIGITAL* 5-6 (1995); DON TAPSCOTT, *THE DIGITAL ECONOMY: PROMISE AND PERIL IN THE AGE OF NETWORKED INTELLIGENCE* 2 (1996).

the podcasts it offers. Search engines complement all these efforts by quickly assembling digital information regarding a query.⁵

Such categorizers are on the verge of becoming even more effective guides to online content; for example, as Google aims to index books, and new technologies of sampling provide ever more sophisticated ways for online reviewers to illustrate their posts and podcasts. The rise of these metadata providers suggests that the problem of information overload is beginning to solve itself. As more and more services rate and organize content, there is less reason to think one has missed some particularly compelling, delightful, or important work.

Unfortunately, copyright litigation has begun to stifle this development. Content owners are beginning to demand license fees not merely for works themselves, but also for any fragments of them.⁶ The Motion Picture Association of America has already shut down a site that illustrated the information it provided about movies with trailers.⁷ Major publishers have sued Google, insisting that the search engine license any “snippets” from books that it deems relevant to a search query.⁸ A small search engine had to fight a long legal battle merely to defend its practice of putting tiny, “thumbnail” reproductions of an artist’s landscapes in its database.⁹ Claiming absolute rights over the content they own, many copyright holders appear to demand nothing less than perfect control over any fragment or sample of their works.

Many copyright theorists have documented how such fine-grained control would threaten diversity in expression,¹⁰ and perhaps

5. See *infra* Part IV.A (describing a more complete list of categorizers).

6. See, e.g., Tim Wu, *Jay-Z Versus. the Sample Troll: The Shady One-Man Corporation That’s Destroying Hip-Hop*, SLATE, Nov. 16, 2006, <http://www.slate.com/id/2153961/> (discussing the litigation campaign of Bridgeport Music Inc., which holds “portfolios of old rights (sometimes accumulated in dubious fashion) and use[s] lawsuits to extort money from successful music artists for routine sampling, no matter how minimal or unnoticeable”).

7. See *infra* text accompanying notes 223-32 (discussing *Video Pipeline, Inc. v. Buena Vista Home Entertainment, Inc.*, 342 F.3d 191 (3d Cir. 2003)).

8. See *infra* text accompanying notes 44-95 (discussing Google Print and Google Library).

9. See *infra* text accompanying notes 215-22 (discussing *Kelly v. Arriba Soft*, 336 F.3d 811 (9th Cir. 2003)).

10. Larry Lessig and Yochai Benkler have both documented the flood of creativity that new computing technologies have helped unleash and proposed legal rules to protect such innovation. LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 6-8 (1999); Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 414-29 (1999). Lastowka and Hunter’s work has illustrated the extraordinary importance of amateur production of content. Dan Hunter & F. Gregory Lastowka, *Amateur-to-Amateur*, 46 WM. & MARY L. REV. 951, 951 (2004) (arguing that “the creation, selection, production, dissemination, promotion, sale, and use of expressive content . . . are undergoing revolutionary decentralization and disintermediation . . . [and] are increasingly being performed

even copyright holders themselves.¹¹ These theorists have closely tied their encouragement of new creativity and “remix culture” to proposals for copyright reform. In order to make the “raw material” of innovation more available to “improvers” seeking to work with extant innovation,¹² copyright reformers aim to reduce the scope, strength, and duration of exclusive property rights in information. They have offered a number of compelling justifications for their position. These justifications focus on promoting innovation, diversifying content providers, equalizing access, and the virtue-creating effects of producing (as opposed to merely consuming) content.¹³

Unfortunately, most of these proposed justifications have not been compelling to legislators or courts. Though lawmakers’ rationales for gradually strengthening copyright protection have been varied, they boil down to a common perception that unlicensed uses amount to free-riding.¹⁴ “All this new creativity is great,” leading copyright

by individuals and disaggregated groups” rather than large corporations, and furthermore that the law should be “adjusted in order to recognize the opportunity and desirability of decentralized content”).

11. See Frank Pasquale, *Breaking the Vicious Circularity: Sony’s Contribution to the Fair Use Doctrine*, 55 CASE W. RES. L. REV. 777, 789, 795 (2005) (discussing how the failure of the film industry’s effort to outlaw the VCR—called the “VTR” in the article—ultimately redounded to its benefit, through the sale of video and DVDs); William Fisher, *Don’t Beat Them, Join Them*, N.Y. TIMES, June 25, 2004, at A23 (claiming that trying to block technology that seems to infringe on copyrights may result in the worst outcome for the copyright holder—the most beneficial result occurs when the copyright holders are denied a share in the revenues earned by a new technology and instead have to create their own commodity to complement the technology).

12. See Mark A. Lemley, *The Economics of Improvement in Intellectual Property*, 75 TEX. L. REV. 989, 1050 (1997) (a definition of improvers); *id.* at 1020-21 (noting that patent law traditionally does a much better job of protecting improvers than copyright law, for example, through the lack of doctrine analogous to “blocking patents” in copyright law); *id.* at 1023 (“In the case of “improvers who have made a major contribution to social value, for example a work in which the new material predominates over infringing material . . . patent law offers the possibility of complete immunity from infringement under the reverse doctrine of equivalents. Copyright law has no corresponding doctrine.”).

13. See LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* 120-21 (2002) (praising “innovation from the internet”); Yochai Benkler & Helen Nissenbaum, *Commons-based Peer Production and Virtue*, 14 J. POL. PHIL. 394, 394-95, 400 (2006), available at <http://www.nyu.edu/projects/nissenbaum/>.

14. See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1039 (2005) (documenting “courts and scholars . . . preoccupied with the problem of ‘free riding.’”). As Lemley explains, “If the goal of creating property rights is to equate private and social costs and benefits by having the property owner internalize the social costs and benefits, those who ‘free ride’—obtain a benefit from someone else’s investment—are undermining the goals of the property system.” *Id.* at 1039-40.

If I plant beautiful flowers in my front lawn, I don’t capture the full benefit of those flowers—passers-by can enjoy them too. But property law doesn’t give me a right to track them down and charge them for the privilege—though owners of property once tried unsuccessfully to obtain such a right.

holders admit. “But why permit it at my expense? Why not get a license like everyone else?” On this view, reductions of intellectual property rights are takings, to be compensated like any other transfer of property from private hands for public purposes.¹⁵ The copyright holder is always an innocent victim who has contributed something original to the store of knowledge, and those using any part of its work without a license are unfairly refusing to pay for the unalloyed benefit the work has conferred on society.¹⁶

How can this view be challenged? Some cyberlaw theorists have argued that the social benefits of looser intellectual property protections greatly outweigh the costs of reduced protection.¹⁷ This argument is likely true, but given valuation difficulties, it is hard to

Id. at 1048 (articulating a number of compelling reasons why law should not strive to internalize all positive externalities of intellectual property to its owner).

15. U.S. courts have established that there can be a “taking” of trade secrets. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1003-04 (1984) (“[T]o the extent that Monsanto has an interest in its health, safety and environmental data cognizable as a trade-secret property right under Missouri law, that property right is protected by the Taking Clause of the Fifth Amendment.”); *Philip Morris, Inc. v. Reilly*, 312 F.3d 24, 31 (1st Cir. 2002) (“In most states, trade secrets are property protected by the Takings Clause . . .”). The recent French decision limiting recent legislation regarding iPods also suggested a takings rationale for preserving intellectual property (“IP”) rights against legislative alteration. *See, e.g.*, Thomas Crampton, *Apple Gets French Support in Music Compatibility Case*, N.Y. TIMES, July 29, 2006, at C9 (describing the decision from the French Constitutional Council to declare “major aspects of the so-called iPod law unconstitutional . . . ‘highlight[ing] fundamental protections for intellectual property in such a way as to put iTunes a little further from risk of the French law’”). Were such a rationale adopted in the United States, the much-observed “ratchet effect” of IP expansionism would move from empirical regularity to constitutionalized norm.

16. The Clinton Administration’s White Paper on internet policy expressed this view, and it has animated copyright policy in legislation such as the Digital Millennium Copyright Act of 1998, which greatly expanded copyright holders’ rights to control digital uses of their works.

Some participants have suggested that the United States is being divided into a nation of information “haves” and “have nots” and that this could be ameliorated by ensuring that the fair use defense is broadly generous in the NII context. The Working Group rejects the notion that copyright owners should be taxed—apart from all others—to facilitate the legitimate goal of “universal access.”

BRUCE A. LEHMAN & RONALD H. BROWN, INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 84 (1995). This bizarre stance presumes that there is some baseline price and set of rights that copyright owners are entitled to, outside of law. Boyle has observed the fatuousness of the Working Group’s assumption of a baseline of absolute copyright holder control over expression. James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L.J. 87, 105-06 (1997) (“Of course, given the goals of copyright law, it would have made just as much sense if the argument had been reversed, taking the fair use rights of users and consumers as the baseline.”).

17. Glynn Lunney, *Fair Use and Market Failure: Sony Revisited*, 82 B.U. L. Rev. 975, 977-78 (2002) (“Only where the copyright owner has demonstrated by the preponderance of the evidence that the net benefit to society will be greater if a use is prohibited, should a court conclude that a use is unfair.” (footnote omitted)).

prove its truth in the economic patois that now dominates intellectual property policy.¹⁸ This Article proposes another tack, analogizing information overload in the cultural environment to pollution of the physical environment.¹⁹

Environmental laws force polluters to pay for the ways they reduce the usefulness of air, water, and soil. Information law should adjust the rights of content creators in order to compensate for the ways they reduce the usefulness of the information environment as a whole. Every new work created contributes to the store of expression, but also helps make it more difficult to find whatever work a particular user needs or wants. The “search cost” of finding a needed work has been well-documented in the literature of information economics.²⁰ Copyright law should take negative externalities like search costs into account in its treatment of alleged copyright infringers whose work merely attempts to index, organize, categorize, review, or provide small samples of work generally.²¹ They are not simply “free riding” off the labor of copyright holders, but rather are

18. James Boyle, *Cruel, Mean or Lavish?: Economic Analysis, Price Discrimination and Digital Intellectual Property*, 53 VAND. L. REV. 2007, 2009 (2000) (“[Information economics] offer[s] us plot-lines and econo-dramas, readymade images of types of dysfunction in information markets that sharpen our perceptions of potential risks and benefits. Unfortunately, it tends to offer them in antagonistic and mutually annihilating pairs.”); Frank Pasquale, *Toward an Ecology of Intellectual Property: Lessons from Environmental Economics for Valuing Copyright’s Commons*, 8 YALE J.L. & TECH. 78, 84-85 (2006) (attempting to address some of the valuation difficulties); see RISHAB A. GHOSH, CODE: COLLABORATIVE OWNERSHIP AND THE DIGITAL ECONOMY, 275-76 (2005) (estimating the value of OSS with reference to the price of proprietary software that accomplishes the same or similar functions).

19. Boyle, *supra* note 16, at 108-09 (pioneering this approach by recommending that intellectual property law reformers learn from strategies adopted by environmentalist scholars and activists). Several other scholars have extended and developed this metaphor. See, e.g., Brett Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917, 980-81 (2005); Dennis D. Hirsch, *Is Privacy Regulation the Environmental Law of the Information Age?*, in PRIVACY AND TECHNOLOGIES OF IDENTITY: A CROSS-DISCIPLINARY CONVERSATION 239, 240 (Katherine Strandburg & Daniela Stan Raicu eds., 2006); Pasquale, *supra* note 18; Peter K. Yu, *Intellectual Property and the Information Ecosystem*, 2005 MICH. ST. L. REV. 1, 7-8 (2005).

20. WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 167 (2003) (discussing the “benefits of trademarks in reducing the costs to consumers of distinguishing among brands of a product”). Although the authors concentrate on trademark law, the point is generalizable to any situation where a given product, information or otherwise, is being sought out by a potential purchaser or user.

21. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. PAPERS & PROC. 347, 350 (1967) (“[P]roperty rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization.”).

creating the types of navigational tools and filters that help consumers make sense of the ocean of data copyright holders have created.²²

By modeling information overload as an externality imposed by copyrighted works, this article attempts to provide a new economic justification for more favorable copyright treatment of a group of users collectively deemed “categorizers.” Though categorizing is but one small part of what indexers, samplers, and search engines do, this synecdochic designation participates in the very phenomenon it is used to describe. For often the part is very revealing of the whole, and categorizers’ efforts to reveal the whole via samples and snippets deserve far more solicitude from the law than they currently receive.

The argument proceeds as follows. Part II describes how conflicts between copyright holders and those who categorize their content have complicated our understanding of fair use. The recent suit against the “Google Print” project has crystallized the legal issues at stake: 1) whether categorizers can provide small samples of copyrighted works to illustrate the categorizations made, and 2) whether a categorizer can copy an entire work digitally in order to prepare such samples.²³ Though doctrines protecting fair use and “intermediate copying” may protect such indexing activities, a series of court decisions limiting fair use have made their applicability questionable. Few areas of law are more unsettled.

Stepping back from the doctrine, Part III explains the role of categorizers in the information ecosystem. While past legal scholarship has celebrated categorizers’ creativity and utility, this Article focuses on information overload as a negative condition that necessitates it. Just as the production of physical goods burdens the natural environment, the production of copyrightable expression imposes costs on the cultural environment. These information overload externalities include the increased “search cost” of finding the particular piece of expression one most wants, increased anxiety, and loss of solidarity via a fragmented public sphere.

The classic economic response to physical pollution is a “Pigouvian tax,” designed to internalize the cost of emissions to their source.²⁴ Such a tax would be impossible in the cultural environment,

22. Pessach, *supra* note 1, at 1067 (“Recent scholarly work has emphasized copyright’s ‘dynamic effect,’ that is, the ongoing influence of expansive copyright protection toward an enclosure of the creative commons, and diminishment of cultural diversity.”).

23. Elisabeth Hanratty, *Google Library: Beyond Fair Use?*, 2005 DUKE L. & TECH. REV. 10, 12-14 (suggesting that Google’s book digitization and indexing projects may run afoul of current copyright laws).

24. See Dennis W. Carlton & Glenn C. Loury, *The Limitation of Pigouvian Taxes as a Long-Run Remedy for Externalities*, 95 Q.J. ECON. 559, 559 (1980) (defining Pigouvian taxes as efforts to internalize the costs of externalities to their creators, and discussing their disadvantages);

because information overload is not an artifact of any particular act of creation but rather of the creative process *overall*.²⁵ The more practical method of addressing information overload is to empower the categorizers who can help us make sense of the “blooming, buzzing confusion” of the information society.

Part IV proposes a way of adjusting copyright doctrine to accomplish this goal. Because categorization projects are so necessary to counteract the negative effects of information overload, they deserve positive recognition in the *first* fair use factor, which focuses on the “purpose and character of the use.”²⁶ Traditional analysis of whether the use is commercial and transformative has extremely limited utility in the categorization context. Courts can short-circuit these endlessly manipulable formal distinctions by recognizing categorization as a pro-defendant finding in the first fair use factor. Courts should also immunize initial digital copies of works *used for generating* such samples.

Information overload is an unintended but serious consequence of copyright law’s success in creating incentives for the production and distribution of expression. If courts grant content owners the right to veto categorizers’ efforts to make sense of given fields of expression, they will only exacerbate the problem. Designed to promote the “progress of the science and useful arts,”²⁷ copyright doctrine should privilege the efforts of those who make that progress accessible and understandable. Categorizers fill both those vital roles.

Pigou or No Pigou, ECONOMIST, Nov. 11, 2006, at 85, 85, available at http://www.economist.com/finance/displaystory.cfm?story_id=8150198 (describing new resurgence (and resistance to) Pigou’s ideas).

25. Moreover, the old adage that “one man’s trash is another’s treasure” is commonly thought to be truer of cultural than physical products. BART KOSKO, NOISE 6 (Penguin Press 2006) (“One person’s signal is another person’s noise and vice versa.”). I have resisted this sort of relativism in some venues; I recognize it, however, as a persistent feature of what Rorty calls postmodern bourgeois liberal democracy. See, e.g., Posting of Frank Pasquale to Prawfsblawg, http://prawfsblawg.blogs.com/prawfsblawg/2006/05/is_bach_better_.html (May 9, 2006, 12:42 EST); Frank Pasquale, *The Strange Romance of IP Expansionism and Aesthetic Relativism*, MADISONIAN THEORY, Aug. 4, 2006, <http://madisonian.net/archives/2006/08/04/the-strange-romance-of-ip-expansionism-and-aesthetic-relativism/>.

26. 17 U.S.C. § 107(1) (2006).

27. U.S. CONST. art. I, § 8, cl. 8 (Congress has the power “[t]o 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.”).

II. DILEMMAS OF CATEGORIZERS

Categorizers, reviewers, and indexers have existed for some time.²⁸ But the legal questions they raise have become increasingly urgent as new technologies advance their effectiveness. Without digital technology, one could usually only find a book by subject if it were so relevant to the search that the “subject” words in a card catalog happened to match one’s search. Now, digitized textual searches can make the entire book a de facto index card. Before web access, the only way to watch a film review actually illustrated by clips was to watch Gene Shalit or some other noted reviewer with a television show—which may in turn be owned by the financial backers of the movies reviewed. Now there is no technological barrier to reviewers putting up clips to illustrate graphically the picks and pans they dish out.²⁹

However, there are many legal barriers. Section 106 of the Copyright Act grants copyright holders six exclusive rights—all of which may be violated by the would-be reviewer.³⁰ Any copy of the film

28. See, e.g., JAMES F. ENGLISH, *THE ECONOMY OF PRESTIGE: PRIZES, AWARDS, AND THE CIRCULATION OF CULTURAL VALUE* 1 (2005) (noting that the “custom of . . . selecting outstanding individuals from various fields of cultural endeavor and presenting them with special tokens of esteem . . . dat[es] back at least to the Greek drama and arts competitions in the sixth century B.C. . . .”).

29. Categorizers’ political significance should also be recognized. Some commentators believe heavily favored incumbent George Allen lost his 2006 senate race in Virginia after a clip of him “belittling [a] dark-skinned man as ‘macaca, or whatever his name is’ ” was rapidly disseminated over the web. Frank Rich, *2006: The Year of the Macaca*, N.Y. TIMES, Nov. 12, 2006, § 4, at 12. Rich argues that “[t]he moment became a signature cultural event of the political year because [Allen’s opponent] posted the video clip on YouTube.com, [a] wildly popular [video categorizing] site. . . . Unlike unedited bloggerhea, which can take longer to slog through than Old Media print, YouTube is all video snippets all the time; the one-minute macaca clip spread through the national body politic like a rabid virus.” *Id.*

30. [T]he owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

- (1) to reproduce the copyrighted work in copies or phonorecords;
- (2) to prepare derivative works based upon the copyrighted work;
- (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
- (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;
- (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and
- (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

17 U.S.C. § 106 (2006).

made in order to isolate the clips violates the owner's exclusive right to copy.³¹ The clip itself may be deemed a "derivative work, which only the owner may prepare."³² Placing it on a website may be termed "distribution," or even a "public performance," depending on how many individuals have access to the site.³³ Even if the clip has no negative impact on the market for the film, the copyright holder can still sue for statutory damages—which range as high as \$150,000 for a willful infringement.³⁴

Regardless of these deterrents, thousands of individuals still post and comment on movie clips, texts, music, images, and other copyrighted works.³⁵ To the extent they comment on the original, they have a decent shot at a "fair use" defense.³⁶ Fair use is copyright's "safety valve," permitting a wide range of uses unauthorized by copyright holders.³⁷ To the extent the user's commentary is more

31. See *id.* § 106(1) (granting the copyright owner exclusive reproductive rights, making such copying an infringement).

32. *Id.* § 106(2) (codifying the exclusive right to prepare a derivative work based on a copyrighted work).

A 'derivative work' is [defined as] a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work.'

Id. § 101.

33. *Id.* § 106(3) (codifying the "distribution" right); *id.* § 106(4) (codifying the "public performance" right).

[T]he copyright owner may elect, at any time before final judgment is rendered, to recover, instead of actual damages and profits, an award of statutory damages for all infringements involved in the action, with respect to any one work, for which any one infringer is liable individually, or for which any two or more infringers are liable jointly and severally, in a sum of not less than \$750 or more than \$30,000 as the court considers just.

Id. § 504(c)(1); *id.* § 504(c)(2) ("In a case where the copyright owner sustains the burden of proving, and the court finds, that infringement was committed willfully, the court in its discretion may increase the award of statutory damages to a sum of not more than \$150,000.").

