The rapid growth and evolution of technology over the last several decades has met mixed reactions from the legal community. Generally, courts have been forced to adapt old doctrines or adopt new ones to encourage innovation in the fields of science and technology. Copyright

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law has changed significantly, since its eighteenth-century inception, to account for technological advances while remaining true to its constitutional mandate: “To promote the Progress of Science and useful Arts . . . .”¹ To further promote this progress, American courts have carved out the “fair use” doctrine, which allows infringing uses that meet certain criteria.²

The judicial expansion of the fair use doctrine, as part of a greater effort to liberalize copyright law, is necessary to protect the growth of innovation in a rapidly changing digital world. The federal copyright statute enumerates four factors that courts should consider before determining fair use.³ Courts have recently developed a limited market analysis for determining the fourth fair use factor, “the effect of the [unauthorized] use upon the potential market for or value of the copyrighted work.”⁴ The controlling weight courts have given to the effect of unauthorized uses upon the value of derivative works has complicated this market analysis.⁵

As the wealth of online information increases, the search cost associated with finding any particular piece of information rises. Thus, the continued development of increasingly comprehensive search

¹ U.S. CONST. art. I, § 8, cl. 8. For an interesting analysis of the Copyright clause, see Dotan Oliar, Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power, 94 GEO. L.J. 1771 (2006). Oliar argues that the “promote [] Progress” language is not merely a nonbinding preamble, but a requisite limitation on congressional power. Basing his analysis on records of the Constitutional Convention of 1787, Oliar provides three compelling reasons for his limitation argument. First, Madison and Pinckney’s initial proposals for the intellectual property clause granted plenary power to Congress; however, these plenary grants of power were not ultimately adopted. Id. at 1776-77. Second, Madison and Pinckney, both nationalists, supported a strong central government while other members supported states’ rights. Id. at 1777. The fact that Madison and Pinckney were both nationalists suggests that the intellectual property clause was the result of a compromise between the nationalist drafters of the clause and the other members who wished to limit Congressional power with the “promote [] Progress” language. Id. Third, the “promote [] Progress” language was originally associated with proposals for Congressional power to encourage innovation and to establish universities. Id. While the Framers rejected these initial proposals, they retained the “promote [] Progress” language for the intellectual property clause. Id.


⁴ § 107(4).

⁵ 17 U.S.C. § 101 (2006) (“A ‘derivative work’ is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgement, 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.’”); see Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994); see also Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc., 342 F.3d 191 (3d Cir. 2003).
engines and other online categorizers has become all the more vital for Internet users. Recently, however, litigation over the availability of copyrighted information on those search engines has blocked the expansion of categorizers and indexers. To ensure the viability of these categorizers, a virtual necessity in a complex maze of information, copyright law must find a way to maximize categorizers’ efficacy while retaining the creative incentives that copyright law provides copyright owners.6

Appellate courts have failed to provide consistent analyses with respect to the fourth fair use factor.7 To ensure the continued growth of technological innovation and equitable distribution of the fruits of progress, courts should adopt a comprehensive fourth factor analytical methodology. This comment provides such a methodology. My suggested multi-step analysis requires courts to engage in an equitable balancing of benefits and harms. I also suggest several universal principles applicable to search engines and searchable databases to identify the many benefits these navigational tools impart to copyright owners.

The sections of this comment provide the background necessary to understand the multi-step analysis. Part II discusses the Copyright Act of 1976 and the fair use exception, as well as several influential cases affecting fourth factor analysis. Chief among these cases is *Sony Corp. of America v. Universal City Studios, Inc.*8 Although Justice Blackmun’s circular definition of market harm in *Sony* is not controlling, it has been highly influential. Part III discusses the conflict among the circuits regarding cataloguing and its effect on the potential market for, or value of, a copyrighted work.9 The Ninth and Seventh Circuits have upheld the validity of categorizers under fair use, while the Third Circuit has found that such categorizers do not merit fair use protection.10 Despite the


9 I use “catalogue” or “categorizer” to refer to any system of information storage and retrieval that attempts to organize data for ease of use. See *infra* Part III.A.

10 Compare *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003) (holding that use of thumbnail images on a search engine constitutes a fair use) and *Ty, Inc. v. Publication Int’l Ltd.*, 292 F.3d 512, 515 (7th Cir. 2002) (holding that use of copyrighted images in a collector’s guide may qualify as a fair use) with *Video Pipeline, Inc. v. Buena*
agreement between the Ninth and Seventh Circuits, there still exists wide
disparity in the appellate courts’ application of the fourth fair use
factor. Part IV.A provides a comprehensive framework for analyzing
the fourth factor implications in any fair use case. Although the analysis
is rigorous, it is necessary to properly balance the equities involved. Part
IV.B examines search engines and categorizers in general to highlight
the unique benefits provided by these navigational tools. While search
engines and categorizers should be analyzed under the comprehensive
framework established in Part IV.A, these types of cataloguing systems
present particular benefits to society. Such benefits should always factor
into the inquiry and will often tilt the balance in favor of fair use.
Therefore, this comment provides a consistent method of fourth factor
analysis, which is necessary to preserve the benefits of Internet search
engines.