35. See Posting of Daniel J. Solove to Concurring Opinions Blog, http://www.concurringopinions.com/archives/2005/12/what_if_copyrig.html (Dec. 15, 2005, 11:53 EST) ("[T]he blogosphere has developed a set of copyright norms in an area where there is very little enforcement. These norms about the use of copyrighted material are probably at odds with existing copyright law.").

36. 17 U.S.C. § 107 ("[T]he fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.").

37. *Eldred v. Ashcroft*, 537 U.S. 186, 219-20 (2003) ("[T]he 'fair use' defense allows the public to use not only facts and ideas contained in a copyrighted work, but also expression itself

voluminous than the clip or sample involved, the fair use defense is stronger.³⁸

But as automated categorizers, such as search engines, have begun to enter the field, the limits of fair use are being tested. Search engines' ranking of cached content in response to a search inquiry is a "comment" on the content; as one court recently held, rankings may be considered a form of expression protected under the First Amendment.³⁹ Nevertheless, a wide array of content owners—ranging from book publishers to sports broadcasters to news services—have complained that Google's initial copy of their content into its databases, and its subsequent provision of fragments of that content in response to search queries, is a violation of their copyrights.

Given the paucity of comment they offer, search engines pose the copyright issues raised by categorizers in the starkest form.⁴⁰ A long review encompassing a small film clip would strike many as a classic fair use (though the law of fair use is so unclear that even that conclusion cannot be made with certainty).⁴¹ But if a categorizer's only contribution consists of organizing and ranking content, should *that* excuse an infringement of copyright?⁴²

in certain circumstances. . . . The fair use defense affords considerable latitude for scholarship and comment." (citation omitted).

38. See 17 U.S.C. § 107(3) (2006) (calibrating the fair use defense to the "amount and substantiality" of the work used).

39. Two questions remain. First, are PageRanks constitutionally protected opinions? Second, if PageRanks fall within the scope of protection afforded by the First Amendment, is the publication of PageRanks per se lawful under Oklahoma law, thereby precluding tort liability premised on the intentional and even malicious manipulation of PageRanks by Google? The court answers both questions in the affirmative. *Search King Inc. v. Google Tech., Inc.*, No. CIV-02-1457-M, 2003 WL 21464568, at *3 (W.D. Okla. May 27, 2003). For a critique of *Search King's* First Amendment analysis, see Oren Bracha and Frank Pasquale, *Fairness and Accountability in the Law of Search*, 35 HOFSTRA L. REV. (forthcoming 2007).

40. In this respect, the dilemmas facing search engines and bond raters raise similar First Amendment issues. See Gregory Husisian, Note, *What Standard of Care Should Govern the World's Shortest Editorials?: An Analysis of Bond Rating Agency Liability?*, 75 CORNELL L. REV. 411, 427 (1990). In a fair use dispute, the search engine would likely call its ranking system a type of "editorializing" or comment on the items ranked and organized. However, it is unclear whether ranking in itself is "transformative" enough a use to merit a favorable fair use finding, or even a positive "first factor" finding.

41. See, e.g., *Preamble*, DOCUMENTARY FILMMAKERS' STATEMENT OF BEST PRACTICES IN FAIR USE (Am. Univ. Ctr. for Soc. Media, Washington, D.C.), Nov. 18, 2005, at 1, available at http://www.centerforsocialmedia.org/files/pdf/fair_use_final.pdf ("[D]ocumentary filmmakers have found themselves, over the last decade, increasingly constrained by demands to clear rights for copyrighted material. . . . The knowledge and perspectives that documentarians can provide are compromised by their need to select only the material that copyright holders approve and make available at reasonable prices.").

42. Frank Pasquale, *Rankings, Reductionism, and Responsibility*, 55 CLEV. ST. L. REV. 777, 779-80 (2006) (discussing the nature of the ranking in connection with the *Search King* case). In *Search King*, Google successfully resisted an action sounding in defamation and unfair

As the rest of Part II demonstrates, that legal question is deeply contested. Since the search engine Google is now directly confronting legal challenges usually only hypothetically posed to categorizers, I focus the discussion on it. The Author's Guild, major publishers, and Agence France-Press have all claimed Google's current and planned services infringe their copyrights.⁴³ The rest of this Part examines the strength of each side's claims, setting up a discussion in Part III regarding which side *deserves* to be vindicated.

A. Case Study: The Google Print Project

Sergey Brin has said that "the perfect search engine would be like the mind of God."⁴⁴ Hubris aside, the comment reveals much about the aspirations of general purpose search engines. Their business model is predicated on their being the first source of information that "searchers" seek out when they need to find a site for which they do not know a URL, or any other resource they cannot locate by themselves. Searchers will only trust a given search engine as an all-purpose portal if they can be reasonably assured that it has indexed the relevant information. If, for example, you are searching for "resorts near Cancun," and you know that a given search engine only lists American sites, you would be sure to avoid that one.⁴⁵

competition by characterizing its page rankings as "opinion" rather than "fact." 2003 WL 21464568, at *3. While I am wary of giving search engine rankings First Amendment protection in this way, I think that rankings contain enough expressive content to merit favorable copyright treatment analogous to that already enjoyed by reviewers.

43. Complaint at 2, *The Author's Guild v. Google, Inc.*, No. 05-CV-8136-JES (S.D.N.Y. filed Sept. 20, 2005) (on file with author), available at <http://fl.findlaw.com/news.findlaw.com/hdocs/docs/google/agggoog92005cmp.pdf> (alleging that "[b]y reproducing for itself a copy of those works that are not in the public domain . . . Google is engaging in massive copyright infringement."); Complaint at 5, *Agence France-Press v. Google, Inc.*, No. 1:05cv00546 (D.D.C. filed Mar. 17, 2005) (on file with author), available at <http://blog.searchenginewatch.com/blog/050321-175410> (follow "Main Document (Complaint)" hyperlink) (alleging that "[w]ithout AFP's authorization, Defendant is continuously and willfully reproducing and publicly displaying AFP's photographs, headlines and story leads on its Google News web pages.").

44. Siva Vaidhyanathan, *A Risky Gamble with Google*, CHRON. HIGHER EDUC., Dec. 2, 2005, at B9; see *Documentary Archive: Inside the World of Google* (BBC News television broadcast Aug. 15, 2006), available at http://news.bbc.co.uk/2/hi/programmes/documentary_archive/4794479.stm (follow "Download" hyperlink; fast-forward audio to 16:43) (Susan Wojcicki, VP of Product Management, confirming Brin's perhaps facetious statement about his interest in a "Google implant to the brain" which would act as a search engine, allowing access to the world's information—although "no one is working on that right now").

45. China adopts an analogous policy, having constructed "what is known in academic circles as the Great Firewall of China," which keeps government-censored sites from reaching its citizens. JOHN BATTELLE, *THE SEARCH: HOW GOOGLE AND ITS RIVALS REWROTE THE RULES OF BUSINESS AND TRANSFORMED OUR CULTURE* 204 (2005).

Although the Cancun example is fanciful (given the international reach of the main general-purpose search engines operating in the United States), it does highlight the importance of *comprehensiveness* to a search engine.⁴⁶ For some time, search engines have jockeyed to claim that they have indexed the most websites.⁴⁷ Nevertheless, search engines have also conceded to individual site-owners' demands by not indexing sites that have a small programming script ("robots.txt") at the top of the "source pages."⁴⁸ This opt-out strategy has worked well in the online context because the Digital Millennium Copyright Act immunizes "information service providers" from copyright liability for caching websites.⁴⁹

Similar express immunities do not apply to books, but Google has nevertheless attempted to apply this opt-out approach to the texts it is indexing for its "Google Library" project. The quest for comprehensiveness has taken search engines beyond online sources and into the print world; all the major general-purpose search engines have begun scanning books into an online database.⁵⁰ However, only Google is committed to copying copyrighted books into a database and making them searchable.⁵¹ (In time, searches for "resorts near Cancun" might not just generate links to relevant websites, but also to snippets of text from relevant books like *Fodor's Mexico*.) Google is permitting copyright owners to keep their books out of the database, provided they notify Google of their objections.⁵² This "opt-out"

46. Danny Sullivan, *End Of Size Wars? Google Says Most Comprehensive But Drops Home Page Count*, SEARCH ENGINE WATCH, Sept. 27, 2005, <http://searchenginewatch.com/searchday/article.php/3551586>.

47. *Id.*

48. See generally Google.com, Removing My Content from the Google Index, <http://www.google.com/webmasters/remove.html> (follow "How can I remove content from Google's index?" link; then follow "Remove" hyperlinks) (last visited Nov. 4, 2006) (representative of the policies of other large general-purpose search engines).

49. 17 U.S.C. § 512(b) (2006).

50. Elinor Mills, *Microsoft to Offer Book Search*, CNET, Oct. 25, 2005, http://news.com.com/Microsoft+to+offer+book+search/2100-1025_3-5913711.html.

51. See, e.g., Edward Wyatt, *Google Adds Library Texts to Search Database*, N.Y. Times, Nov. 3, 2005, at C11.

52. See Oren Bracha, Abstract, *Standing Copyright Law on Its Head? The Googlization of Everything and the Many Faces of Property* (Univ. of Texas Law and Econ. Research, Working Paper No. 92, 2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=931426 (using "the Google Print Library case in order to examine the role of opt-out arrangements in copyright law in general and in the context of digital libraries in particular" and "argu[ing] that the choice between opt-in and opt-out is always a context-specific policy determination and that the digital-library context makes a compelling case for an opt-out regime.").

approach has provoked the ire of the Author's Guild and major publishers, who have sued to enjoin the Google project.⁵³

Google has partnered with five major libraries in order to build a massive digital library based on their holdings.⁵⁴ To date, the University of Michigan, Harvard University, Stanford University, the New York Public Library, and Oxford University have agreed to participate.⁵⁵ Each library partner has control over which of its books are scanned, and each is to receive a copy of the books pursuant to conditions specified in its contract with Google.⁵⁶ Google plans to add over fifteen million library volumes to its electronic index (and is expected to spend \$150 million (approximately \$10 per book) in compiling its digital library).⁵⁷ Users will be able to enter a search term and receive a results list of everywhere that term appears in Google's database.⁵⁸

53. Google knew or should have known that the Copyright Act, 17 U.S.C. § 101 *et seq.* ("the Act") required it to obtain authorization from the holders of the copyrights in these literary works before creating and reproducing digital copies of the Works for its own commercial use and for the use of others. Despite this knowledge, Google has unlawfully reproduced the Works and has announced plans to reproduce and display the Works without the copyright holders' authorization. Google intends to derive revenue from this program by attracting more viewers and advertisers to its site.

Complaint at 2-3, *The Author's Guild v. Google, Inc.*, No. 05-CV-8136-JES (S.D.N.Y. filed Sept. 20, 2005) (on file with author), available at <http://fl1.findlaw.com/news.findlaw.com/hdocs/docs/google/aggoog92005cmp.pdf>.

54. See Vaidhyanathan, *supra* note 44, at B7 ("The University of Michigan at Ann Arbor has agreed to let Google scan its entire collection—some 7.8 million works—and Stanford University says it is keeping open the possibility of including 'potentially millions' of its more than eight million volumes.").

55. Wyatt, *supra* note 51; see, e.g., Contract between Google Inc., and the Regents of the University of Michigan 1 (on file with author), available at <http://lib.umich.edu/mdp/um-google-cooperative-agreement.pdf>. The Author's Guild is not only concerned about Google's copy of the libraries' holdings, but also with the digital copy they plan to give to each of the libraries. At the Yale Search Conference, Author's Guild representative Paul Aiken fretted that universities might be so bold as to permit libraries to *make course reserve readings available online*. Paul Aiken, Address at the Yale Information Society Project Conference: Regulating Search? A Symposium on Search Engines, Law, and Public Policy (Dec. 3, 2005). Given the coursepack cases discussed below, Mr. Aiken likely has a legal basis for demanding compensation for such a use.

56. See Posting of Susan Wojcicki to Official Google Blog, <http://googleblog.blogspot.com/2005/09/google-print-and-authors-guild.html> (Sept. 20, 2005, 21:04 EST).

57. Compare John Markoff & Edward Wyatt, *Google is Adding Major Libraries to its Database*, N.Y. TIMES, Dec. 14, 2004, at A1, with Gary Wolf, *The Great Library of Amazonia*, 11 WIRED 76 (2003), available at http://www.wired.com/wired/archive/11/12/amazon_pr.html (describing the process of creating Amazon's "Look-Inside-The-Book" feature and the costs of digitization associated with it).

58. Even the project's critics acknowledge the enormous gains in access to knowledge the project promises. See Vaidhyanathan, *supra* note 44, at B10 ("The dream of a perfect research machine seems almost within our reach. Google . . . announced late last year that it would digitize millions of bound books from five major English-language libraries. It plans to make

Google has set forth different terms of distribution for the materials that will be included in Google Print, depending on their copyright status. Materials in the public domain will basically be made wholly available. If a page from a public domain work contains a search term entered by a user, she will be able to view the entire page that contains the search term and can also read through or print the entire book.

Copyright owners can also make their books available in this way, but very few have chosen to do so.⁵⁹ More likely, a copyright owner submitting a work to Google Print will choose Google's second distribution option: to permit a searcher to view a full page of the text surrounding their search results and also a few pages on either side of the results. The result page will also provide links to online book retailers who sell the text.

For copyrighted works not recommended to Google by their publisher, a far more constricted result will appear. The user will only be able to view the bibliographic information and a few short sentences of text around their search term.⁶⁰ The results page will provide links to other information on the web regarding the search terms, links to retailers who sell the book (or used book sellers in case the work is out-of print), and a link suggesting places to find the book at the user's local library.⁶¹ In addition, "[t]o further protect the copyright holders, Google disables the user's print, save, cut and copy functions on the text display pages so that the user is limited to reading the information on the screen."⁶²

available online the full text of public-domain books (generally those published before 1923, plus government works and others never under copyright) and excerpts from works still in copyright." These new technologies promise to transform many information-related industries. See, e.g., Deanna Barmakian, *Better Search Engines for Law*, 92 LAW LIBR. J. 399 (2000).

59. See, e.g., Larry Lessig, *Free Culture*, <http://www.free-culture.cc/> (providing a PDF of the book, information on where to buy a paper copy, reviews, a wiki, and audio versions). Though this strategy may not maximize revenues for a copyright holder, there are clear advantages for an author trying to disseminate ideas. See Podcast: Interview by Frank Ling with Larry Lessig, hosted by Berkeley Groks Science (Apr. 28, 2004), http://www.ugcs.caltech.edu/~frank/BerkeleyGroks_Lessig.btm (describing near-instantaneous creation of audio-version, wiki-version, and translations of the book after it was made available online).

60. See Google, What You'll See When You Search on Google Book Search, <http://print.google.com/googleprint/screenshots.html#excerpt> (last visited Nov. 7, 2006) (explaining that "The Snippet View, like a card catalog, shows information about the book plus a few snippets—a few sentences of your search term in context.").

61. *Id.* ("These links aren't paid for by those sites, nor does Google or any library benefit if you buy something from one of these retailers. . . . To enforce limits on how many pages a user can view, we do connect some information—your Google Account name—with the books and pages that you've viewed.").

62. Hanratty, *supra* note 23, at 12.

B. Indeterminate Legal Analysis

Nevertheless, Google's project has provoked objections from leading copyright holders and raises two important issues for copyright law. First, courts must decide whether the initial archival copy, necessary to the creation of the index, violates copyright law. Second, the status of whatever "snippets" the search engine generates in response to search inquiries is also at issue. The plaintiffs want Google to license each of these uses; Google claims each is a fair use. The following statutory text of § 107 governs the controversy:

Notwithstanding the provisions of sections 106 and 106A [enumerating copyright holders' rights], the fair use of a copyrighted work . . . is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include –

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.⁶³

A rather complicated caselaw has developed around each factor. Sections 1 and 2 below analyze how each might apply to the two stages of the Google Print project.⁶⁴

63. 17 U.S.C. § 107 (2006); *see also* Eric Goldman, Summary of Fair Use Doctrine (Oct. 2004), <http://www.ericgoldman.org/Courses/ipsurvey/fairusecheatsheet.pdf> (last visited Nov. 6, 2006) (providing a rough guide on how these factors usually play out in the caselaw).

64. I have split the analysis into the two stages of the project, but even this initial step is contestable. While the entire searchable database of Google Library may be deemed a "transformative" use of the works involved, there is no guarantee that a court will focus on that stage of the process. It may well focus on the initial, archival copies Google makes, and deem those "nontransformative." A first factor finding that this essential aspect of the Google Library project is both commercial and nontransformative would seriously undermine any fair use defense Google might have. On the other hand, a court may elide the "initial archival copying" analysis by deeming that incidental or intermediate copying. *See* 17 U.S.C. § 117(c) (2006) (providing that it is not infringement for the owner of a machine to make a copy of a computer program if the copy is made automatically by virtue of the activation of a machine that contains a licensed copy of the computer program, for repair and maintenance purposes); *see also* *Sega Enterprises v. Accolade, Inc.*, 977 F.2d 1510, 1527 (9th Cir. 1992) ("[W]here disassembly is the only way to gain access to the ideas and functional elements embodied in a copyrighted computer program and where there is a legitimate reason for seeking such access, disassembly is a fair use of the copyrighted work, as a matter of law."). For a critical look at the applicability of these cases here, *see* discussion *infra* note 257.

1. The Initial Archival or Indexed Copy

To create a searchable database of books, Google first needs to scan each paper book into a digital file. Only a complete copy can serve the tool's purpose: to permit every word of every text to be a search query. Generally speaking, the first fair use factor (relating to the "purpose and character of the use") has two dimensions: commerciality and transformativity.⁶⁵ Noncommercial uses are favored, as are those that add to, revise, or reconfigure the work.⁶⁶ An archival copy *itself* serves no commercial purpose—only the result it generates does. However, archival copies do not have transformative qualities; their very purpose is to reproduce faithfully the content they index. So the first fair use factor appears to be a "wash."

Inquiries into the second fair use factor, the "nature" of the copyrighted work, usually have two prongs as well—first, whether the work is fact or fiction,⁶⁷ and second, whether the work is published or unpublished.⁶⁸ Courts are usually less concerned about unauthorized uses of factual works and published works than they are about unauthorized uses of fictional works and unpublished works, and they adjust fair use jurisprudence accordingly. Thus, it appears that this factor slightly favors Google: though some of the books are fictional, some are factual, and all are published.

The third fair use factor, "amount and substantiality," cuts against Google, since Google plans to copy each work in its entirety.⁶⁹ Finally, the fourth fair use factor—the effect on the market—is entirely indeterminate.⁷⁰ A court might find that Google's failure to

65. In the last Supreme Court case addressing fair use, the Court suggested that transformativity analysis is more important than commerciality analysis. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) ("The central purpose of [first factor analysis] is to see . . . whether the new work merely 'supersede[s] the objects' of the original creation, or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is 'transformative.'" (internal citations omitted)).

66. *Id.*

67. The copying of factual works, including factual elements of creative works (such as the tables of contents and indexes) is likely to be deemed fair use. *See, e.g., Harper & Row, Publishers Inc. v. Nation Enterp.*, 471 U.S. 539, 563 (1985).

68. *See WILLIAM F. PATRY, THE FAIR USE PRIVILEGE IN COPYRIGHT LAW* 504-48 (2d ed. 1995) (providing an overview of how courts have treated various uses under the second factor).

69. Copying an entire work militates against a finding of fair use unless mitigating circumstances are found. *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 109 (2d Cir. 1998). However, making a copy of a television program for home viewing at a later time entails copying the entirety of a creative work but has been found to be fair use. *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417, 449-51 (1984).

70. Jonathan Band's analysis suggests that Google has a better chance at "winning" this factor than is suggested here. *See Jonathan Band, Google: Google Print: Dismissing Copyright*

pay licensing fees for the right to archive the books is a grievous financial loss to the copyright holders.⁷¹ Or a court might find that such a licensing market is not “traditional, reasonable, or likely to be developed,”⁷² and that the archival copies, standing alone, pose no threat to the commercial interests of copyright holders.⁷³ Given the equivocal nature of the other three factors, the futility of the fourth factor’s analysis makes fair use analysis of the initial archival copies a black box.⁷⁴

Concerns, 7 E-COMMERCE L. & POL’Y 8 (2005), http://www.ecomlaw.com/lp/details_contents.asp?ID=967 (“Without question, the Print Library Project will increase the demand for some books. The project will expose users to books containing desired information, which will lead some users to purchase the books or seek them out in libraries (which in turn may purchase more copies of books in high demand). It is hard to imagine how the Library Project could actually harm the market for certain books, given the limited amount of text a user will be able to view.”) Band also reasons that the “Google Publisher” option offered to copyright holders (which provides them a share of any advertising revenue generated by the project) would circumvent the licensing demands mentioned below. *Id.*

71. The reasoning is obviously circular:

[A] potential market, no matter how unlikely, has always been supplanted in every fair use case, to the extent that the defendant, by definition, has made some actual use of plaintiff’s work, which use could in turn be defined in terms of the relevant potential market. In other words, it is a given in every fair use case that plaintiff suffers a loss of a potential market if that potential is defined as the theoretical market for licensing the very use at bar.

MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05(A)(4) (Matthew Bender & Company, Inc. 2006) (1963). Nevertheless, it has guided a number of leading fair use decisions. See Pasquale, *supra* note 11, at 777 (cataloging and criticizing such decisions as directly contradicting the Supreme Court’s method of fourth factor analysis exemplified in *Sony v. Universal Studios*).

72. This is the legal standard for determining the legitimacy of licensing evidence in fourth factor analysis. See Matthew Africa, *The Misuse of Licensing Evidence in Fair Use Analysis: New Technologies, New Markets, and the Courts*, 88 CAL. L. REV. 1145, 1168-69 (2000).

73. See Band, *supra* note 70 (“Without question, the Print Library Project will increase the demand for some books. The project will expose users to books containing desired information, which will lead some users to purchase the books or seek them out in libraries (which in turn may purchase more copies of books in high demand). It is hard to imagine how the Library Project could actually harm the market for certain books, given the limited amount of text a user will be able to view.”). Band also reasons that the “Google Publisher” option offered to copyright holders would circumvent the licensing demands mentioned below. I provide doctrinal support for Band’s broad reading of fourth factor, “effect on the market” analysis in a recent article. See Pasquale, *supra* note 11, at 790. Nevertheless, a strict application of rules developed in the coursepack cases would suggest that publishers could *still* claim a negative market effect because a fair use finding would deny them the chance to charge a licensing fee for snippets.

74. This should not be surprising; as David Nimmer has suggested, “had Congress legislated a dartboard rather than the particular four fair use factors embodied in the Copyright Act, it appears that the upshot would be the same.” David Nimmer, *Fairest of Them All’ and Other Fair Use Fairy Tales*, 66 LAW & CONTEMP. PROBS. 263, 280 (2003); see also MARJORIE HEINS & TRICIA BECKLES, WILL FAIR USE SURVIVE? FREE EXPRESSION IN THE AGE OF COPYRIGHT CONTROL 16-25 (2005), available at <http://www.fepproject.org/policyreports/WillFairUseSurvive.pdf> (discussing various focus groups’ and lawyers’ complete uncertainty about whether certain uses of copyrighted work would count as fair).

Since there is no direct precedent for Google's service, it is difficult to apply caselaw here. Some commentators have argued that Google's archival, indexed copies are prohibited under a 2000 district court opinion, *UMG Recordings, Inc. v. MP3.com, Inc.*⁷⁵ In that case, a company with an apparently forward-looking business model, MP3.com, copied 80,000 CDs in order to permit users who could *prove they already owned certain CDs* to "space-shift" their content—i.e., listen to streamed music via MP3.com's website, rather than lugging around their CDs.⁷⁶ The district court rejected every aspect of MP3.com's fair use defense, a decision that ultimately led to a settlement of \$53.4 million in damages paid to Universal Music Group.⁷⁷

MP3.com stands as a chilling landmark of copyright formalism.⁷⁸ For instance, the Recording Industry Association of America has used *MP3.com*-like reasoning to argue that owners of CDs have no right to rip them onto their personal MP3 players. Though the RIAA has long held the position that "it's perfectly lawful to take a CD that you've purchased, upload it onto your computer, put it onto your iPod," it and other large content holders recently made it clear that they believe they can revoke that right at any time and for any reason:

Nor does the fact that permission to make a copy in particular circumstances is often or even routinely granted necessarily establish that the copying is a fair use when the copyright owner withholds that authorization. [A policy permitting copies is] simply a statement about authorization, not about fair use.⁷⁹

If content owners succeed in preventing iPod owners from ripping their own music to their own personal music players, it is hard to imagine Google achieving the right to copy content en masse.

This is true, unless, of course, courts overcome the formalism of *MP3.com* and look at the initial copy *in the context of* Google's larger

75. *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000). See Hanratty, *supra* note 23, at 10.

76. MP3.com would stream the music to the user once they had validated their ownership of the relevant CD. *UMG*, 92 F.Supp 2d at 350.

77. Amy Harmon, *Deal Settles Suit Against MP3.com*, N.Y. TIMES, Nov. 15, 2000, at C1.

78. For the leading contemporary jurisprudential definition of formalism, see Frederick Schauer, *Formalism*, 97 YALE L.J. 509, 510 (1988) (defining formalism as "the way in which rules achieve their 'ruleness' [by] . . . screening off from a decisionmaker factors that a sensitive decisionmaker would otherwise take into account"). The fair use test codified in 17 U.S.C. § 107 is more a standard than a rule, left deliberately open-ended in order to permit contextual judgment to trump mechanical pigeonholing of cases. 17 U.S.C. § 107 (2006).

79. Joint Reply Comments to the United States Copyright Office on DMCA Rulemaking on Exemptions to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Docket No. RM 2005-11 (Recording Indus. Ass'n of Am. et al. Feb. 2, 2006), available at http://www.copyright.gov/1201/2006/reply/11metalitz_AAP.pdf.

purposes in creating an index of books. Both courts and Congress have recognized the legitimacy of intermediate copying in contexts where a spare copy was necessary to a non-infringing goal.⁸⁰ For example, computer repairers can make an identical but non-infringing copy of a program on a hard drive to perform maintenance,⁸¹ and programmers can make a non-infringing copy of a program in order to reverse engineer it.⁸²

2. Snippets

An intermediate copying, fair use defense can only succeed if the final product—a database providing “snippets” as samples of books—is non-infringing. This is an extraordinarily difficult question in copyright law.⁸³ Google has argued that the snippets are a fair use

80. Paul Ganley, Abstract, Google Book Search: Fair Use, Fair Dealing and the Case for Intermediary Copying (Jan. 13, 2006), http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID875384_code549519.pdf?abstractid=875384&mirid=1 (last visited Nov. 7, 2006) (proposing, based on American law, a “specific defence for ‘intermediary’ copying premised on the ‘temporary copies’ exception . . . of the Copyright, Designs, and Patents Act of 1988 . . . and alternatively a new defence of ‘fair dealing for informational purposes’ . . .”); compare ROBERT BURRELL AND ALLISON COLEMAN, COPYRIGHT EXCEPTIONS: THE DIGITAL IMPACT 136 (2005) (“The libraries and archives [exemptions in the United Kingdom copyright law] allow officially sanctioned persons to make copies of a work and, in appropriate circumstances, to supply these copies to other institutions and individuals. . .”).

81. In 1993, the Ninth Circuit refused to find a repairman’s unauthorized “copying” of a program to a computer’s hard drive a fair use, despite the necessity of doing so merely to turn the computer on. *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993). Five years later, the Digital Millennium Copyright Act of 1998 legislatively overruled that part of the holding. 17 U.S.C. § 117(c)(2006) (providing that it is not infringement for the owner of a machine to make a copy of a computer program if the copy is made automatically by virtue of the activation of a machine that contains a licensed copy of the computer program, for repair and maintenance purposes).

82. *Sega Enters. v. Accolade, Inc.*, 977 F.2d 1510, 1527, 1527-28 (9th Cir. 1992) (“[W]here disassembly is the only way to gain access to the ideas and functional elements embodied in a copyrighted computer program and where there is a legitimate reason for seeking such access, disassembly is a fair use of the copyrighted work, as a matter of law.”) Beyond that bright line rule, *Sega* may well also stand for a judicial willingness to permit copying of small portions of competitor’s software in order to promote interoperability. *Id.*

83. Unfortunately, the formalism of the statutory fair use factors makes much of the analysis of the initial archival copy planned by Google applicable to the “snippets” that search queries would generate. The fourth factor licensing analysis is indeterminate, and the second, “nature of the work” query is slightly in Google’s favor, given the published status of all the works. The third factor shifts to Google’s favor, since the “snippets” are only a tiny fraction of the work as a whole (generally, the three or four lines above and below the search term). The first factor may shift to Google’s favor as well, since the generation of snippets is far more transformative than the mere copying of texts. Yet the commercial dimensions of the project are far more evident here, since Google will be selling advertising on pages that feature the snippets. So the first factor, and brute fair use analysis generally, appears indeterminate here as well. For a commentary on the formalism and ultimate incoherence of the factors, see Michael Madison, *A*

of the books from which they derive. But copyright holders may argue that the snippets themselves are copyrighted *works*.⁸⁴ Consider a query for “poetry about plums” that returns an anthology by William Carlos Williams. The entire twenty-eight word poem, *This Is Just To Say*, might show up as a snippet.⁸⁵ It is hard to argue against the conclusion that this snippet is a reproduction of copyrighted work.

Though such a result might merely lead one to exclude short poetry from the digitized databases, run-of-the-mill protection of “microworks” raises other problems.⁸⁶ Though “[w]ords and short phrases such as names, titles, and slogans” clearly are not copyrightable,⁸⁷ clever advocacy has eroded extant judicial resistance to the copyrightability of abridgments, samples, or small portions of works.⁸⁸

Pattern-Oriented Approach to Fair Use, 45 WM. & MARY L. REV. 1525, 1550 (2004) (describing “conflicts and complications in the statutory text” that govern fair use determinations).

84. Justin Hughes, *Size Matters (or Should) in Copyright Law*, 74 FORDHAM L. REV. 575, 576 (2005) (citing 17 U.S.C. § 101, 102 (2000)) (“The Copyright Act defines a ‘collective work,’ a ‘work made for hire,’ ‘literary works,’ a ‘joint work,’ and ‘a work of visual art.’ But the law runs silent on the foundational concept on which these definitions are built.”). Hughes notes that

[u]nder the fair use doctrine, the smaller the amount copied, the fairer the copying. Courts have also deployed a ‘de minimis’ copying rule separate from, and antecedent to, any fair use analysis. The de minimis rule expressly allows the copying of small and insignificant portions of the plaintiff’s work. However, neither of these doctrines is an adequate device because each takes the work as its starting point to measure the amount of copying.

Id. Many courts have been unwilling to reject claims for control of very small “works.” See, e.g., Thomas Cotter, *Memes and Copyright*, 80 TUL. L. REV. 331, 333 n.3 (2005) (citing *Mattel, Inc. v. Goldberger Doll Mfg. Co.*, 365 F.3d 133, 134-37 (2d Cir. 2004) (noting that “the United States Court of Appeals for the Second Circuit vacated a judgment that Barbie’s eyes, nose, and mouth were uncopyrightable standard features”)).

85. The entire poem is twenty-eight words long. See William Carlos Williams, “This Is Just To Say,” *quoted in its entirety in* CAMILLE PAGLIA, *BREAK, BLOW, BURN* 131 (Pantheon Books 2005) (apologizing for finishing off the cold plums in the refrigerator).

86. I borrow the term “microworks” from Hughes. Hughes, *supra* note 84, at 576.

87. 37 C.F.R. § 202.1(a) (2006) (providing that that “[w]ords and short phrases such as names, titles, and slogans; familiar symbols or designs; mere variations of typographic ornamentation, lettering or coloring; [and] mere listing of ingredients or contents” are not subject to copyright).

88. See Hughes, *supra* note 84, at 577 (observing that the “creeping protection of ‘microworks’” occurs primarily because fair use and de minimis doctrine (permitting the copying of small portions of plaintiffs’ work) “each take[] the work as its starting point to measure the amount of copying,” leaving open the possibility that the court will define the work narrowly and characterize the plaintiff as copying the whole of it). A similar issue is known as the “denominator problem” in takings law; as the Supreme Court acknowledged,

Because our test for regulatory taking requires us to compare the value that has been taken from the property with the value that remains in the property, one of the critical questions is determining how to define the unit of property “whose value is to furnish the denominator of the fraction.”

Under the fair use doctrine, it usually is the case that the less of a work is copied, the more likely the use is fair.⁸⁹ However, the fourth “effect on the market” component of fair use cases has sometimes devolved into a judicial insistence that any use that can be paid for, should be paid for.⁹⁰ The “coursepack” cases, for instance, required that instructors at universities get copyright permission for reproducing *portions* of books in materials photocopied for classes.⁹¹ On one reading, these cases require a copier to license any portion of a work for which a market is “traditional, reasonable, or likely to be developed.”⁹² Given the extent to which the internet reduces the transaction costs of micropayment systems,⁹³ publishers might argue that a new branch of the extant Copyright Clearance Center would easily set up a marketplace for snippets.⁹⁴ Mere token efforts by

Keystone Bituminous Coal Ass'n. v. DeBenedictis, 480 U.S. 470, 497 (1987) (quoting Frank Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation"* Law, 80 HARV. L. REV. 1165, 1192 (1967)).

89. See 17 U.S.C. § 107(3) (2006) (calibrating fair use protection to “amount and substantiality” of the work used). *But see* L.A. News Serv. v. KCAL-TV Channel 9, 108 F.3d 1119, 1120-23 (9th Cir. 1997) (noting that even taking a small portion of the work may lead to a negative third factor finding if it is the “heart of the work”); Religious Tech. Ctr. v. Pagliarina Lerma, 908 F. Supp. 1362, 1367 (E.D. Va. 1997) (reaching a similar conclusion). *See also* L.A. News Serv. v. Reuters Telev. Int'l, 149 F.3d 987, 994 (9th Cir. 1998) (mentioning the “heart of the work” doctrine); Sundeman v. Seajay Soc'y, Inc., 142 F.3d 194, 205 (4th Cir. 1998) (same).

90. See Wendy J. Gordon, *Market Failure and Intellectual Property: A Response to Professor Lunney*, 82 B.U. L. REV. 1031, 1032 (2002) (criticizing this development as a misinterpretation of her seminal article on the topic, 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, 1601 (1982) (asserting that “the courts and Congress have employed fair use to permit uncompensated transfers that are socially desirable but not capable of effectuation through the market”)).

91. See, e.g., Bernard Zidar, *Fair Use and the Code of the Schoolyard: Can Copyshops Compile Coursepacks Consistent with Copyright?*, 46 EMORY L.J. 1363, 1364 (1997) (suggesting that the “prevailing analysis by which fair use is determined effectively denies fair use protection to all commercial copyshops”).

92. Princeton Univ. Press v. Mich. Doc. Servs., 99 F.3d 1381, 1407-08 (6th Cir. 1997) (en banc) (quoting Am. Geophysical Union v. Texaco, 60 F.3d 913, 930-31 (2d Cir. 1994)).

93. Micropayments are “small digital payments of between a quarter and a fraction of a penny.” Posting of Clay Shirky, clay@shirky.com, to nec@shirky.com (Sept. 5, 2003), available at http://www.shirky.com/writings/fame_vs_fortune.html. Internet services like BitPass, FirstVirtual, Cybercoin, Millicent, DigiCash, Internet Dollar, and Pay2See have served as micropayment systems. *Id.*

94. For example, in *Princeton*, the Sixth Circuit ruled that publishers' development of the Copyright Clearance Center made it reasonable for them to demand that universities license even brief excerpts of copyrighted works included in coursepacks. *See, e.g., Princeton*, 99 F.3d at 1386-87 (holding that defendant's photocopying of plaintiff's copyrighted work was not a fair use because it harmed the reasonable potential market value of the copyrighted works); *Am. Geophysical Union*, 60 F.3d at 930-31 (same). For a complete collection of documents relating to the coursepack case, see Stanford University Libraries, *Copyright and Fair Use: Michigan Document Services and Coursepacks*, http://fairuse.stanford.edu/primary_materials/cases/michigan_document_services/index.html (last visited Nov. 7, 2006). This site is one excellent example of the value of the work of “legal categorizers” on the internet.

copyright holders to set up a licensing market for “snippets,” then, could fatally undermine Google’s argument for unlicensed use. And many publishers have made more than token efforts, brokering deals with Amazon’s similar “Look Inside the Book” program (though they have refused to disclose the terms of the deal).⁹⁵

Those unfamiliar with copyright arcana might find it odd that the mere ability to charge for snippets should have anything to do with a legal requirement to do so.⁹⁶ As Gideon Parchomovsky argues,

[T]he ability to charge by itself cannot possibly determine legal rights. A hoodlum might have the ability to charge protection fees, and yet no one would argue that this in itself gives him a right to do that Absent an underlying theory of rights, the ability to charge is normatively meaningless.⁹⁷

Given the utilitarian contours of U.S. copyright law,⁹⁸ content owners try to supply such an “underlying theory” by arguing that the better they perfect their control over the use of their works, the better they can maximize the development of future works.⁹⁹ Their opponents, known variously as the Open Access Movement,¹⁰⁰ Free

95. Wolf, *supra* note 57, at 76 (Amazon “created an unrivaled digital archive of more than 120,000 books” by “negotiat[ing] contracts with hundreds of publishers.”). Google aims to digitize millions of titles held by five major university libraries, and argues that given the millions of “orphan works” (with no clear copyright ownership) and the unreasonableness of some publishers, there is no way to attain a comprehensive index via negotiations.

96. As I have expressed elsewhere, I think that both *MP3.com* and *Princeton Univ. Press* are misguided as a matter of copyright policy, ultimately undermining the constitutional purpose of intellectual property protection. See Pasquale *supra* note 11, at 781. There is no sound economic rationale for taking the position that every use (outside a narrow band of “classic” fair uses) that *can* be paid for *should* be paid for. *Id.*

97. Gideon Parchomovsky, *Fair Use, Efficiency, and Corrective Justice*, 3 LEGAL THEORY 347, 360 (1997).

98. See PAUL GOLDSTEIN, *COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 146-48 (rev. ed. 2003) (contrasting utilitarian American approach to copyright with natural rights perspective that is more common internationally).

99. June M. Besek, *Anti-Circumvention Laws and Copyright: A Report from the Kernochan Center for Law, Media, and the Arts*, 27 COLUM. J. L. & ARTS 385, 496 (2004) (finding that “Section 1201 has been successful in stimulating new means of distribution and promoting consumer choices with respect to a variety of works, particularly sound recordings, motion pictures and television programming, and literary works”); Jane C. Ginsburg, *Legal Protection of Technological Measures, Protecting Works of Authorship; International Obligations and the US Experience*, 29 COLUM. J. L. & ARTS 11, 12 (2005) (stating that “[t]he US experience to date indicates that legal protection for technological measures has helped foster new business models that make works available to the public at a variety of price points and enjoyment options, without engendering the ‘digital lockup’ and other copyright owner abuses that many had feared”).

100. Public Library of Science: Open Access, <http://www.plos.org/oa/definition.html> (last visited Nov. 7, 2006) (defining open access publications as those for which “[t]he author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper

Culture Movement,¹⁰¹ or the Copyleft,¹⁰² argue that such a strategy tends only to enrich dominant players, and that an alternative, more open-access policy, would maximize expression.¹⁰³

This Article takes a different normative tack in advocating for copyright reform. Instead of arguing that more access to works for categorizers would increase the amount and quality of expression, I take the position that such a policy would reduce the costs of information overload generated by the abundance of works. I expand and develop my critique of cases like *MP3.com* and *Princeton University Press* in Parts III and IV below. The view that “every use that can be paid for, should be paid for” is parasitic on an assumption that *every copyrighted work* somehow contributes positively to the store of expression. As our understanding of information overload externalities grows, such an assumption is becoming increasingly naïve.

III. FROM MAXIMIZING TO OPTIMIZING EXPRESSION

Copyright law not only might permit content owners to scuttle search engines’ quest for an authoritative index of copyrighted expression, but also may chill the efforts of smaller categorizers who want to sample works for illustrative purposes. This result is unacceptable in an age of data proliferation, as metadata becomes an ever more important resource.¹⁰⁴ Some balance is needed before

attribution of authorship, as well as the right to make small numbers of printed copies for their personal use.”)

101. See FreeCulture.org: Manifesto, <http://freeculture.org/manifesto.php> (last visited Nov. 7, 2006) (“We won’t allow the content industry to cling to obsolete modes of distribution through bad legislation. We will be active participants in a free culture of connectivity and production, made possible as it never was before by the Internet and digital technology, and we will fight to prevent this new potential from being locked down by corporate and legislative control.”).