II. FOUNDATIONS OF FAIR USE AND FOURTH FACTOR PROMINENCE

Fair use is an exception to copyright infringement. In other words,
one who engages in fair use does not violate the exclusive rights of the
copyright owner. The statute provides four nonexhaustive factors that
guide courts in determining whether to permit the exception:

Vista Home Entm’t, Inc., 342 F.3d 191 (3d Cir. 2003) (holding that use of clip previews
of motion pictures in a searchable database was not a fair use).

11 See infra Part III.B.
13 The Copyright Act of 1976 grants several exclusive rights to the owners of
copyrighted works.

Subject to sections 107 through 122, the 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.

(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.\textsuperscript{14}

While the statute provides no hierarchy of importance among the four factors, lower courts often adhere to Supreme Court dicta that the fourth factor is “undoubtedly the single most important element of fair use.”\textsuperscript{15} Thus, it appears that the judiciary retains the power to mold the statutory factors and emphasize different factors in the spirit of equity.

Although Congress codified fair use in § 107, it originated as a judicially-created doctrine.\textsuperscript{16} Recognizing these origins, Congress left the development of the doctrine to the judicial branch.\textsuperscript{17} Congress has emphasized that “there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change . . . . [C]ourts must be free to adapt the doctrine to particular situations on a case-by-case basis.”\textsuperscript{18} Because of the doctrine’s equitable nature and case-by-case adaptability, fair use has been criticized as “so flexible as to virtually defy definition.”\textsuperscript{19} To remedy this unpredictability, courts should adopt a consistent application of the fourth fair use factor, “the effect of the use upon the potential market for or value of the copyrighted work.”\textsuperscript{20} However, courts and academia have struggled to come to a consensus regarding fourth factor application.

For example, in \textit{Princeton University Press v. Michigan Document Services, Inc.},\textsuperscript{21} the Sixth Circuit, in an en banc opinion, held that the

\textsuperscript{14} § 107. The statute also provides several examples of fair uses. “[T]he fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified . . . . for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.” \textit{Id.}


\textsuperscript{17} The 1976 amendment to the original Copyright Act was “intended to restate the present judicial doctrine of fair use, not to change, narrow, or enlarge it in any way.” \textit{Id.}

\textsuperscript{18} \textit{Id.}


\textsuperscript{21} 99 F.3d 1381 (1996).
defendant’s sale of “coursepacks” to students was not a fair use. In coming to this conclusion, the fourth factor was decisive. Unlike its competitors, defendant Michigan Document Services (“MDS”) did not obtain permission from the copyright holders prior to printing and selling its coursepacks. Applying the fourth factor, the Sixth Circuit cited Supreme Court language that “to negate fair use . . . one need only show that if the challenged use should become widespread, it would adversely affect the potential market for the copyrighted work.” The Sixth Circuit reasoned that if copyshops across the country printed coursepacks and refused to obtain permission fees from the copyright holders, such widespread use would adversely affect the licensing market of the publishers.

This analysis was a major source of contention between the majority and the dissents in Princeton University Press. The dissents focused on a key criticism of fourth factor application: reliance on a circular argument. Judge Ryan’s dissent summarizes the circularity as stated by the original panel opinion: “Evidence of lost permission fees does not bear on market effect. The right to permission fees is precisely what is at issue here. It is circular to argue that a use is unfair, and a fee therefore required, on the basis that the publisher is otherwise deprived of a fee.” The dissent found the majority’s analysis flawed because the majority first assumed that the copyright holders were entitled to license fees from MDS, and then the majority found that a loss of these fees rendered market harm to the copyright holders. By first finding that the copyright holders were entitled to a licensing fee, the majority presumed that which it was obligated to determine on the merits; the issue was whether the use was fair, and if the use was fair then no permission fees would have been required in the first place.

Similarly, the circularity issue was of prime importance in American Geophysical Union v. Texaco, Inc. In Texaco, the Second Circuit held that photocopying of scientific and technical journal articles for use by Texaco researchers was not a fair use. In its fourth factor

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22 Coursepacks are similar to anthologies in that they contain excerpts from more extensive works. However, the excerpts are not compiled by a publisher, but by a professor who tailors the excerpts based on the particular course he or she is teaching.