102. Copyleft, <http://www.gnu.org/copyleft/> (last visited Nov. 7, 2006) (“Copyleft is a general method for making a program or other work free, and requiring all modified and extended versions of the program to be free as well.”). The copyleft tries to assure that open access versions of software remain open access by trying to require any future users and developers of such software to make their products open access as well. *Id.*

103. See, e.g., HENRY C. MITCHELL, *THE INTELLECTUAL COMMONS: TOWARD AN ECOLOGY OF INTELLECTUAL PROPERTY* 137 (2005) (decrying dominant role of content industries in setting policies and arguing for the restoration of “user rights and social utility as factors in IP regimes”).

104. As David Weinberger comments on the Google Print controversy, “Despite the present focus on who owns the digitized content of books, the more critical battle for readers will be over how we manage the information about that content-information that’s known technically as metadata.” David Weinberger, *Crunching the Metadata*, BOST. GLOBE, Nov. 13, 2005, at E3. For a definition of metadata, see *Metadata*, in WEBOPEDIA, <http://www.webopedia.com/TERM/M/metadata.html> (“Metadata describes how and when and by whom a particular set of data was collected, and how the data is formatted.”). For a broader definition, see *Metadata*, in WIKIPEDIA,

aggressive litigation strategies permit content owners to leverage control over copyrighted works into veto power over any project that ranks, reviews, organizes, or even refers to them.¹⁰⁵

Unfortunately, extant academic commentary on copyright tends to obscure the importance of categorizers by elevating the value of all copyrighted work indiscriminately. Section A below explores this rhetoric, concluding that normative discourse on copyright needs to balance accounts of how to maximize expression with frank recognition of expression's costs. Section B suggests one way of recognizing expression's costs, by analogizing the problem of information overload to pollution in the environmental context. If copyright holders insist on characterizing robust fair use exceptions as a "tax" or "taking" of potential licensing fees, it is just as appropriate to characterize those exceptions as compensation to society for the information overload they have helped create.

A. The Maximizing Paradigm

Full accounting for information overload externalities would balance any putative sacrifice in licensing fees that fair use for categorizers would cause. Unfortunately, current normative discourse on copyright tends to occlude this possibility. Scholars on both sides of copyright disputes generally assume that more expression is always better—that copyright's constitutional purpose (to promote the progress of the arts and sciences) is primarily about the creation of incentives for expression.¹⁰⁶ Copyright expansionists point to the incentive effects of increased legal protection of works.¹⁰⁷ Promoters of an expansive public domain claim that perfect control by extant owners will excessively raise the cost of the "raw materials" used in future information creation and thereby prevent more expression than

<http://en.wikipedia.org/wiki/Metadata> (last visited Jan. 21, 2006). I am aware that the "wikipedia" is not an authoritative source, but its treatments of technical subjects are sufficiently clear and reliable to stand here as a placeholder for a later, stabler source of definitions. Moreover, to the extent they reflect *current* public understanding of terms, they may well prove superior to dictionary definitions written long ago.

105. An anticommons develops when fragmented ownership causes high transaction costs that stunt the development of a resource. Michael Heller, *The Tragedy of the Anticommons: Property in Transition from Marx to Markets*, 111 HARV. L. REV. 621 (1998). Just as Garrett Hardin observed that insufficient propertization could lead to overuse of resources, anticommons theorists show how excessive propertization can lead to underuse of resources.

106. Ginsburg, *supra* note 99, at 37 ("The technological measures that reinforce legal control may enable and encourage authorial entrepreneurship, because authors may be able to rely on these measures to secure the distribution of and payment for their works, and new business models may therefore emerge.")

107. *Id.*

such control promotes.¹⁰⁸ Such assumptions, which tend to ignore or downplay the *costs* of expression, unfairly disadvantage categorizers in the normative debates surrounding their uses of copyrighted work.

Much scholarship in copyright can be characterized as an effort to reconcile the curiously dual roles of copyrighted expression in market economies. The entire field of intellectual property is premised on the idea that the commodification of information will create incentives for its production. However, one of the aspirational conditions of any market is “perfect information;” i.e., consumers’ and producers’ full knowledge of the utility of products.¹⁰⁹ To the extent such information is protected by copyright law, it is less than universally available. The conflict is particularly acute in the sale and licensing of copyrightable expression, an “experience good” whose value often cannot be fully ascertained without some exposure to it. Costless exposure to the product can often substitute for the product itself—an insight formalized as Arrow’s “paradox of disclosure.”¹¹⁰

Another janiform role of information in the economy lies in its status as both “finished good” and “raw material” for future creation.¹¹¹ Legal rules that raise the price for, say, copyrighted musical lyrics, may incentivize more lyricists, but ultimately raise the price of recordings. For this reason, the recording industry has long (and successfully) lobbied Congress compulsorily to license musical lyrics and compositions at a low, flat rate.¹¹² Of course, the industry is

108. JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY 37 (Harvard University Press 1996) (“[P]erfect information is one of the elements of the perfect market. If information can be commodified, then a host of transaction costs are introduced into information flow and a limited monopoly is granted in the midst of a system supposedly premised on competition.”).

109. George Akerlof, *The Market for Lemons: Qualitative Uncertainty and the Market Mechanism*, in FOUNDATIONS OF THE ECONOMIC APPROACH TO LAW 239, 244 (Avery Weiner Katz ed., 1998); George Stigler, *The Economics of Information*, in FOUNDATIONS OF THE ECONOMIC APPROACH TO LAW 234, 239 (Avery Weiner Katz ed., 1998); Joseph E. Stiglitz, *Information*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS (David R. Henderson ed., 2002), <http://www.econlib.org/library/Enc/Information.html> (last visited Jan. 10, 2006) (“Many of the central theories and principles in economics are based on assumptions about perfect information.”). For the legal implications of this assumption, see BOYLE, *supra* note 108, at 99 (“Barriers to the free flow of information lead to the inhibition of innovation and inadequate circulation of information.”).

110. See Kenneth Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY 609, 615 (Kenneth Arrow ed., Princeton University Press 1962).

111. BOYLE, *supra* note 108, at 38 (“[O]ne important use of ‘fair use’ law is to make sure that future creators have available to them an adequate supply of raw materials.”).

112. See Theresa Bevilacqua, *Time to Say Good-Bye to Madonna’s American Pie: Why Mechanical Compulsory Licensing Should be Put to Rest*, 19 CARDOZO ARTS & ENT. L. J. 285, 285 (2001) (noting that “anyone who desires can make an arrangement of an existing work, record the arrangement, and sell it”); 17 U.S.C. § 115 (2004).

considerably less willing to recognize that its own music is “raw material” for DJs, filmmakers, and other creative workers.¹¹³

Many scholars have tried to develop proposals that reduce the “commodification/perfect information” and the “finished good/raw material” tensions.¹¹⁴ Reliance on information economics has enhanced the validity of this work generally over the past two decades. However, the verdict of information economics is frequently equivocal in particular disputes, given the two tensions discussed above. Two schools—the “copyleft” and “copyright expansionists”—have each developed rival prescriptions for maximizing expression in the midst of these tensions.

Scholars and policymakers who favor expanding copyright protections also draw on analogies between real and intellectual property. The most famous is the tragedy of the commons. Just as a common pasture may be overused if the entire community can use it to graze its cattle, so too unowned or “orphan” works might be mis- or over-used.¹¹⁵ Similarly, potential investors will balk at committing resources to a project whose benefits they cannot reliably and exclusively appropriate or sell. Just as private ownership of land has proven to be an engine of economic growth,¹¹⁶ private ownership of copyrightable works is the key to their development.¹¹⁷ Thus,

113. Joel Rose, *Copyright Laws Severely Limit the Availability of Music, All Things Considered*, (NPR radio broadcast Jan. 9, 2006) (reporting on Library of Congress study indicating that “over 70 percent of American music recorded before 1965 is not legally available in the United States.”). According to a recent report on the “clearance culture,” “In the music industry, the practice of requiring a license for even the smallest sample is entrenched.” HEINS & BECKLES, *supra* note 74, at 5. The contrast with the recording industry’s own treatment of composers and lyricists could not be more stark. Bevilacqua, *supra* note 112, at 296 (“The RIAA [has] argued the compulsory license [for lyrics and compositions has] to be retained because the threat of an industry-wide monopoly might resurface if authors were allowed to grant exclusive licenses.”).

114. See, e.g., WILLIAM W. FISHER III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT 144-145 (Stanford University Press 2004) (recommending compulsory licensing scheme for all works); William W. Fisher III, *Reconstructing the Fair Use Doctrine*, 101 HARV. L. REV. 1659 (1988).

115. Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243, 1243 (1968).

116. HERNANDO DESOTO, *THE OTHER PATH* (Basic Books 1990) (theorizing secure private ownership of land as the linchpin of economic development). *But see* John Gravois, *The DeSoto Delusion*, SLATE, Jan. 29, 2005, <http://www.slate.com/id/2112792/> (“In some corners of the world, the land-titling programs inspired by de Soto’s work are proving merely ineffective. In other places, they are showing themselves to be downright harmful to the poor people they set out to help.”).

117. See William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 487 (2003) (arguing that untrammelled copying or use of a celebrity’s image “could prematurely exhaust the celebrity’s commercial value . . . just as unlimited drilling from a common pool of oil or gas would deplete the pool prematurely”). *But see* Stewart Sterk, *Intellectualizing Property: The Tenuous Connections Between Land and Copyright*, 83 WASH. U. L. Q. 417, 421 (2005) (“Real property rights operate to avoid the ‘tragedy of the commons’—a

expansionists argue that intellectual property (“IP”) laws should expand the scope and term of IP rights, and grant rights of control over earlier stages of the development of information goods.¹¹⁸

A number of critical IP scholars have attempted to refute these models by emphasizing the benefits of more open access to works.¹¹⁹ The Free Culture movement has countered each of these contentions with arguments that limits on “real world” property rights should be extended to IP.¹²⁰ Scholars have developed theories of the “tragedy of the anticommons”¹²¹ or “comedy of the commons.”¹²² They argue that an open-access regime, or “low IP equilibrium,” can be far more productive than a situation where early innovators “lock up” certain fields and initiate escalating arms races toward acquiring more and more IP rights.¹²³

Despite their opposing conclusions on most particulars, scholars in favor of open access share some common assumptions with copyright expansionists. Both schools emphasize that the decision to

problem that does not arise with intellectual works—because once created, those works, unlike land, are non-rivalrous public goods.”).

118. See Ginsburg, *supra* note 99, at 12; Bruce Kuhlik & Richard Epstein, *Is There a Biomedical Anticommons?*, REGULATION, Summer 2004, at 54 (answering no).

119. See Posting of Donna Wentworth to Copyfight Blog, http://copyfight.corante.com/archives/2005/07/30/what_does_copyfight_mean.php (July 30, 2005) (“[T]he copyfight is the battle to keep intellectual property tethered to its purpose, understanding that when IP rights are pushed too far, they can end up doing exactly the opposite of what they’re intended to do.”). The Copyfight blog has a long list of “copyfighters” on the left side of the page. *Id.*

120. Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L. J. 1, 5 (2004) (arguing that “property is not as absolute as it is often claimed to be,” surveying “fifty doctrines of property law,” “distilling restrictions centered on development, necessity, and equity” from these restrictions, and “import[ing] these categories of limits into” intellectual property law).

121. See, e.g., Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439, 441 (2003) (“Anticommons property occurs when multiple parties have an effective right to prevent others from using a given resource, and as a result no one has an effective right of use.”); Michael S. Mireles, *An Examination of Patents, Licensing, Research Tools, and the Tragedy of the Anticommons in Biotechnology Innovation*, 38 U. MICH. J. L. REFORM 141 (2004) (arguing that fragmented intellectual property rights hamstring innovation). *But see* Kuhlik & Epstein, *supra* note 118, at 54 (“Without ample patent protection, no combination of first-mover advantages or altruism will generate the capital sums needed. Reducing the patentees’ right to exclude or its power to price is a partial repeal of the patent grant with mischievous social consequences.”).

122. See, e.g., DAVID BOLLIER, *SILENT THEFT: THE PRIVATE PLUNDER OF OUR COMMON WEALTH* 37-38 (Routledge 2002) (celebrating the nonrivalry of consumption of information resources); Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 713 (1986) (“There is . . . an extensive academic and judicial discussion of the possibility that certain kinds of property ought to be public.”).

123. See Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 VA. L. REV. 1687 (2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=878401 (arguing that the fashion industry’s “low-IP equilibrium” promotes innovation).

make any particular *stage* of intellectual property production commodifiable will draw investment to that stage, while diverting resources away from earlier or later stages. For example, if very short, basic sequences of programming code are copyrightable, software firms would invest a great deal in developing (and copyrighting) those sequences. If only larger structures (or collections) of code are copyrightable, then investment is shifted toward those structures. Copyright expansionists tend to argue that commodification should be permitted at earlier stages of production, since competition in “innovation markets” is often *for*, and not *within*, a market.¹²⁴ The Free Culture movement tends to argue that only later stages of production should be commodifiable, in order to ensure that a larger “public domain” of materials is open for everyone’s use and development.

Neither side tends to acknowledge the *costs* of producing ever more copyrightable expression, or to investigate deeply the *quality* and *kind* of expression produced.¹²⁵ However, some scholars have hinted at recognizing this problem by applying environmental economics as a way of balancing the competing roles of information in the market. Rather than *maximizing* resource yield, environmental law frequently focuses on *optimizing* it in order to preserve a robust natural ecosystem.¹²⁶ Similar insights are beginning to inform a new movement of “cultural environmentalism” aimed at improving the quality, diversity, and organization of copyrighted expression.

B. An Ecology of Expression

Environmental economists try to balance the commodification of environmental resources with their importance as a general

124. See Richard J. Gilbert & Steven C. Sunshine, *Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets*, 63 ANTITRUST L. J. 569, 574 (1995) (suggesting a “causal connection between market concentration and the pace of technological innovation”). *But see* Robert Hoerner, *Innovation Markets: New Wine in Old Bottles*, 64 ANTITRUST L. J. 49 (1995).

125. Here copyright may find some guidance from patent scholarship’s recent concern with patent quality. See, e.g., BEN KLEMENS, MATH YOU CAN’T USE 2-3 (Brookings Institution Press 2006) (suggesting that many pharmaceutical patents ought to be given better treatment than many software patents, since the former are often based on far more costly research); Mark Lemley, Doug Lichtman, & Bhaven Sampat, *What to Do about Bad Patents?*, REGULATION, Winter 2005-2006, at 12-13 (proposing a method of identifying and increasing legal protection for particularly useful patents).

126. See, e.g., H. Gary Knight, *International Fisheries Management: A Background Paper, in THE FUTURE OF INTERNATIONAL FISHERIES MANAGEMENT* 1, 41 n.25, 2, 23 (H. Gary Knight ed., 1975) (“Optimum sustainable yield was established as the international management criterion for fisheries in the Convention on Fishing and Conservation of the Living Resources of the High Seas.”).

“background” in which all other activity (including market exchange) takes place.¹²⁷ The valuation of ecosystem services helps quantify the monetary value of this “background” role by estimating the full costs of pollution.¹²⁸ For example, the “harvest” of many natural resources not only results in a finished product (such as a fish to eat), but also short-circuits that resource’s capacity to yield more in the future (i.e., the eaten fish is not going to spawn).¹²⁹ Environmental economists have given us a much more sophisticated understanding of the trade-offs between commodification and preservation regimes.¹³⁰

There have been many instructive translations of these ideas from the physical to the virtual realm. For example, Brett Frischmann emphasizes the analogies between information goods and physical infrastructures that enable markets to function.¹³¹ James Boyle’s work similarly elevates open access to certain types of information as a *sine qua non* for successful markets.¹³² Elinor Ostrom has applied her landmark work on physical commons to the information commons.¹³³ These scholars argue that information goods, like wetlands or forests, tend to produce many positive externalities undervalued by markets.¹³⁴

127. HERMAN E. DALY, *STEADY-STATE ECONOMICS* 89-90 (Island Press 1991) (“Benefits and costs that do not register themselves as conscious short-run pleasure or pain at an individual level but that are organic, with interdependencies far exceeding market relationships, must be dealt with outside the market and must result in constraints on the market.”).

128. EBAN S. GOODSTEIN, *ECONOMICS AND THE ENVIRONMENT* 32 (John Wiley & Sons, Inc. 2005) (“Economists define ‘pollution’ as a negative externality: a cost of a transaction not borne by the buyer or seller. Pollution is termed an externality because it imposes costs on people who are ‘external’ to the transaction between the producer and consumer of the polluting product.”).

129. *Id.* at 41 (observing that “free-market forces do not provide the right incentives to insure that adequate precautions are taken to protect our environment”).

130. Knight, *supra* note 126, at 22-23.

131. Frischmann, *supra* note 19, at 985-90.

132. Boyle, *supra* note 16, at 113. A “Conference on Cultural Environmentalism” at Stanford is set to revisit Boyle’s contribution in March 2006. Cultural Environmentalism at 10, <http://cyberlaw.stanford.edu/conferences/cultural/> (last visited Feb. 25, 2006) (“host[ing] a symposium to explore the development and expansion of the metaphor of ‘cultural environmentalism’ over the course of ten busy years for intellectual property law”).

133. Charlotte Hess & Elinor Ostrom, *Ideas, Artifacts, and Facilities: Information as a Common Pool Resource*, 66 *LAW & CONTEMP. PROBS.* 111, 113 (2003) (“summariz[ing] the lessons learned from a large body of international, interdisciplinary research on common-pool resources in the past twenty-five years and consider[ing] its usefulness in the analysis of scholarly information as a resource”).

134. See also Mark Lemley & Brett Frischmann, *Spillovers* 34 (Stanford Law and Economics, Working Paper No. 321, 2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=898881 (discussing positive externalities); Pasquale, *supra* note 18, at 78 (arguing that the positive complementary, network, and long-range effects of new technologies on the value of copyrighted works parallel the indirect, direct, and option values of biodiversity recently recognized by environmental economists). For a definition of positive externalities, see William B. Rubenstein, *Why Enable Litigation?: A Positive Externalities Theory of the Small Claims Class*

Building on this work, Yochai Benkler provides a particularly powerful theoretical account of the beneficial role of categorizers on the web in the course of addressing the “Babel objection” to internet communications.¹³⁵ Under this account of information overload, “when everyone can speak, no one can be heard, and we devolve either to a cacophony or to the reemergence of money as the distinguishing factor between statements that are heard and those that wallow in obscurity.”¹³⁶ According to Benkler, the “emergence of nonmarket, peer-produced alternative sources of filtration and accreditation in place of the market-based alternatives” is one key response “to the information overload problem.”¹³⁷ Benkler notes that an institutional ecology of “enclosure” threatens such categorization processes, just as an ecology of “openness” is key to their success.¹³⁸

The new scholarship of cultural environmentalism sets the groundwork for a better understanding of the *costs*, as well as the *benefits*, of copyrighted expression. Any particular consumer good is both a finished product, potentially useful to some consumer, and potential trash, distracting the attention of shoppers from what they *really* want or need, or cluttering landfills of the future.¹³⁹ Similarly, any bit of expression that *signals* something to one who wants exposure to it may constitute *noise* to thousands of others. It is as foolish to hope for the maximization of copyrighted expression as it is to measure our welfare merely with reference to the amount of stuff we have.¹⁴⁰

After developing the pollution analogy further, I make the case for considering information overload as an *externality* below. Characterizing information overload as an externality advances legal

Action, 74 UMKC L. REV. 709, 710 n.6 (2006) (defining an externality as “a cost or benefit that the voluntary actions of one or more people imposes or confers on a third party or parties without their consent”).

135. YOCHAI BENKLER, *THE WEALTH OF NETWORKS* 10 (Yale Univ. Press 2006), available at http://www.benkler.org/Benkler_Wealth_Of_Networks.pdf.

136. *Id.*

137. *Id.* at 12.

138. *Id.* at 395.

139. JAMES R. KAHN, *THE ECONOMIC APPROACH TO ENVIRONMENTAL AND NATURAL RESOURCES* 251, 254 (The Dryden Press 1995) (demonstrating that “we are generating an inefficiently high level of waste” because “the private cost of solid waste does not equal its social cost”). *But see* Eric Goldman, *A Coasean Analysis of Marketing*, 2006 WIS. L. REV. (forthcoming). My response to Goldman is posted as a commentary to Conglomerate Blog Junior Scholars’ Workshop, http://www.theconglomerate.org/2006/07/frank_pasquale_.html (July 5, 2006).

140. *See Grossly Distorted Picture: It’s High Time that Economists Looked at More than Just GDP*, ECONOMIST, Feb. 9, 2005, at 72, available at http://www.economist.com/finance/PrinterFriendly.cfm?story_id=5504103 (“GDP . . . was never intended to be the definitive yardstick of economic welfare. . . [and] is not even the best gauge of the monetary aspects of living standards.”).

recognition of the benefits of fair use for categorizers in two ways. First, the externality approach denies copyright holders the rhetorical high ground cultivated by victims of eminent domain.¹⁴¹ Fair use is less an easement or taking forced on an innocent party to facilitate some utopian ideal of information dissemination, than a natural way of “cleaning up” the mess of expression encouraged by copyright law.¹⁴² Second, the externality approach reframes *economically* and *neutrally* a perspective often consigned to the dustbin of *cultural* and *ideological* critique. Dominant IP policymakers may be frightened of a “Free Culture” movement, but they cannot shun the very economic methods originally used to justify strong copyright protection once they render more nuanced policy recommendations.

1. Information Overload as Externality

Nuisance claims, anti-pollution laws, and taxation are all methods of “internalizing” the cost of harms like pollution to their creators. In his 1997 book *Data Smog*, David Shenk noticed that many producers of information were, like producers of physical goods, causing an externality: a miasmatic haze of “information overload” that threatened to obscure the truth of any given matter in a cacophony of conflicting claims.¹⁴³ As early as 1991 James Boyle had noted the trend on a larger scale, calling for some “future Pigou [to] write an analysis of the . . . ‘information pollution’ we were creating . . . [because] our economics did not force us to internalize the consequences of our overproduction.”¹⁴⁴ Answering Boyle’s call, this Article recognizes information overload externalities and proposes

141. This rhetorical high ground is very effective in current efforts to limit eminent domain powers. See John M. Broder, *States Curbing Right to Seize Homes*, N.Y. TIMES, Feb. 21, 2006, at A1 (“In a rare display of unanimity that cuts across partisan and geographic lines, lawmakers in virtually every statehouse across the country are advancing bills and constitutional amendments to limit use of the government’s power of eminent domain to seize private property for economic development purposes.”); Adam Liptak, *Case Won on Appeal (to Public)*, N.Y. TIMES, July 30, 2006, § 4, at 3.

142. Gregory Duhl provides a good comparison of fair use and eminent domain that confirms these points in *Old Lyrics, Knock-Off Videos, and Copycat Comic Books: The Fourth Fair Use Factor in U.S. Copyright Law*, 54 SYRACUSE L. REV. 665, 730 (2004) (arguing that “courts [should] account for a copyright holder’s lost licensing royalties in its analysis of market effect only if a primary or derivative market for licensing the original work exists, and only if the copyright holder is willing and able to exploit that market”).

143. DAVID SHENK, *DATA SMOG* 11 (HarperEdge 1997) (condensing a variety of social scientific observations into thirteen “laws of data smog”).

144. James Boyle, *A Theory of Law and Information: Copyright, Spleens, Blackmail and Insider Trading*, 80 CAL. L. REV. 1413, 1537-38 (1992).

methods for courts to adjust copyright doctrine in order to help internalize them.¹⁴⁵

Though few can doubt that information overload is an annoying or troubling aspect of modern culture, a skeptic may still question its characterization as an *externality*. A narrow economic approach may reserve the concept of externality for more concrete or quantifiable harms, dismissing an “overload externality” as excessively *subjective*.¹⁴⁶ On the other end of the methodological spectrum, humanists may find the *positivism* implicit in externality analysis suspect, insisting instead that the critiques of overload relate to the *kind of society* we hope to create, rather than *harms to individuals* we hope to minimize. Though both the positivist individualism of orthodox economics and the normative holism of critical cultural studies might appear to pose obstacles to an externality-based understanding of information overload, they ultimately illuminate the externality concept’s potential to unite these two ways of thinking.¹⁴⁷ An economics without an understanding of how individualized transactions affect society as a whole is blind, but social criticism left untranslated into the economic language of policy science is lame.¹⁴⁸

As empirical methods begin to complement (or even displace) mathematical modeling in economics,¹⁴⁹ the field is becoming

145. There was an early recognition of the problem of overload in Ira S. Nathenson, *Internet Infoglut and Invisible Ink: Spamdexing Search Engines with Meta Tags*, 12 HARV. J.L. & TECH. 43, 48 (1998) (recognizing a “fundamental tension . . . among the public, webmasters, and those with proprietary rights, because each seeks to externalize its costs of information dissemination and retrieval”). Nathenson’s article, along with many later pieces on spam, recognized the harms that could be caused by excess *marketing of works*. This Article focuses on information overload attributable to works themselves.

146. Compare Julie Cohen, *Creativity and Culture in Copyright Theory*, 40 U.C. DAVIS L. REV. (forthcoming 2007) (manuscript at 5), available at <http://www.law.georgetown.edu/faculty/jec/creativityandculture.pdf> (“[T]he purported advantage of rights theories and economic theories is neither precisely that they are normative nor precisely that they are scientific, but that they do normative work in a scientific way.”).

147. I use the term “cultural studies” broadly to refer to all aspects of sociology, history, anthropology, political science, and social science generally which are not committed to the methodological individualism of economics. For more on the distinction between methodological individualism and holism, see Ernest Gellner, *Holism versus Individualism*, in READINGS IN THE PHILOSOPHY OF THE SOCIAL SCIENCES 254 (May Brodbeck ed., 1968).

148. This formulation follows Einstein’s famous observation about science and religion (“Religion without science is blind; science without religion is lame.”). See QuoteWorld, <http://quoteworld.org/quotes/4186>.

149. See, e.g., Martha C. Nussbaum, *Flawed Foundations: The Philosophical Critique of (a Particular Type of) Economics*, 64 U. CHI. L. REV. 1197, 1199 (1997); Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1570-74 (1998); Tanina Rostain, *Educating Homo Economicus: Cautionary Notes on the New Behavioral Law and Economics Movement*, 34 LAW & SOC’Y REV. 973, 973 (2000). These trends suggest that small communities of expertise are driving progress in economics, and the social sciences generally. See IAN SHAPIRO, *THE FLIGHT FROM REALITY IN THE HUMAN SCIENCES* 14 (Princeton University Press

increasingly relevant as it models competition and value-creation in specific realms of human experience.¹⁵⁰ Just as the fields of chemistry, biology, and physics arose from “natural philosophy,”¹⁵¹ today the fields of information economics, labor economics, behavioral economics, and health economics are developing in response to shortcomings in conventional microeconomic theory.¹⁵² Two of the most important new challenges to conventional microeconomic theory are a) a growing recognition of the degree to which individual consumption decisions influence others’ capacity to consume and produce¹⁵³ and b) the development of hermeneutical economics based less on quantification and modeling than on sophisticated interpretations of the *meaning* of economic exchanges for those participating in them.¹⁵⁴

2005) (encouraging social scientists to “confront the complexities implicit in the relational logics of . . . ideals”).

150. See David Colander et al., *Introduction to THE CHANGING FACE OF ECONOMICS: CONVERSATIONS WITH CUTTING EDGE ECONOMISTS* 18 (David Colander et al. eds., 2004) (noting that “experimental economics is changing the way economists think about empirical work[,]” and “ecological economics is redefining how nature and the economy are viewed as interrelating”).

151. “[Natural philosophy is] the study of nature and the physical universe before the advent of modern science.” Natural Philosophy, <http://www.answers.com/topic/natural-philosophy>; see also C.J. DIJKSTERHUIS, *THE MECHANIZATION OF THE WORLD PICTURE* 3 (Princeton University Press 1986); JOHN DUPRE, *THE DISORDER OF THINGS: METAPHYSICAL FOUNDATIONS OF THE DISUNITY OF SCIENCE* 7 (1995) (criticizing reductionism as philosophically naïve because “the dream of an ultimate and unified science is a mere pipe dream”); BERNARD PULLMAN, *THE ATOM IN THE HISTORY OF HUMAN THOUGHT* 12 (Oxford University Press 2001) (describing persistent lure of reductionist thought).

152. For example, there are now distinctions between mainstream, orthodox, and heterodox economists. See Colander et al., *Preface to THE CHANGING FACE OF ECONOMICS*, *supra* note 150, at 8-9. Anita Bernstein has noted (with some skepticism) the resulting pluralism in Law and Economics scholarship in *Whatever Happened to Law and Economics*, 64 MD. L. REV. 303, 307-08 (2005) (“Stripped of its distinctive intellectual features, no longer able to give descriptions or policy recommendations that could not have come from sources outside the movement, law and economics now functions mainly as a faculty club with opaque, arbitrary criteria for membership.”).

153. See JON ELSTER, *STRONG FEELINGS: EMOTION, ADDICTION, AND HUMAN BEHAVIOR* 106 (M.I.T. Press 1999) (discussing “emotions as the object of social norms”); OZ SHY, *THE ECONOMICS OF NETWORK INDUSTRIES* 3 (Cambridge University Press 2001) (discussing how the “utility derived from the consumption of [many] goods is affected by the number of other people using similar or compatible products”).

154. See, e.g., TYLER COWEN, *GOOD AND PLENTY: THE CREATIVE SUCCESSSES OF AMERICAN ARTS FUNDING* 131 (Princeton University Press 2006) (examining the meaning of copyright enforcement to critics and consumers); DEIRDRE N. MCCLOSKEY, *IF YOU’RE SO SMART* 108 (University of Chicago Press 1992); Lawrence A. Berger, *Self-Interpretation, Attention, and Language*, in *ECONOMICS AND HERMENEUTICS* 281 (Don Lavoie ed. 1990) (arguing that “economics must come to grips with the questions of communication, community, and public space. . . [and] self-interpretation; for it is constitutive of the object of concern”); Warren Samuels, *Introduction to ECONOMICS AS DISCOURSE: AN ANALYSIS OF THE LANGUAGE OF ECONOMISTS* 5 (Warren Samuels, ed., Kluwer Academy Publishers, 1991) (“The paramount status of meaning is the case whether economic reality is given in the senses that the

Consider the role of millions of pounds of used computers dumped into landfills in lesser-developed countries over the past decade.¹⁵⁵ The computers contain various heavy metals and contaminants that frequently pollute groundwater.¹⁵⁶ Degradation of natural resources via pollution is a classic example of a negative externality: A concrete harm (the dirt or damage caused by pollution) is being inflicted by one group on another without compensation.¹⁵⁷ To be sure, the burdens of information overload are less concrete than those of pollution.¹⁵⁸ Yet the harms information overload imposes, simply in terms of making sought-after information harder to find, are real:

[I]n a Babel of signals, we must listen to a great deal of chatter to hear one bit of information we really want. We discover that information can become noiselike when it is irrelevant or interferes with desired signals, so tending to defeat meaning—making it harder to extract meaning from information, just as it is hard to extract metal from low-grade ore.¹⁵⁹

philosophical realist and idealist affirm or is a matter of social, human construction; or whether one follows the road of epistemology or rhetoric-discourse.”); Gavin Wright, *Economic History as a Cure for Economics*, in *SCHOOLS OF THOUGHT: TWENTY-FIVE YEARS OF INTERPRETIVE SOCIAL SCIENCE* 41, 42 (Joan Scott and Debra Keates eds., 2001).

155. ELIZABETH GROSSMAN, *HIGH TECH TRASH: DIGITAL DEVICES, HIDDEN TOXICS, AND HUMAN HEALTH* 7 (Island Press 2006); Jim Puckett, *High-Tech's Dirty Little Secret: The Economics and Ethics of the Electronic Waste Trade*, in *CHALLENGING THE CHIP: LABOR RIGHTS AND ENVIRONMENTAL JUSTICE IN THE GLOBAL ELECTRONICS INDUSTRY* 225, 227 (Ted Smith et al. eds., 2006) (“Free trade became a mechanism that allowed [hazardous materials] to be shunted to unsuspecting, disempowered communities.”); Press Release, Basel Action Network, *High-Tech Toxic Trash Exported to Africa* (Oct. 24, 2005), <http://www.minesandcommunities.org/Action/press772.htm> (“[A] report entitled *The Digital Dump: Exporting High-Tech Re-use and Abuse to Africa*, exposes the ugly underbelly of what is thought to be an escalating global trade in toxic, obsolete, discarded computers and other e-scrap collected in North America and Europe and sent to developing countries by waste brokers and so-called recyclers.”).

156. GROSSMAN, *supra* note 155, at 7.

157. ROBERT D. COOTER, *THE STRATEGIC CONSTITUTION* 109 (Princeton University Press 2000).

158. But note that even the latter are usually considered probabilistic harms, expressed as some odds that one exposed to pollution will develop a disease in response. See Lisa Heinzerling, *The Rights of Statistical People*, 24 *HARV. ENV'T L. REV.* 189 (2000) (discussing probabilistic harms and cost-benefit analysis).

159. ORRIN KLAPP, *OVERLOAD AND BOREDOM* 2 (Greenwood Press 1986); see also BART KOSKO, *NOISE* (Viking 2006) (discussing the prevalence and harms of noise). Low-income internet users are probably the worst affected by overload externalities. Commenting on the spam problem, Ray Everett-Church posits,

[W]hereas major corporations can afford to fight these cutting-edge cyberlaw battles, small mom-and-pop ISPs and their customers are left to suffer the floods. The harm inflicted is in many respects analogous to the effects on society from something like pollution. For example, it would be far cheaper for chemical manufacturers to dump their waste into rivers and lakes. However, those externalities—as economists call them—allow one party to profit at another's—or everyone's—expense.

Or, one might say, clean water from increasingly polluted aquifers. Given the directness of the analogy, it should not be surprising that mainstream economic theorists recognize the costs of information excess. For example, Landes and Posner note that “the demand for copies of a given work depends not only on the number of copies but also on the number of competing works. The more there are, the lower will be the demand for any given work.”¹⁶⁰ Expression does not exist in a vacuum, but rather influences and is influenced by previous and expected expression.

A skeptic might object that these mutual influences are too various or tenuous to be identified scientifically. However, as Donald Herzog observes, “the criteria economists actually use to identify externalities . . . come from moral and political theory, not their own views about utility maximization.”¹⁶¹ This is a long and accepted practice in the field of law and economics, permitting serious consideration of, say, smoking or jackhammer noise as nuisances, but not considering unusually colorful clothing or disagreeable manners to be nuisances. Economists developed the concept of “externality” when it became apparent that many aspects of the production of physical goods either used or despoiled resources that the goods’ producers never paid for.

Despite the inevitably normative dimension of externality labeling and measurement in economics, it is still widely accepted as an integral part of a *neutral and universalistic* language of policy justification. This is important because First Amendment concerns for content neutrality may scuttle “first-order” efforts to deal with information overload directly by making certain types of expression more costly.¹⁶² Though courts have accepted many copyright

Ray Everett-Church, *Why Spam is a Problem*, E-OTI, May/June 1999, <http://www.isoc.org/oti/articles/0599/everett.html>.

160. LANDES & POSNER, *supra* note 20, at 39. Posner has also applied a broad understanding of externalities in cultural disputes. See Posting of Richard Posner to Becker-Posner Blog, <http://www.hecker-posner-blog.com/archives/2005/07/> (July 17, 2005; 19:19 EST) (“Economics focuses on the consequences of social action. . . . [T]here is no difference from an economic standpoint between physical and emotional harm; either one lowers the utility of the harmed person.”). But see Richard Epstein, *Externalities Everywhere? Morals and the Police Power*, 21 HARV. J. L. & PUB. POL’Y 61 (1997) (warning against overly expansive conception of externalities).

161. Don Herzog, *Externalities and Other Parasites*, 67 U. CHI. L. REV. 895, 910, 912 (2000) (book review) (“[E]conomists are opportunistic about invoking externalities. They do so not whenever we find people with preferences about others’ preferences and actions; they actually do so in ways closely tracking the traditional harm principle of liberal theory.”).

162. A first-order response to the problem—reducing legal incentives to create information—would require one to “take sides” in the debate between the copyleft and IP expansionists mentioned above. Ironically, it would tend to support the policy prescriptions of the loser (i.e., if we finally decided that copyright expansionists had proven that privatization is the best method

enforcement actions that suppressed expression, they are unlikely to countenance an effort to use copyright policy to reduce trivial, untrue, or immoral expression.¹⁶³ However, understanding information overload as an *externality* arising from information production could lead to content-neutral policy prescriptions acceptable to all. This understanding is focused merely on the amount, and not the kind, of information produced, leading to “second-order” solutions to overload externalities.

2. Reducing Search Costs: Copyright at the School of Trademark

We can further familiarize the idea of modeling information overload as an externality by turning to an area of intellectual property law well acquainted with the problem of search costs: trademark law.¹⁶⁴ In the blooming, buzzing confusion of modern markets, trademarks are source-designators,¹⁶⁵ providing consumers

for maximizing information, we'd be inclined to endorse more forms of public access—and vice versa). I am not prepared to take sides on this “first order” question here; suffice it to say, a great deal more empirical research is necessary to such a determination, which would likely only be valid for particular *sectors* of the information economy, and not for copyrightable expression as a whole. For more on sectoral analysis in copyright, see Michael W. Carroll, *One for All: The Problem of Uniformity Cost in Intellectual Property Law, A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit*, 55 AM. U. L. REV. 845, 878, 849 (2006) (claiming that “uniformity cost is the central problem that intellectual property law must manage,” recognizing that “uniformity cost rises with the growing economic importance of, and variation among, information-centric industries,” and recommending copyright law sensitive to the unique competitive environments in different industries).

163. See, e.g., J.M. Balkin, *Populism and Progressivism as Constitutional Categories*, 104 YALE L.J. 1935, 1978 (1995) (book review) (critiquing Cass Sunstein's constitutional theory for positing a “division between high and low culture—with the former seen as essential to the repair of the system of democratic deliberation and the latter identified with mass culture and particularly with the culture of television”). Though courts have given their imprimatur to a number of copyright policies that have suppressed expression, they do so largely because the copyright laws are facially neutral with respect to different kinds of expression.

164. *Scandia Down Corp. v. Euroquilt, Inc.*, 772 F.2d 1423, 1429 (7th Cir. 1985) (“Trademarks help consumers to select goods. By identifying the source of the goods, they convey valuable information to consumers at lower costs. Easily identified trademarks reduce the costs consumers incur in searching for what they desire, and the lower the costs of search the more competitive the market. A trademark also may induce the supplier of goods to make higher quality products and to adhere to a consistent level of quality.”), cited in Graeme B. Dinwoodie & Mark D. Janis, *Confusion Over Use: Contextualism in Trademark Law* 36 n.100 (U. Iowa Legal Studies, Research Paper No. 06-06, 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=927996; LANDES & POSNER, *supra* note 20, at 168 (“The value of a trademark to the firm that uses it to designate its brand is the saving in consumers' search costs made possible by the information that the trademark conveys or embodies about the quality of the firm's brand.”).

165. GRAEME B. DINWOODIE & MARK D. JANIS, TRADEMARKS AND UNFAIR COMPETITION: LAW AND POLICY 13 (2004) (“[H]istorically, in the United States, trademark protection has existed as an important aspect of a larger body of law, namely unfair competition law: It is unfair competition to pass off your goods as those of another producer by using a trademark confusingly similar to that of the other producer.”); *accord.*, *Diane Prods. v. Swan Cosmetic Research Labs.*,

with easily apprehended symbols indicating the provenance of the goods and services they purchase.¹⁶⁶ Leading articles on trademark law suggest that its primary purpose is to reduce consumers' "search costs," to make it easier for them to find what they want.¹⁶⁷ For example, "Starbucks" as a mark for cafés helps consumers navigate the marketplace to find (or avoid) a known consumption experience. Trademarks thus increase the *salience* of particular products and services, elevating them above the run of things by associating them with particular words, images, and prior experiences.¹⁶⁸ Like trademarks, search engine results help consumers navigate through a maze of digital data. They are "search cost reducers" *par excellence*,

Inc., No. 84 C 7383, 1985 U.S. Dist. LEXIS 17173, at *9 (N.D. Ill. Aug. 2, 1985) (noting that the court "urged defendant to consider prominent source designation on the front of its packaging" in order to "avoid actual confusion or the likelihood of confusion" with competitor's product).

166. As Barnes explains,

According to conventional theory, when mark holders invest in trademarks, they create goodwill that leads to greater profits from sales of their goods and services. Mark holders invest in trademarks through maintaining consistent quality and characteristics of their products and services and advertising that informs consumers about their products qualities or, at least, informs consumers about their products' availability. Consumers benefit because they can rely on familiar marks to locate satisfactory goods and services. Competition is enhanced because new entrants to a market can also invest in trademarks that will attract new customers to the qualities and characteristics of their own goods. Competition lowers prices. Everyone benefits. Investing in and protecting the signals conveyed by trademarks benefits suppliers and consumers.