23 Princeton Univ. Press, 99 F.3d at 1384.

24 Id. at 1386-87 (citations omitted) (internal quotation marks omitted).

25 Id. at 1387.


27 60 F.3d 913 (2d Cir. 1994).

28 Id. at 914.
examination, the court found that only a few journal subscriptions had been lost as a result of the copying, but large profits had been lost from the market for licensing fees for individual articles.29 Although the majority addressed the circularity problem, it attempted to circumvent the harm by explaining that courts may only consider “traditional, reasonable, or likely to be developed markets.”30 Therefore, the Second Circuit concluded that the market for licensing fees was “reasonable or likely to be developed” because such licenses could have been obtained through the Copyright Clearance Center (“CCC”).31

Despite the majority’s attempts to avoid the circularity criticism, Judge Jacobs’s dissent pointed out several flaws. First, the CCC was neither traditional nor reasonable and any possibility for development was subject to obstacles.32 Second, the circularity of the argument was not avoided: the market for licensing fees under the CCC cannot develop unless the courts reject fair use arguments like Texaco’s, and the courts cannot hold a particular use to be infringing unless there exists a market that will be harmed.33 Thus, the majority first assumed that the publishers were entitled to licensing fees through the CCC and the loss of those licensing fees resulted in harm to the copyright holders’ market.

The conflicts regarding fourth factor circularity and licensing markets first came to the fore in Sony Corp. v. Universal City Studios, Inc.34 In Sony, the Supreme Court held that the use of the videotape recorder (“VTR”) for timeshifting35 purposes constituted a fair use. In its fourth factor analysis, the Court found that the VTR did not damage the market for television programs, but actually enhanced the programs’ value by allowing for broader public access.36 By allowing viewers to watch programs that they otherwise would have missed, the VTR enhanced both the value of the programs and the value of the advertisements shown during those programs.37

29 Id. at 930-31.
30 Id. at 930.
31 Id. The court noted that “[t]he CCC is a central clearing-house established in 1977 primarily by publishers to license photocopying. The CCC offers a variety of licensing schemes . . . .” Id. at 929 n.16.
32 Id. at 937 (Jacobs, J., dissenting).
33 Id.
35 The Court explained “time-shifting” as “the practice of recording a program to view it once at a later time, and thereafter erasing it.” Id. at 423. The Court went on to note that “[t]ime-shifting enables viewers to see programs they otherwise would miss because they are not at home, are occupied with other tasks, or are viewing a program on another station at the time of a broadcast that they desire to watch.” Id.
36 Id. at 454.
37 Id.
The Court conceded that some viewers might fast forward through the commercials of the recorded programs, but ultimately any lost advertising revenue due to fast-forwarding was more than offset by the totality of the benefits conferred on the copyrighted works due to time-shifting. In essence, the Sony majority’s fourth factor analysis recognized that both the negative and positive effects of an unauthorized use should be considered. Yet the merits of this equitable balancing approach faded into the background as lower courts adopted the more restrictive view of market harm espoused by the Sony dissent.

Despite the Sony majority’s analysis of both the positive and negative effects of the use upon the market, much deference has been given to Justice Blackmun’s dissent. Justice Blackmun argued that the fourth factor requires that “the infringer . . . demonstrate that he had not impaired the copyright holder’s ability to demand compensation from (or to deny access to) any group who would otherwise be willing to pay to see or hear the copyrighted work.” The dissent, rather than taking a comprehensive view of fourth factor analysis, narrowly defined the inquiry and relied on circular logic. Justice Blackmun first assumed that the use at issue was unfair and then determined that the unfair use harmed the market for licensing fees. This analysis has been detrimental to fair use determinations in subsequent cases like Princeton University Press and Texaco because it first assumes that which must be determined, whether the use is fair. Justice Blackmun’s approach is also problematic because it constrains the fourth factor analysis to the market for licensing fees. Any loss of licensing fees to the copyright

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38 Id. at 453 n.36.
39 Pasquale, supra note 6, at 810.
First, the case considered not only the negative, substitutive effects of the contested copying on the market for the copyrighted works, but also examined the positive, complementary effects . . . . Second, Sony either limited the range of “traditional, reasonable, or likely to be developed” markets that could be claimed by the copyright owner, or determined that negative effects on one market would likely be swamped by positive effects in other markets – thereby leading to a fourth factor finding in favor of the defendants. Either interpretation of the case expands the range of evidence that must be considered before a court can deny a fair use defense.