David W. Barnes, *A New Economics of Trademarks* 1 n.1 (Seton Hall Public Law Research, Paper No. 886045, 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=886045.

167. Stacey L. Dogan & Mark A. Lemley, *Trademarks and Consumer Search Costs on the Internet*, 41 HOUS. L. REV. 777, 778 (2004); *see also* Ty Inc. v. Ruth Perryman, 306 F.3d 509, 510 (7th Cir. 2002) ("The fundamental purpose of a trademark is to reduce consumer search costs by providing a concise and unequivocal identifier of the particular source of particular goods. The consumer who knows at a glance whose brand he is being asked to buy knows whom to hold responsible if the brand disappoints and whose product to buy in the future if the brand pleases."); Stacey L. Dogan & Mark A. Lemley, *A Search-Costs Theory of Trademark Defenses*, in TRADEMARK LAW AND THEORY: A HANDBOOK OF CONTEMPORARY RESEARCH (Graeme B. Dinwoodie & Mark D. Janis eds., forthcoming 2007).

168. *New Kids on the Block v. News Am. Publ'g, Inc.*, 971 F.2d 302, 306 (9th Cir. 1992) ("In economic terms, trademarks reduce consumer search costs by informing people that trademarked products come from the same source. The benefit of the brand name is analogous to that of designating individuals by last as well as first names, so that, instead of having to say "the Geoffrey who teaches constitutional law at the University of Chicago Law School—not the one who teaches corporations," you can say "Geoffrey Stone, not Geoffrey Miller." " (quoting William M. Landes & Richard A. Posner, *Trademark Law: An Economic Perspective*, 30 J. L. & ECON. 265, 269 (1987)); *Union Nat'l. Bank of Tex., Laredo, Tex. v. Union Nat'l. Bank of Tex., Austin, Tex.*, 909 F.2d 839, 844 (5th Cir. 1990) ("The idea is that trademarks are 'distinguishing' features which lower consumer search costs and encourage higher quality production by discouraging free-riders.") (also citing Landes & Posner)); Dogan & Lemley, *Trademarks and Consumer Search-Costs*, *supra* note 167, at 780-81.

rapidly ordering a plethora of data to promote the discovery of URLs related to one's inquiry.

The degree of similarity of marks and rankings emerges most vividly in the way the prerogatives of search engines and trademark holders have come into conflict in recent years. For example, search engines want the right to display whatever their algorithms deem most relevant in response to a given mark—including links to those who compete against the mark's owner.¹⁶⁹ These disputes show how trademarks and search rankings are coming to enter the same cultural space—that of ordering an array of options for consumers.¹⁷⁰

Trademark law has long acknowledged the type of concerns about information overload and attention scarcity that have driven the analysis of categorizers' positive externalities (and content providers' negative, overload externalities) in Sections A and B, *supra*.¹⁷¹ Marks are designed to help consumers choose products and services. Marks help consumers order experiences and learn via impressions of given consumption experiences. Without them, it is easy to imagine being overwhelmed by the array of options available—or simply foregoing choice altogether.

In an era of information overload, attention, not information, is the more pressingly scarce commodity.¹⁷² Like travelers congesting a

169. See *Google Inc. v. Am. Blind & Wallpaper Factory, Inc.*, No. C 03-05340 JF, 2004 U.S. Dist. LEXIS 27601, at *3 (N.D. Cal. Apr. 8, 2004) (Defendant claimed Google's sale of "adwords" infringed on its trademarks by featuring competitor's websites prominently in response to search queries like "American Blinds"); see also *Reed Elsevier, Inc. v. Innovator Corp.*, 105 F. Supp. 2d 816, 817 (S.D. Ohio 2000) (Plaintiff claimed that defendant bought trademarked terms on various search engines so that when a user searched for plaintiff's trademarked terms, the search engine would display defendant's result in front of, and in larger font than, plaintiff's); *Lockheed Martin Corp. v. Network Solutions, Inc.*, 985 F. Supp. 949, 950 (C.D. Cal. 1997) (Plaintiff complained that defendant, a registrar of Internet domain names, committed direct and contributory infringement, unfair competition, and trademark dilution when it accepted registration of Internet domain names similar or identical to plaintiff's service mark).

170. See Mark Bartholomew, *Making a Mark in the Internet Economy: A Trademark Analysis of Search Engine Advertising*, 58 OKLA. L. REV 179, 181 (2005) (discussing the common role of search queries and trademarks in helping consumers locate goods and services); see also Misha Gregory Macaw, *Google, Inc. v. American Blind & Wallpaper Factory, Inc.: A Justification for the Use of Trademarks as Keywords to Trigger Paid Advertising Placements in Internet Search Engine Results*, 32 RUTGERS COMPUTER & TECH. L.J. 1, 3 (2005) (arguing that the use of trademarks as keywords does not constitute trademark infringement so long as search engines try to prevent consumer confusion).

171. Sara Stadler Nelson, *The Wages of Ubiquity in Trademark Law*, 88 IOWA L. REV. 731, 737-46 (2003).

172. RICHARD A. LANHAM, *THE ECONOMICS OF ATTENTION: STYLE AND SUBSTANCE IN THE AGE OF INFORMATION* 7 (2006) ("What then is the new scarcity that economics seeks to describe? It can only be the human attention needed to make sense of information."); Herbert A. Simon, *Designing Organizations for an Information-Rich World*, in *COMPUTERS, COMMUNICATIONS, AND THE PUBLIC INTEREST* 37, 40-41 (Martin Greenberger ed., 1971) ("[A] wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the

busy highway, a proliferation of goods can get in each other's way, providing too many choices for a harried consumer to process. Marks help ease the processing demands, reducing consumers' costs of searching for the product they want.¹⁷³

Trademark law anticipates and mitigates the problem of information overload by giving owners the right to control the marks associated with their products. Mark owners can also sue to enjoin use of marks substantially similar to their own, and some product packaging (and even product design) that is too similar to the "trade dress" of their products. Such broad protections serve to reduce the noise with which counterfeiters and copiers can occlude the signal of mark owners. In other words, the use of a mark as a source designator is rivalrous; to the extent unauthorized producers appropriate the mark, they reduce its potential to signal the provenance of the good it marks.¹⁷⁴

At this point, the analogy between systematic protection for trademarks and for categorization should be clearer. Both serve a similar function by generating metadata structures that help us organize experience. In so doing, these structures help us more easily find what we need and grasp the import of signals that promote our search. Both also respond to the problem of congestion.¹⁷⁵ In a world

overabundance of information sources that might consume it."), cited in Niva Elkin-Koren, *Let the Crawlers Crawl: On Virtual Gatekeepers and the Right to Exclude Indexing*, 26 U. DAYTON L. REV. 179, 184 (2001).

173. Imagine, for instance, a world without trademark protection, where each producer's marks were copied freely by competitors. Consumers could not easily recognize, by brand, the source of the products they were consuming. Stephen L. Carter, *The Trouble with Trademark*, 99 YALE L.J. 759, 762-63 (1990) ("[I]f a firm of good reputation tried to mark its goods with a symbol to let consumers know them—that is, to lower the costs of search for consumers desiring to purchase the firm's goods—other firms could imitate the symbol and trade on the first firm's reputation."). They may well develop secondary authentication techniques, or other ways of assuring that something marked as "Coca Cola" really came from the company that supplied the last beverage they enjoyed with that label on it (such as always traveling to one "authorized distributor" who could certify the source of the beverage). But all these alternative strategies would likely increase the cost of finding what one is looking to buy.

174. See Barnes, *supra* note 166, at 8 ("Simultaneous use of a trademark by consumers referring to a particular source of coffee is purely non-rivalrous and simultaneous use by competing coffee suppliers in the same geographic market is purely rivalrous. Trademark law permits unrestricted referential use. Infringement actions are directed at conflicting proprietary uses of a mark, source-indicating uses by competitors.")

175. Congestion is a problem readily apprehended in physical space, with important applications to scarce attentional resources. Todd Sandler & John T. Tschirhart, *The Economic Theory of Clubs: An Evaluative Survey*, 18 J. ECON. LITERATURE 1481, 1488 (1980) (focusing on the physical aspect of crowding as congestion). Indeed, scholars of copyright have begun examining "congestion externalities," though they tend to focus on whether untrammelled use of a particular work reduces its value. Compare Landes & Posner, *supra* note 117, at 474-75 ("[J]ust as an absence of property rights in tangible property would lead to inefficiencies, so an absence of copyright protection for intangible works may lead to inefficiencies because of

where a quarter gigabyte of data is produced per person, per year, what appears of far more value than sheer information are the filters and maps we need to make sense of this deluge.¹⁷⁶ As Richard Lanham says, the “new scarcity” is not that of information in general, but of “human attention needed to make sense of information.”¹⁷⁷ Both trademarks and categorizers help ease the burden of choosing between an ever-increasing number of goods and services.

A skeptic might reply: If trademark law gives a mark’s owner control over the use of the mark, why shouldn’t copyright law give a copyright owner the right to control the metadata associated with his or her works?¹⁷⁸ The flaw in reasoning here is to elide the distinction between *competing* and *referential* uses in trademark.¹⁷⁹ Trademark law largely prohibits the former, but provides robust protections for the latter. Similarly, categorizers seek not to use parts of copyrighted works to *substitute* for the works themselves, but to *refer* to them, like the nominative uses protected by trademark law.¹⁸⁰ The trademark law gives these nominative uses favorable treatment at least in part because they reduce consumers’ search costs—they permit those

congestion externalities and because of impaired incentives to invest in maintaining and exploiting these works”), with Dennis S. Karjala, *Congestion Externalities and Extended Copyright Protection*, 94 GEO. L. J. 1065, 1067-68 (2006) (arguing that the Landes and Posner analysis on congestion externalities is “seriously flawed” because it overgeneralizes and ignores the fact that “a downward shift in the demand curve for a product does not necessarily, or even often, represent a loss in ‘value’ to society as opposed to a change in overall social preferences”). This Article focuses on whether works in general can create “congestion externalities” by overtaxing users’ ability to find what they need.

176. The quarter-gigabyte figure is based on LANHAM, *supra* note 172, at 258 (“Just as digital storage is the only possible means of preserving the exabytes of information (an exabyte = a billion gigabytes) being generated annually, so the competitive expression of the electronic screen is the only way to express the larger struggle for attention.”).

177. *Id.* at 7.

178. See *Merchant & Evans, Inc. v. Roosevelt Bldg. Prods. Co.*, 774 F. Supp. 1467, 1474 (E.D. Pa. 1991) (“Exclusivity promotes investments in goodwill because consumers interested in quality can easily locate goods manufactured by quality producers and distinguish those of competitors. Likewise, such exclusivity reduces the search costs of consumers, thereby raising their welfare.”).

179. See Barnes, *supra* note 166, at 8 (“Consumers would be confused by the simultaneous use of the STARBUCKS mark by two unrelated coffee shops on the same block. But society also benefits from unlimited referential use, to search for or refer to products from Starbucks U.S. Brands. The [referential] information contained in a trademark, like the information disclosed in a patent or revealed in a copyrighted expression, can be consumed non-rivalrously.”).

180. The nominative use defense permits a party to use a trademark to refer to the trademark holder. For example, the New Kids on the Block once sued *USA Today* to prevent the newspaper from publishing a poll on band member popularity, “Who’s the best on the block?” The Ninth Circuit held that the newspaper was only using the mark (New Kids on the Block) to refer to the band, not as an indication that the band had endorsed the poll or newspaper, or was the ultimate source of the poll. *New Kids on the Block v. News Am. Publ’g, Inc.*, 971 F.2d 302, 304, 308-09 (9th Cir. 1992).

writing about or commenting on products quickly to identify the thing to which they are referring. Similarly, the type of indexing and commentary provided by commentary improves the marketplace of ideas by increasing consumers' level of information about the expressive works they are considering buying.

Trademark law is fundamentally a species of unfair competition policy, a mode of regulating commercial relations among competing offerors of similar products. In its role as an arbiter of categorization processes, copyright law should not shy away from such a function.¹⁸¹ Just as John Wiley has observed the lessons patent law can teach copyright law, some astute commentators have already described the ways in which trademark theory can inform copyright doctrine.¹⁸² As Gregory Lastowka observes, the Visual Artists' Rights Act already protects rights of attribution (a form of source-designation) for "original works by visual artists who produce single works, limited edition prints, or sculptural casting in editions of less than 200." Lastowka proposes extending that type of protection to copyrighted works generally.¹⁸³ Laura Heymann asks us to "consider trademark-like activity in . . . the act of authorship," as she carefully parses the types of information conveyed by metadata like names and brands.¹⁸⁴ Each scholar's observations provide fresh ways of understanding copyright-based regulation of categorization. Overlapping trade secret, patent, copyright, and contract laws already govern the protection of search engines' "secret sauce" of the algorithms they use to generate results. Given the centrality of search cost theory to so much of trademark law and theory, a combination of principles drawn from both copyright and trademark might best guide policymaking on the search processes that categorizers promote.

181. See Joseph P. Liu, *Regulatory Copyright*, 83 N.C. L. REV. 87, 103 (2004) (discussing the increasingly fine-grained role copyright law has in regulating a number of business practices).

182. John Shepard Wiley Jr., *Copyright at the School of Patent*, 58 U. CHI. L. REV. 119, 137-44 (1991); see also *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 125 S.Ct. 2764, 2779 (2005) (discussing the lessons of patent for copyright contributory infringement doctrine).

183. Greg Lastowka, *The Trademark Function of Authorship*, 85 B.U. L. REV. 1171, 1212, 1221 (2005).

184. Laura A. Heymann, *The Birth of the Authoronym: Authorship, Pseudonymity, and Trademark Law*, 80 NOTRE DAME L. REV. 1377, 1379 (2005).

IV. OVERCOMING OVERLOAD

“Second order” approaches¹⁸⁵ to overload externalities do not attempt to reduce the amount of copyrightable expression, but rather seek to create incentives for the production of metadata (via categorization services, evaluators, and indexers) which make the welter of extant information easier to navigate.¹⁸⁶ Unfortunately, would-be catalogers, archivists, arrangers and guides are often menaced by a thicket of potential copyright claimants. Even if most content owners appreciate the categorizers’ service, holdouts tend to demand licensing fees either for the initial, archival copy used to make such compilations digitally searchable, or for results that include portions of the copy as samples. The courts are divided on the merits of such claims, and the cases often hinge on judges’ ability to recognize the ways in which unauthorized arrangement and organization of copyrighted works may be essential to a thriving market in information.¹⁸⁷ For instance, courts have affirmed fair use in the case of internet archives of photos, but have resisted it in the case of an interactive site using movie clips.¹⁸⁸ The resulting legal uncertainty has chilled many valuable categorization projects.

This Part suggests two legal routes for courts to begin giving proper weight to the value of categorization services in copyright law. First, categorization and indexing should join the list of especially privileged uses recognized in case law.¹⁸⁹ Like reviewers and

185. As noted above, in the introduction and note 162, a “first order” solution to the problem of information overload would involve a Pigouvian tax on expression. Given the normative undesirability of such a tax, the “second order” solutions proposed here are designed not to deter the creation of expression, but to create incentives for the type of expression (categorization) that makes all other expression more useful and navigable.

186. Those fond of the problem of infinite regress might skeptically comment here on the potential problem of too many metadata providers. Nevertheless, for reasons that become more apparent in Part IV.A, I believe that metadata is less susceptible to the problem of information overload than the expression it organizes and categorizes. Consider, for example, rival movie review sites (such as Rotten Tomatoes (<http://www.rottentomatoes.com>) and the *New York Times* film review archive). It is much easier to take in Rotten Tomatoes’ snap statistical summary of movie reviews (indicating that sixty-seven percent of 130 total reviews of *Legally Blonde* are positive) or even the *Times*’ snarky dismissal of the film than to watch the film itself. Rotten Tomatoes, *Critics Tomatometer for Legally Blonde: 67%*, http://www.rottentomatoes.com/m/legally_blonde/; A.O. Scott, *Legally Blonde*, N.Y. TIMES, July 13, 2001, http://movies2.nytimes.com/gst/movies/movie.html?v_id=246684 (claiming the film “turns gooey when it should be sharp”).

187. See Madison, *supra* note 83, at 1640-41 (discussing the ability of courts to identify and interpret such patterns, or “social practices”).

188. See discussion *infra* Part IV.B.

189. For an overview of how courts have treated various uses under the first factor, see PATRY, *supra* note 68, at 419-504. Categorizing does not yet explicitly appear in this list, though

educators, categorizers reduce negative externalities associated with information overload. Law should not discourage this productive activity.

Second, courts should begin treating aggressive litigation against categorizers as a form of copyright misuse—an illicit effort to leverage control over copyrighted works into secondary markets in which monopoly market power is inappropriate.¹⁹⁰ Only robust fair use and misuse defenses can adequately protect the Google Print project, and categorizers generally, from harassing litigation.

A. *The Value of Categorizers*

Though many commentators appear to assume that copyright law's chief purpose is to create *more* expression, its *organization* is becoming increasingly important in an era of information overload. Independent categorizers promise to play a vital role in taming information overload externalities, if copyright law permits them to archive, index, and sample copyrighted works.

The scope and creativity of categorizers is astonishing. Feel depressed and only want to read good news? Try out "Mood News," which arrays headlines in order of "good, bad, and neutral."¹⁹¹ Want to read fresh new political theory and perspectives on the academy? Try meta-blog "Political Theory Daily Review," which posts dozens of recommendations each day.¹⁹² Need to figure out which of your Beanie Babies is a collectable and which can be safely donated to Goodwill? A publisher has been generating several guides just for that purpose, as well as picture books permitting a broader overview of the Beanie Baby landscape.¹⁹³

Though each of these particular examples may seem hopelessly specialized or trivial, the phenomenon of categorizing as a whole is not. Consider, for example, the range of music categorizing sites.

it might be seen as a natural extension of preservation, abstracting, and research. *See id.* at xvi (listing these as examples of fair use).

190. *See* NIMMER & NIMMER, *supra* note 71 (examining the scope of potential, secondary markets for copyrighted works).

191. Mood News, Mood News Summary, <http://www.latedecember.com/sites/moodnews/index.php> (last visited Nov. 6, 2006). If Agence France-Press succeeds in its claim against Google, arguing that headlines are copyrightable, such a service would probably be shut down due to liability concerns.

192. Alfredo Perez, Political Theory Daily Review, <http://politicaltheory.info/> (last visited Nov. 6, 2006).

193. *See* DENISE I. O'NEAL, FOR THE LOVE OF BEANIE BABIES 5 (1998) (discussing the thriving beanie baby "secondary market").

MySpace Music,¹⁹⁴ The N,¹⁹⁵ Yahoo! Music Engine,¹⁹⁶ NPR,¹⁹⁷ and Amazon.com¹⁹⁸ all permit users to comment on and rank musical works. In the film arena, Rotten Tomatoes arranges snippets from a cornucopia of movie reviews on pages devoted to nearly all recent films.¹⁹⁹ Blockbuster publicizes a list of “1001 Movies You Must See”²⁰⁰ as well as the American Film Institute’s Top 100.²⁰¹ Netflix,²⁰² IMDB, and YMDB all offer users the chance to rate films, comment on them, and comment on each other ratings and comments.²⁰³ Both Amazon.com and Powells.com offer similar services for books.

Given the breadth of such current categorizing services, it is reasonable to wonder whether any legal intervention is necessary to help this field at all. Is it not just as Robert Merges predicted back in the 1990s; namely, that private parties are working out deals to best promote and expose their content?²⁰⁴ Admittedly, some large corporations have successfully brokered deals with content owners to set up robust categorizing sites that feature bits of the content presented. For example, Amazon’s power as a retailer allowed it to leverage “look inside the book” from publishers.²⁰⁵ But when we look at the fate of some smaller players, the limitations of a laissez-faire approach become clear.

194. MySpace.com, MySpace Music: Today’s Top Artists, <http://topartists.myspace.com/index.cfm?fuseaction=music.topBands> (last visited Nov. 6, 2006).

195. The N, Music Rankings, <http://www.the-n.com/games/rank/index.php?topic=183&v=69170&theme=music> (last visited Nov. 6, 2006).

196. Yahoo!, Ask Yahoo! Music Help, <http://help.yahoo.com/l/us/yahoo/music/yme/personalization/personalization-45785.html> (last visited Nov. 6, 2006).

197. NPR, The Best Music of 2005 Countdown, <http://www.npr.org/templates/story/story.php?storyId=5054194&sourceCode=gaw> (last visited Nov. 6, 2006).

198. Amazon.com: Rating Items, <http://www.amazon.com/gp/help/customer/display.html/002-0999018-0456820?ie=UTF8&nodeId=13316081#rate> (last visited Nov. 6, 2006).

199. Rotten Tomatoes, Frequently Asked Questions: Reviews, <http://www.rottentomatoes.com/pages/faq#gathering> (last visited Nov. 6, 2006).

200. Blockbuster, 1001 Movies You Must See Before You Die Collections, <http://www.blockbuster.com/online/catalog/listDetails?listRef=1001MustSeeMovies> (last visited Nov. 6, 2006).

201. Blockbuster, AFI Top Collections, <http://www.blockbuster.com/online/catalog/listDetails?listRef=afiTopMovies> (last visited Nov. 6, 2006).

202. Netflix Recommendations, <http://www.netflix.com/Recs> (last visited Feb. 6, 2006) (subscription required).

203. YMDB: Your Movie Database, Frequently Asked Questions, http://www.ymdb.com/faq/index_ukuk.html#question5 (last visited Nov. 6, 2006).

204. Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293, 1295-96 (1996) (praising collecting societies like ASCAP and BMI as models of private ordering).

205. See Wolf, *supra* note 57, at 86 (noting Amazon’s digital archive of 120,000 books in which “every page is viewable”).

The Chilling Effects Clearinghouse has documented many cases of content owners bullying categorizers and commentators with cease-and-desist letters.²⁰⁶ The high cost of litigation deters many categorizers from even trying to assert their fair use claims. As Lawrence Lessig has said, given the uncertain state of the law, fair use is often little more than “the right to hire a lawyer.”²⁰⁷ Thus, content owners may use expansive rights over derivative works to assure that only “approved” partners have “full service” rating and comment sites. For example, to assure comity between all players, Amazon screens reviews and does not permit exceptionally cutting or nasty criticism.²⁰⁸ Ty, Inc., owner of the Beanie Babies trademark and copyrights in these “sculptural works,” has systematically tried to suppress criticism of its products and business practices.²⁰⁹ And as this Article has already documented, Google’s legal troubles are legion, in part because it refuses to play by the rules set by content owners.²¹⁰

Ironically, Google itself may well be hurt in the long run if it manages to succeed in its fair use defense against publishers, the Author’s Guild, and Agence France-Press. To the extent that these cases establish a precedent of license-free sampling, they permit lower-cost entry for competitors in the search market—as well as for categorizers generally. In a world in which categorizers need licenses for all the content they sample, only the wealthiest and most established entities will be able to get the permissions necessary to run a categorizing site.²¹¹ Fair use for snippets of books, thumbnails of

206. HEINS & BECKLES, *supra* note 74, at 36-41 (discussing several instances where copyright holders’ legal threats effectively vetoed apparent fair uses).

207. lessig blog, <http://www.lessig.org/blog/archives/001794.shtml> (Mar. 20, 2004; 18:26 EST); *see also* Nimmer, *supra* note 74, at 280 (“Basically, had Congress legislated a dartboard rather than the particular four fair use factors embodied in the Copyright Act, it appears that the upshot would be the same.”).

208. For documentation of this phenomenon in the case of one book, see *Battle of the Bailey Reviewers*, <http://www.tsroadmap.com/info/bailey-reviews.html> (last visited Nov. 6, 2006).

209. *See* discussion *infra* Part IV.C.

210. *See* Complaint at 2, *The Author’s Guild v. Google, Inc.*, No. 05-CV-8136-JES (S.D.N.Y. filed Sept. 20, 2005) (on file with author), *available at* <http://f11.findlaw.com/news.findlaw.com/hdocs/docs/google/aggoog92005cmp.pdf>; Complaint at 5, *Agence France-Press v. Google, Inc.*, No. 1:05cv00546 (D.D.C. filed Mar. 17, 2005) (on file with author), *available at* <http://blog.searchenginewatch.com/blog/050321-175410> (follow “Main Document (Complaint)” hyperlink).

211. For a fuller exploration of the possibility of entrenched concentration here, see Pasquale, *supra* note 18, at 129-30 (“[W]e cannot expect . . . a competitive market to arise organically . . . [I]ndividuals . . . seek out the most comprehensive and authoritative source of information, and the very fact that this occurs gives the leading source enormous leverage to assure that information sources will want to appear (and be highly ranked) on its search

images, and samples of audiovisual and musical works levels the playing field.

Only a diverse and independent field of categorizing sites can fully realize their promise of better mapping the information environment. Categorizers help society overcome the “fragmentation” and “colonization” of the “lifeworld,” terms used by German social theorist Jurgen Habermas to designate the negative consequences of increasing specialization and inaccessibility of knowledge.²¹² Fine art and music will tend to become ever more disconnected from daily life if a robust community of critics and commentators is unable to relate them to those outside the often insular community of tastemakers. Popular music improves as niches of thoughtful and independent commentators evaluate and share the artists they enjoy.

In politics, the growing trend toward “narrowcasting” and partisan media erodes the common public sphere of knowledge upon which democratic dialogue depends.²¹³ As narrowcasting replaces broadcasting, news aggregators like Google may well be the only news source that adequately reflect the full range of opinions on what constitutes news. Finally, categorizers “level” the information playing field, letting outsiders understand the full range of expression available. As proprietary information grows in importance, citizens deserve at least a right to know *what is available*, even if its price makes the expression in question unaffordable.²¹⁴

results. . . . The ‘rich get richer’ [dynamic can] mak[e] the search and rankings field a very difficult one to enter.”).

212. JÜRGEN HABERMAS, *THE THEORY OF COMMUNICATIVE ACTION* 364 (Thomas McCarthy trans., Beacon Press 1987) (1981) (describing “the disintegration of life-relations when these are separated, through legalized social intervention, from the consensual mechanisms that coordinate action and are transferred over to [delinguistified steering] media such as power and money”).

213. See generally CASS SUNSTEIN, *REPUBLIC.COM* (2001) (describing potential negative effects of narrowcasting); Michael S. Kang, *From Broadcasting to Narrowcasting: The Emerging Challenge for Campaign Finance Law*, 73 *GEO. WASH. L. REV.* 1070 (2005) (asserting that narrowcasting defies basic understandings of campaign finance law); Eben Moglen & Pamela S. Karlan, *The Soul of a New Political Machine: The Online, the Color Line and Electronic Democracy*, 34 *LOY. L.A. L. REV.* 1089, 1106 (2001) (“Broadcasting declines, narrowcasting is in.”). But see Dan Hunter, *Philippic.com*, 90 *CAL. L. REV.* 611, 663-65 (2005) (reviewing SUNSTEIN, *supra*, and suggesting that he overstates the negative filtering effects of narrowcasting).

214. Jonathan Zittrain and Benjamin Edelman articulate this principle forcefully in their analysis of search engine censorship. Jonathan Zittrain & Benjamin Edelman, *Localized Google search result exclusions: Statement of issues and call for data* (Oct. 26, 2002), available at <http://cyber.law.harvard.edu/filtering/google/> (discussing internet filtering).

B. The Current Circuit Split on Categorizers

Despite their great promise, categorizers have suffered uneven treatment from courts. The circuits are split on the issue of web archives and categorizations, finding certain types of collections clear fair uses and others infringing.

In *Kelly v. Arriba Soft*, Arriba's search engine, now located at www.ditto.com, permitted Internet users to find images by searching its archives.²¹⁵ Kelly, a nature photographer, sued Arriba Soft for including his images in its archive.²¹⁶ Arriba's website provided two services: 1) lists of "thumbnail" visions of the images (reduced in size and thus quality) and 2) framing of the full-size image (which appeared on Arriba's website exactly as it had on its source page). The Ninth Circuit ruled that the first use was fair, largely on the basis of its "effect on the market" analysis.²¹⁷

The panel recognized that the plaintiff's images "are related to several potential markets," including attracting internet users to Kelly's own website (which sold digital and print versions of the images and other materials), and being sold or licensed to other websites or to a "stock database."²¹⁸ Observing that Arriba's thumbnail images actually directed users to Kelly's site, the panel found no evidence that it reduced the value of his images as a type of advertising for his site.²¹⁹ The court also found that the "low resolution" thumbnails in no way competed with the full size images in markets for images.²²⁰ However, since the full-size images Arriba

215. *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 815-16 (9th Cir. 2003).

216. For example, if one goes to Arriba Soft's website and types in "dog," the site provides at least twelve "thumbnail" images of dogs, permitting the user to click on the source of each image and thereby be directed to the website on which the dog image appears. Ditto, <http://www.ditto.com> (last visited Nov. 5, 2006).

217. It remanded the latter issue with instructions to the district court. *Kelly*, 336 F.3d at 822.

218. *Id.* at 821.

219. The panel's finding on the first factor (the purpose and character of the use) informed its effect on the market analysis:

Arriba was neither using Kelly's images to directly promote its website nor trying to profit by selling Kelly's images. Instead, Kelly's images were among thousands of images in Arriba's search engine database. Because the use of Kelly's images was not highly exploitative, the commercial nature of the use only slightly weighs against a finding of fair use.

Id. at 818.

220. *Id.* Google is expected to rest a good deal of its fair use defense on an analogy of snippets to thumbnails. Thumbnails are to pictures what snippets of text are to books (sentences are to books). Books cannot be modified (useful yet not as valuable to user) by shrinking the size of text (as thumbnails are just pictures reduced in size), but instead are reduced in form (length) by only allowing the user/searcher to see a small applicable portion.

made available did divert internet users from Kelly's website, and effectively substituted for the images Kelly would have sold, the panel was agnostic on the fairness of this use and ordered the district court to consider more closely the economic effects of this type of reproduction.²²¹ The *Kelly* panel's opinion offers a model of "fourth factor" analysis that recognizes the complexity of economic effects of unauthorized use.²²²

However, fourth factor analysis not only "giveth" to categorizers, but also "taketh away." In *Video Pipeline, Inc. v. Buena Vista Home Entertainment*, a company specializing in the business of movie preview compilation and organization sold clips of movies, without permission from the movie copyright holders, to retailers for use on their websites.²²³ Users could not download the clips, but each time a user viewed a clip on a retailer's website, the retailer paid a fee to the movie preview company.²²⁴ The copyright holders of the movies claimed that the use of the clips constituted copyright infringement.²²⁵

The district court sensitively addressed the "effect on the market" factor accounting for both potential negative as well as positive effects resulting from the unauthorized distribution of the clips.²²⁶ In addition, the trial judge found that the movie clips were not substitutes for the copyrighted films²²⁷ and recognized that the

221. The panel addressed the diverse markets for the photos involved. *Id.* at 821.

222. However, the vitality of that precedent was recently called into question when a district court judge found Google liable for providing almost exactly the same image-search service at issue in *Kelly*. The only significant difference in the two cases was that Google's antagonist, a purveyor of erotic images, could demonstrate that it had licensed small-scale reproductions of its images to a cell-phone company. See Xenia Kobylarz, *Perfect 10 Racks Up Preliminary Injunction Against Google*, LAW.COM, Feb. 22, 2006, <http://www.law.com/jsp/article.jsp?id=1140516320952>; Siva Vaidhyathan, *Thumbnails (and Google) in Danger*, SIVACRACY.NET, Feb. 22, 2006, <http://www.nyu.edu/classes/siva/archives/002827.html> (noting that Google may be "inviting its own death" if this case "forc[es] the courts to overturn *Kelly* [*v. Arriba Soft*]").

223. *Video Pipeline, Inc. v. Buena Vista Home Entm't*, 192 F. Supp. 2d 321, 328-29 (D.N.J. 2002), *aff'd*, 342 F.3d 191 (3d Cir. 2003).

224. *Id.*

225. *Id.*

226. There exists

the possibility that potential customers will be discouraged from purchasing or renting certain videos due to the depiction of the movie as provided by Video Pipeline's clip previews. . . . [and,] [m]oreover, the evidence that Video Pipeline's video previews are low in quality . . . also suggests that the market for purchasing or renting the copyrighted motion pictures may be detrimentally affected.

Id. at 340. The district court also concluded that "Video Pipeline's service of providing online previews to retailers' customers may also affect the marketability of the copyrighted motion pictures due to the retailers' competition with . . . [the copyright holder] in online sales." *Id.* at 341.

227. *Id.* at 341.

contested site would increase exposure to the work.²²⁸ Visitors to retailers' websites, "who might otherwise be unaware of, or unattracted to" the films, would have a chance to view clips.²²⁹ These determinations left the district court unconvinced by the plaintiffs' assertions that the Video Pipeline service reduced the value of their copyrighted works.

Nevertheless, the Third Circuit found in favor of Buena Vista (a Disney subsidiary) by restricting the scope of the fourth factor inquiry: "Because the issues pertaining to the potential harm to the market for Disney's derivative trailers are more straightforward, we focus our analysis on this area and do not review the District Court's" consideration of the site's effect on the value of the underlying films.²³⁰ The appellate court found (rather unsurprisingly) that Video Pipeline's unauthorized use of the trailers denied the plaintiffs the right to charge for that content.²³¹ The appellate panel did not even consider whether potential positive effects on sales or rentals of the underlying movies might swamp these negative effects.²³²

C. Directions for the Future

Arriba Soft and *Video Pipeline* create a circuit split on the proper analysis of categorizers in a fair use "effect on the market" analysis. In previous work, I have focused on resolving this split by refining the fourth factor of the fair use test, proposing ways of making the requisite judicial analysis more economically sophisticated and more respectful of the legal methodology adopted in the landmark *Sony* decision.²³³ I now argue that categorization projects are so necessary to counteract the negative effects of information overload that they deserve positive recognition in the *first* fair use factor, which focuses on the "purpose or character of the use."²³⁴ Traditional analysis of whether the use is commercial and transformative has

228. *Id.* ("While Video Pipeline's previews may attract customers to its retailers' websites and lead to increased purchasing, as they submit, such purchases would most likely detract from the sales of home videos on [the plaintiff's] official website.")

229. *Id.*

230. *Video Pipeline*, 342 F.3d at 202.

231. *Id.* at 202-03.

232. *See id.*

233. *See* Pasquale, *supra* note 11; Pasquale, *supra* note 18. I still believe that detailed inquiry into the actual effects of a use on the value of a copyrighted work is essential to applying the statute. However, given that the cost of copyright litigation is one of the main impediments to fair use, richer fourth-factor inquiry may ultimately prove not to be much help to defendants, especially if they cannot afford the experts commonly necessary in such litigation.

234. 17 U.S.C. § 107(1) (2006).

extremely limited utility in the categorization context. Courts can short-circuit these endlessly manipulable formal distinctions by recognizing categorization as a *per se* pro-defendant finding in the first fair use factor. That would not mean an automatic fair use finding—there are, of course, three other factors to examine. But it would at least provide some measure of judicial recognition of the value of categorizers and indexers.

Next, in order to level the litigation playing field, I suggest that aggressive efforts by content holders to shut down categorizing sites should constitute a form of copyright misuse.²³⁵ Developed from the doctrine of patent misuse in the 1990s, the misuse defense may reasonably balance Congress's recent expansion of copyright (and paracopyright) protections. As an equitable defense, misuse doctrine protects innovators in fields related to, but ultimately not directly covered by, the legal rights of a copyright holder. Many content owners have used aggressive litigation tactics not only to control the use of their copyrighted material, but also to leverage that control into veto power over any categorization project which samples their work.²³⁶ Such aggressive tactics are exactly the type of inefficient and unfair competitive tactics that misuse doctrine was designed to combat.

1. Categorization as Privileged Fair Use

The moral and economic arguments for this position have already been laid out in Section A, *supra*: Information overload is a real problem and search engines do much to alleviate it. Yet these arguments must find a basis in extant doctrinal analysis if they are to convince courts. We can find such roots in a rather unlikely place: a 2002 dispute between the extraordinarily litigious stuffed animal manufacturer, Ty, Inc., and a publisher of guides to Ty's "beanie baby" products.²³⁷ In this case, Ty, the owner of copyrights in various "Beanie Babies" (stuffed animals copyrighted as "sculptural works")

235. As Jason Mazzone notes, "The law's strong protections for copyrights are not balanced by explicit protections for the public domain." Jason Mazzone, *Copyfraud*, 81 N.Y.U. L. REV. 1026, 1029 (2006) (recommending that Congress "should amend the Copyright Act to allow private parties to bring civil causes of action for false copyright claims").

236. Such efforts also serve to dampen new, unauthorized commentary on works in order (comparatively) to raise the profile of extant distribution and promotion networks. See Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing*, 19 BERKELEY TECH. L.J. 785, 790 (2004) ("[P]rotection against unauthorized copying provides dramatically disproportionate benefits to the most popular creations: it enables the publishers seeking to create blockbusters to finance enormous promotional campaigns, which drown out valuable, artistic creations that lack competitive marketing efforts.").

237. *Ty, Inc. v. Publ'ns Int'l Ltd.*, 292 F.3d 512 (7th Cir. 2002).

sued the publisher of books featuring images of Beanie Babies (including a collector's guide and a "picture book" entitled *For Love of Beanie Babies*). Ty would only license the right to use pictures of Beanies to those who agreed to extremely restrictive licensing terms:

Ty does not like criticism, and so the copyright licenses that it grants to those publishers whom it is willing to allow to publish Beanie Baby collectors' guides reserve to Ty the right to veto any text in the publishers' guides. It also forbids its licensees to reveal that they are licensees of Ty. Ty's standard licensing agreement requires the licensee to print on the title page and back cover of its publication the following misleading statement: "This publication is not sponsored or endorsed by, or otherwise affiliated with Ty Inc. All Copyrights and Trademarks of Ty Inc. are used by permission. All rights reserved."²³⁸

Ty's licensing terms throw into high relief the problem of the "captured categorizer," an entity that may well have secured the rights to catalog and comment on content, but only at the cost of offering its sincere opinion on the same. Ty's terms rather insidiously insisted that "house organs" themselves proclaim their independence from the very group managing their content.

Writing for the Seventh Circuit panel, Judge Posner characterized *For Love of Beanie Babies*, a children's book whose central appeal was amusing arrangements of particular "species" of Beanie Babies into scenes, as "essentially just a collection of photographs of Beanie Babies, and photographs of Beanie Babies are derivative works from the copyrighted Beanie Babies themselves."²³⁹ The *categorizing* work merited distinctly more favorable treatment:

PIL's *Beanie Babies Collector's Guide* . . . is a small paperback book with small print, clearly oriented toward adult purchasers—indeed, as the title indicates, toward collectors. Each page contains, besides a photograph of a Beanie Baby, the release date, the retired date, the estimated value of the Beanie Baby, and other information relevant to a collector, such as that "Spooky is the only Beanie ever to have carried his designer's name," or that "Prance should be a member of the Beanie line for some time, so don't panic and pay high secondary-market prices for her just because she's fairly new."²⁴⁰

Judge Posner notes that Ty licensed the right to publish photos of Beanie Babies only to authors of collectors' guides who promise not to criticize Ty in their guides.²⁴¹ This state of affairs indicates the importance of independent categorizers; if all collector's guides are licensed, consumers won't be able to trust whether they are getting accurate information about the market or are simply being fed talking points helpful to the interests of dominant producers. Melding first and fourth factor fair use analysis, Judge Posner observes:

238. *Id.* at 520.

239. *Id.* at 519.

240. *Id.* at 519-20.

241. *Id.* at 520 ("Some of the text is quite critical, for example accusing Ty of frequent trademark infringements.").

Generalizing from this example in economic terminology that has become orthodox in fair-use case law, we may say that copying that is complementary to the copyrighted work (in the sense that nails are complements of hammers) is fair use, but copying that is a substitute for the copyrighted work (in the sense that nails are substitutes for pegs or screws), or for derivative works from the copyrighted work, is not fair use. . . . The hammer manufacturer wants there to be an abundant supply of cheap nails, and likewise publishers want their books reviewed and wouldn't want reviews inhibited and degraded by a rule requiring the reviewer to obtain a copyright license from the publisher if he wanted to quote from the book.²⁴²

The existence of reviewing sites uncontrolled by the owners of the material reviewed may be essential to the assurance of trustworthy sources of information about such works.²⁴³ Although *Ty* focuses on reviews,²⁴⁴ categorization and indexing may count as just as socially useful a purpose, and may be the only effective way of keeping track of materials to be reviewed (or reviews themselves). In an era of information overload, there are many reasons to immunize the efforts of those who give us a sense of "what's out there" from holdouts who would make the task prohibitively expensive.

Fair use findings for snippets are also important to Google's archiving project. In a series of cases involving software, courts have protected users' rights to make an *intermediate copy* of a work in order to reverse engineer its noncopyrightable elements—and to circumvent technological measures designed to prevent such intermediate copying.²⁴⁵ In other words, a software coder is entitled to make a copy of a work in order to discover how it works, and then to replicate those elements of it that are not copyrightable. The doctrine appears tailor-made for the Google Library project, which intends not to provide full copies of copyrighted works to searchers, but only small snippets of

242. *Id.* at 517 (emphasis added) (citing *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257, 1277 (11th Cir. 2001) (concurring opinion); *Davis v. The Gap, Inc.*, 246 F.3d 152, 175-76 (2d Cir. 2001); Gordon, *Fair Use as Market Failure*, *supra* note 90, at 1643 n.237).

243. See Nimmer, *supra* note 74, at 293.

244. Posner's analysis focuses not on the effect of the infringement on the defendant only, but, more properly, on the consequences of a pro-plaintiff finding for the public sphere in general:

Quite apart from the impairment of freedom of expression that would result from giving a copyright holder control over public criticism of his work, to deem such quotation an infringement would greatly reduce the credibility of book reviews, to the detriment of copyright owners as a group, though not to the owners of copyright on the worst books. Book reviews would no longer serve the reading public as a useful guide to which books to buy. Book reviews that quote from ('copy') the books being reviewed increase the demand for copyrighted works; to deem such copying infringement would therefore be perverse, and so the fair-use doctrine permits such copying

Ty, Inc., 292 F.3d at 517.

245. See 17 U.S.C. § 1201(f) (2006) (addressing reverse engineering); Ganley, *supra* note 80 (advocating British adoption of an American-style intermediate use doctrine in order to immunize actions like Google's).

text deemed relevant to their queries. To the extent the snippets are protected, the larger archiving project may be eligible for the intermediate copying defense.²⁴⁶ Given the accidental (and inevitable) destruction of so much analog data over time, this digital archiving project is of immense cultural importance.²⁴⁷

Per se favorable first factor treatment for categorizers who merely provide metadata and samples (and not copies of works themselves) would do much to immunize the Google Library project, as well as efforts to extend its coverage to music, films, and other forms of expression. Currently, it is very easy for a court to give inordinate power to holdouts unwilling merely to indicate their refusal to be in the database to Google.²⁴⁸ Per se favorable first-factor treatment would not end the fair use analysis; there are still the three other factors, and they can likely address the meritorious objections of copyright holders.²⁴⁹ Yet a first factor analysis favorable to categorizers and organizers would do much to dispel the fear, uncertainty, and doubt that aggressive content owners have used to chill legitimate fair uses over the past few decades.²⁵⁰

246. See Jonathan Band, *The Google Library Project: Both Sides of the Story*, PLAGIARY, Feb. 8, 2006, at 1, 7, available at <http://www.plagiarism.org/Google-Library-Project.pdf> (“The owners respond that the intermediate copying cases are distinguishable because they address a problem specific to software: translation of the programs is the only means of accessing ideas unprotected by copyright that are contained within the program. This problem, of course, does not exist with books. Furthermore, in the intermediate copying cases, the software developer discarded the translation once it developed its new non-infringing program. Google, conversely, will retain the scanned copy in its search index. While acknowledging these factual differences, Google’s supporters stress the underlying principle of the intermediate copying cases: that copying may be excused if it is necessary for a socially useful non-infringing end use.”).

247. See Mary Sue Coleman, President, Univ. of Mich., *Google, the Khmer Rouge and the Public Good*, Address to the Professional/Scholarly Publishing Division of the Association of American Publishers (Feb. 6, 2006) (on file with author), available at <http://www.umich.edu/pres/speeches/060206google.html> (discussing how disasters like Hurricane Katrina or fascist regimes like the Khmer Rouge can wipe out all unique analog copies of works, and how the Google digitization project is essential to preservation efforts).

248. As Lawrence Lessig has observed, such veto power would essentially keep about three quarters of copyrighted works out of the database, because it is impossible to find the owners of these orphan works. Joan Indiana Rigdon, *Google, Books, and Fair Use*, WASH. LAWYER, Mar. 2006, at 26.

249. These meritorious objections may include security considerations (copyright owners worry about their industry being “Napsterized” if someone breaches the security of Google’s or the partnering libraries’ digital copies of the works) and an overbroad “search engine” exception (which would permit, for example, a “fanfic” site to digitally copy all versions of the work ostensibly in order to let users find their favorite quotes, but really in order to let them download and print works at will).

250. For examples of such overclaiming, see HEINS & BECKLES, *supra* note 74; Lydia Pallas Leren, *Slaying the Leather-Winged Demons in the Night: Reforming Copyright Owner Contracting with Clickwrap Misuse*, 30 OHIO N. U. L. REV. 495, 500 (2004) (“Even if a court would not enforce these overreaching contractual terms as a matter of contract law, the use of these type of provisions in ubiquitous shrinkwrap and clickwrap licenses has a certain in

Admittedly, once such a privileging subfactor as categorization is established, there will be more or less legitimate uses of it. It may well be hard to define what precisely constitutes a categorizer in the abstract.²⁵¹ However, such difficulties have not proven insuperable for other “subfactors” in the first factor of fair use analysis, including transformativeness and commerciality. Courts can distinguish between highly transformative and less transformative uses, and similarly can distinguish between paradigm cases of categorization and less promising ones.²⁵²

For example, one reasonable development of the doctrine would hold that a privilege for categorizers should be proportional to the scope of works categorized and the openness of the categorization project. A project premised on indexing and categorizing, say, all Japanese films, would be a more privileged categorizer than, say, one devoted only to indexing the films of Akira Kurosawa. In the latter case, the relatively more easily found copyright holders should have more of a claim to get some licensing revenues from the project than the enormously dispersed owners of all Japanese films. Moreover, an open categorization project is more of a public service than a narrowly proprietary one. As copyright law develops, more such calibrations of the categorization privilege may emerge.

terrorem effect on users.”); William Patry & Richard Posner, *Fair Use and Statutory Reform in the Wake of Eldred*, 92 CAL. L. REV. 1639, 1654 (2004) (“Copyright owners and their lawyers are likely to continue advising would-be copiers that they are infringers even when the proposed copy would be a fair use; and the copiers will be reluctant to provoke litigation over the issue.”).

251. Similar issues have arisen in the context of exceptions targeted at museums and archives. See ROBERT BURRELL & ALLISON COLEMAN, *COPYRIGHT EXCEPTIONS: THE DIGITAL IMPACT* 138 (Cambridge University Press, 2005) (discussing efforts to “defin[e] libraries, archives, museums, and galleries”).

252. See, e.g., *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 (1994) (“[T]he more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.”).

2. Misuse Defense

Intellectual property rights are, at their core, monopolies.²⁵³ Even though legitimately attained, the rights are subject to abuse. A copyright holder's efforts to leverage control over content into control over a field uncovered by its derivative works rights can result in a finding of copyright misuse (completely independently of any antitrust liability).²⁵⁴ After such a finding, a content owner's copyrights are invalid until the misuse is "purged."²⁵⁵ Although misuse findings have not been common, they may prove a more effective shield for categorization projects than fair use. While fair use doctrine is by nature extraordinarily malleable and indeterminate, misuse presents a relative straightforward assessment of whether copyright holders (either alone or in concert) have attempted to strong-arm control over given works into control over a whole other industry or field.

Several commentators have praised the development of the misuse doctrine as a balance to copyright holders' overreaching.²⁵⁶ Of

253. BRETT FRISCHMANN & DAN MOYLAN, CHAPTER ON COPYRIGHT MISUSE (forthcoming 2006); NIMMER & NIMMER, *supra* note 71, at 4 ("The Copyright Act accords to each copyright owner a limited form of monopoly."). The doctrine of misuse arose in part out of concern about spam litigation by copyright and patent holders designed to intimidate rivals into not exercising rights that were legally theirs. *Id.* at § 13.09[A][1] (discussing Columbia Pictures Indus., Inc. vs. Prof. Real Estate Investors, Inc., 866 F.2d 278 (9th Cir. 1989)). As Heins and Beckles have demonstrated, the chilling effects of "weak IP claims" are legion. HEINS & BECKLES, *supra* note 74, at 33. See also James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. (forthcoming 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=918871 ("Because liability is difficult to predict, intellectual property users often seek licenses even when proceeding without one might be permissible. Yet because the existence (vel non) of licensing markets plays a key role in determining the breadth of rights, these seemingly sensible licensing decisions eventually feed back into doctrine; the licensing itself becomes proof that the entitlement covers the use.").

254. *Id.* at 2; see also *Alcatel USA, Inc. v. DGI Techs., Inc.*, 166 F.3d 772, 792-95 (5th Cir. 1999) (finding misuse where software copyright owner tried to prevent defendant from testing its cards in conjunction with DSC's software, and thereby illicitly attempted to secure a monopoly over uncopyrighted microprocessor cards); *Practice Mgmt. Info. Corp. v. Am. Med. Ass'n*, 121 F.3d 516, 520 (9th Cir. 1997) (finding misuse in licensing agreement which plainly required the Health Care Financing Administration to use the AMA's copyrighted coding system and no other); *Lasercomb Am., Inc. v. Reynolds*, 911 F.2d 970, 972-79 (4th Cir. 1990) (finding misuse where software copyright owner's licensing agreement sought to suppress any attempt by the licensee to independently implement the software's idea); Scott A. Sher, Case Note, *In re Napster Inc. Copyright Litig.: Defining the Contours of the Copyright Misuse Doctrine*, 18 SANTA CLARA COMPUTER & HIGH TECH. L.J. 325, 332-36 (2002) (discussing district court order indicating the potential viability of Napster's misuse defense before it was bought by one of the companies suing it).

255. NIMMER, *supra* note 71, at 2 (citing *Lasercomb*, 911 F.2d at 979 n.22); see also *Practice Mgmt.*, 121 F.3d at 520 n.9.

256. See, e.g., Dan L. Burk, *Anticircumvention Misuse*, 50 UCLA L. REV. 1095, 1133 (2003); Lydia Pallas Loren, *Slaying The Leather-Winged Demons In The Night: Reforming Copyright Owner Contracting With Clickwrap Misuse*, 30 OHIO N.U. L. REV. 495, 497 (2004).

all the defenses in copyright law, misuse appears ideally suited to categorizers. To be reliable, categorizers should have the right to be independent of the owners of the content they organize, comment on, or review. They should not be subject to sanctions or reprisals from large content owners angry at the categorizer's treatment of their properties—be it a low ranking, a bad review, or a brusque dismissal.²⁵⁷ Unfortunately, a recent categorizer case to address the misuse defense directly, *Video Pipeline*, appeared to confuse it with a more general First Amendment argument against excessive control over copyrighted work.²⁵⁸ The *Video Pipeline* court conceded that “anti-competitive licensing agreements may conflict with the purpose behind a copyright’s protection by depriving the public of the would-be competitor’s creativity.”²⁵⁹ However, the court refused to find misuse, holding that the defendant was free to criticize Disney films on websites lacking Disney trailers.²⁶⁰ If the sole value of categorizing sites were commentary, perhaps this crabbed view of the misuse doctrine would be valid.²⁶¹ But as Part III demonstrated, even categorizers that offer the barest comment on copyrighted content create value by *sorting* content. The misuse and fair use defenses

257. Circuit courts addressing potential misuses of copyright have also focused on the illegitimacy of using copyright to expand a copyright holder's power over information that is not covered the copyright. See, e.g., *Assessment Techs. v. Wiredata, Inc.*, 350 F.3d 640, 646-47 (7th Cir., 2003) (“To try by contract or otherwise to prevent the municipalities from revealing their own data, especially when, as we have seen, the complete data are unavailable anywhere else, might constitute copyright misuse. The doctrine of misuse ‘prevents copyright holders from leveraging their limited monopoly to allow them control of areas outside the monopoly.’ ” (quoting *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1026-27 (9th Cir. 2001))).

258. See FRISCHMANN & MOYLAN, *supra* note 253, for a comprehensive critique of *Video Pipeline*.

259. *Video Pipeline, Inc. v. Buena Vista Home Entm't*, 342 F.3d at 204.

260. *Id.* at 206 (“The licensing agreements in this case do seek to restrict expression by licensing the Disney trailers for use on the internet only so long as the web sites on which the trailers will appear do not derogate Disney, the entertainment industry, etc. But we nonetheless cannot conclude on this record that the agreements are likely to interfere with creative expression to such a degree that they affect in any significant way the policy interest in increasing the public store of creative activity. The licensing agreements do not, for instance, interfere with the licensee’s opportunity to express such criticism on other web sites or elsewhere.”).

261. Followed literally, *Video Pipeline* suggests that some courts will respect copyright holders’ demands to set up *their own* method of categorizing, providing samples of works, and excluding others from entering this market. I believe such demands may be a kind of copyright misuse (an illicit effort to leverage control over copyrighted works into control over other markets which are not properly considered derivative works). See, e.g., Matthew Fagin, Frank Pasquale, & Kim Weatherall, *Beyond Napster: Using Antitrust Law to Advance and Enhance Online Music Distribution*, 8 B.U. J. SCI. & TECH. L. 451, 513 (2002) (discussing potentially anti-competitive practices in the recording industry); Matt Richtel, *Aggressive Strategy Brought on Inquiry of Recording Industry*, N.Y. TIMES, Oct. 22, 2001, § C, at 10 (discussing antitrust inquiry catalyzed by RIAA’s effort to dominate the online music retailing market).

should not simply serve to facilitate more expression about extant expression. They are also capable of protecting the independent categorization and organization of copyrighted work.

From a strictly economic perspective, bargains between categorizers and content owners may appear welfare-maximizing.²⁶² For example, Google's recent deal with the Associated Press enables it to develop new content and provides a new revenue source for an embattled old media stalwart.²⁶³ Google has also started licensing content from studios and sees such "deals as a key to long-term growth."²⁶⁴ In the short run, such licensing practices may seem like an ideal compromise between a categorizer and the owners of the content it organizes.

However, traditional economic analysis does not take into account adverse cultural consequences of categorizers dependent on (or otherwise aligned with) the owners of categorized content.²⁶⁵ If

262. See, e.g., Posting of Douglas Lichtman to University of Chicago Faculty Blog, http://uchicagolaw.typepad.com/faculty/2005/10/google_print.html#more (Oct. 4, 2005, 09:41 EST) (arguing for the "develop[ment of] a legal system that allows authors to share in that revenue stream").

263. See Caroline McCarthy, *Google Reveals Payment Deal with AP*, CNET NEWS, Aug. 3, 2006, http://news.com.com/Google+reveals+payment+deal+with+AP/2100-1030_3-6102109.html ("On the surface, paying the Associated Press seems to conflict with the stance Google has traditionally taken regarding its Google News service. Because Google News is an aggregator, the company has argued, Google is not obliged to reimburse news outlets for linking to their content. But Wednesday's announcement said the AP content will be the foundation for a new product that will merely complement Google News. Thus Google maintains that the deal supports its original stance on fair use.")

264. See Kevin J. Delany, *Google Sees Content Deals as Key to Long-Term Growth*, WALL ST. J., Aug. 14, 2006, at B1 ("[Google] announced a deal to distribute video from Viacom Inc.'s MTV Networks on the Web and a separate agreement with News Corp.'s Fox Interactive Media division to provide it with search technology and broker advertising. Google has pledged \$900 million in minimum payments to Fox under the tie-up.")

265. For an analysis of the cultural "blind spots" of economic analysis of intellectual property, see Julie Cohen, *Copyright, Commodification, and Culture: Locating the Public Domain*, in THE FUTURE OF THE PUBLIC DOMAIN: IDENTIFYING THE COMMONS IN INFORMATION LAW 140 (Lucie Guibault and P. Bernt Hugenholtz, eds., 2006) ("Economic models of creativity treat motivation as both exogenous and abstract . . . blithely consign inspiration to the category of 'fixed costs' (or, worse, assumed inputs) . . . [and] lack[] appropriate tools to study audience response to creative works [so pervasively that] . . . what remains most important is what the models leave out."); Posting of Frank Pasquale to Concurring Opinions Blog, http://www.concurringopinions.com/archives/2006/10/net_neutrality.html#more (Oct. 18, 2006, 15:58 EST) ("[W]e may want to avoid giving already-dominant entities even more opportunities to leverage existing networks of distribution into an ever more powerful hold over our collective imagination. Churches, schools, museums, indie musicians—all deserve as much of a shot at our computers as iTunes, Disney, or Comcast."). Though my post addresses "net neutrality," there are powerful analogs between "net neutrality" concerns and categorizer independence and neutrality. See, e.g., Posting of James DeLong to IPCentral Weblog, http://weblog.ipcentral.info/archives/2006/05/search_engine_n.html (May 22, 2006, 13:56 EST); Thomas Hazlett, *Google and the Myth of an Open Net*, FIN. TIMES, Oct. 10, 2006, at 15, available at <http://www.freepress.net/news/18236>.

Google and other large search engines are forced by adverse fair use decisions to license content from copyright holders, we can easily imagine deals between dominant content providers and dominant categorizers that squeeze out smaller players in both fields.²⁶⁶ Just as trademark law helps preserve a fair competitive playing field, copyright law should avoid, whenever possible, enabling aggressive leveraging that entrenches the dominance of large content providers or renders categorizers mere subsidiaries of such copyright holders.²⁶⁷

Strong fair use and misuse defenses for categorization are essential to the reliability, objectivity, and diversity of the services that help us navigate the maze of copyrightable expression. Like the “licensed reviewers” whom Judge Posner mocks in *Ty*, licensed categorizers may be overly inclined to praise their partners’ work, while ignoring the work of others (whatever its relevance or merits). With little fear of a successful misuse defense, large content owners like Disney can give “take it or leave it” ultimatums to categorization sites via license terms, forcing them to “say nothing but good” of the content they index and comment on. Finally, if copyright becomes a major barrier to entry in the categorization field, we can expect the diversity of such sites to decline quickly. It is doubtful that any of these outcomes would promote copyright’s constitutional purposes.

V. CONCLUSION

Imagine a comprehensive source of data—one that included all relevant material in a single index. With the advance of digitization and interconnection, there are less and less *technical* obstacles to such a “celestial jukebox,” “new library of Alexandria,” or consolidated collection of all types of expression.²⁶⁸ As technology governed by Moore’s Law advances, storage and search costs continue to decline.

However, *legal* and *business* obstacles appear to arise as quickly as technical barriers come down. Some of these obstacles may be necessary to secure compensation to copyright holders and other entrepreneurs. But the mere indexing and archiving of readily available works—the core of categorization projects—has little if any negative commercial impact on information creators. Holdouts should

266. See Posting of Frank Pasquale to Madisonian.net Blog, <http://madisonian.net/archives/2006/08/16/googles-fight-and-flight-response> (Aug. 16, 2006) (criticizing the “licensing solution” to the struggle between categorizers and copyright holders); Posting of Frank Pasquale to Madisonian.net Blog, <http://madisonian.net/archives/2006/08/07/would-google-go-out-of-business-without-fair-use> (Aug. 7, 2006) (same).

267. For a prescient look at the dangers of such a regime, see Elkin-Koren, *supra* note 172, at 183-86 (2001) (discussing problematic consequences of concentration in the culture industry).

268. See GOLDSTEIN, *supra* note 98.

not be permitted to stop such projects in the same way that permission culture has crippled innovation in the music and film industries.²⁶⁹

Giving content owners the right to control all mentions and samples of their work conduces to the creation of a desert (albeit a peaceful one) of self-serving and unreliable categorizers. A robust information ecosystem depends on spontaneous creativity, serendipitous appropriation, and accountable information sources—precisely the type of positive developments that an untrammelled market in “snippet licenses” appears less and less likely to provide. The growing burden of information overload makes all the more important a revision of fair use doctrine favoring independent categorization, and a robust misuse defense designed to deter its enemies.

269. HEINS & BECKLES, *supra* note 74, at 25 (discussing several instances where copyright holders' legal threats effectively vetoed apparent fair uses); *see also* PAT AUFDERHEIDE & PETER JASZI, UNTOLD STORIES: CREATIVE CONSEQUENCES OF THE RIGHTS CLEARANCE CULTURE FOR DOCUMENTARY FILMMAKERS 36-38 (2004) (discussing the negative consequences of “clearance culture” for documentary makers without extensive corporate backing).