40 Id. at 485 (Blackmun, J., dissenting).
42 Although it may be true that the burden to prove fair use does shift to the potential infringer if the court finds the use to be a commercial use, Justice Blackmun’s dissent would have the court place the burden on the potential infringer even before the commercial use determination has been made.
holder creates at least some economic loss, and if this is the only market at issue, then the fourth factor will always cut in favor of the copyright holder.43

The Sony majority’s broad approach to fourth factor analysis has been undercut in subsequent lower court decisions by the circular logic of Justice Blackmun’s dissent. The appeal of the circular argument flows from the substantial profits that copyright holders could obtain through licensing. Although the licensing revenues available to copyright holders can, in many instances, be a major source of profit, courts should first determine whether the copyright holder’s rights should extend into that particular licensing market. This would allow the courts to avoid the circularity evident in Princeton University Press and Texaco.

III. CIRCUIT SPLIT REGARDING CATEGORIZERS AND SEARCH ENGINES/SEARCHABLE DATABASES

With the advent of the Internet and digital technology, the amount of information available to the public has grown exponentially. However, in order for society to make use of any type of information, there must be mechanisms in place to facilitate that use. The mere presence of uncategorized information breeds inefficiency and unnecessary search costs. A library of random books placed in random piles, no matter how extensive the collection, is of little use to society; in fact, the more extensive the collection, the more frustrating the search for any particular book. Thus, categorizing mechanisms are more necessary than ever before to organize information and to provide an efficient means of dissemination.

Although this article focuses on Internet search engines, the fundamental disagreement among appellate courts can be framed as a disagreement regarding fourth factor application to categorizers in general. This disagreement has led to a circuit split over the fair use status of categorizers. While the Seventh and Ninth Circuits have found that categorizers are entitled to fair use protection, the Third Circuit has held that categorizers do not merit such protection from the monopoly rights of copyright holders. Pivotal to these decisions, as is the case in most fair use decisions, were the courts’ methods of fourth factor application. Disparities between the courts’ methodologies have led to the current split.

43 “[I]t 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.” 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05(A)(4) (2004).
A. Seventh and Ninth Circuit Categorizer Cases—Laying the Foundation for a Comprehensive Fourth Factor Analysis

The Seventh Circuit’s decision in *Ty, Inc. v. Publications International Ltd.*, addressed the fair use merits of a more traditional categorization system and laid the groundwork for a concrete and comprehensive fourth factor analysis. Ty, Inc., the manufacturer of Beanie Babies, sued Publications International (PIL) for publishing a series of books using images of the stuffed dolls. The district court issued a permanent injunction prohibiting PIL from selling its books, and awarded PIL’s profits from the sale of the books to Ty. On appeal, the Seventh Circuit limited its decision to whether PIL was entitled to a full trial based on the fair use doctrine.

Writing for the court, Judge Posner noted the benefits that public criticism and exposure can bring to copyrighted works. As an example, Judge Posner explained that book reviews provide useful guides for the reading public, and quotations from copyrighted works in these reviews have the potential to increase demand for the works. Clarifying the economic rationale of the fair use doctrine, the court differentiated between substitutive uses and complementary uses. The court explained that nails and pegs function as substitutes for one another. Thus, if the price of nails falls, consumers will be more apt to purchase nails over pegs. While the relationship between nails and pegs is one of substitutive uses, the relationship between hammers and nails is complementary. Thus, if the price of nails falls, consumers have a greater incentive to purchase hammers. Hammer manufacturers gain an economic advantage when there is a healthy supply of cheap nails. Likewise, publishers gain an economic advantage when their books are reviewed. Consumers are unlikely to substitute their purchases of the actual books by reading a book review. Rather, consumers are often enticed to purchase the book after reading the book review. Book reviews facilitate both public criticism and the profits of the publisher.

The court found that PIL’s books were complementary to Ty’s products; rather than diminishing the market for Beanie Babies, the use of the images in PIL’s books helped to create and expand that market.

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44 292 F.3d 512 (7th Cir. 2002).
45 *Id.* at 515.
46 *Id.*
47 *Id.* at 516.
48 *Id.* at 517.
49 *Id.*
50 *Id.* at 517-18.
51 Judge Posner, however, qualifies his analysis by stating that “owners of copyright on the worst books” may be harmed by poor book reviews. *Id.* at 517.
Although the use was complementary, a finding that would militate in favor of fair use, the images were concededly derivative works protected by the Copyright Act. Avoiding a remedial problem associated with many fair use cases, the court chose not to declare every instance of PIL’s use of the images as infringing. Rather, the court distinguished among the different books at issue. The court concluded that the book, For the Love of Beanie Babies, was directed toward a child audience and contained commentary that was secondary to the images. However, the court also concluded that the book, Beanie Babies Collector’s Guide, was geared toward adults and contained far more substantive information in addition to the images, information like the monetary value of the Beanie Baby, its release date, and its retirement date. Beanie Babies Collector’s Guide also accused Ty of frequent trademark infringements.

Judge Posner took note of Ty’s practices in issuing licenses for the use of Beanie Baby images to publishers.

Ty doesn’t 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 it the right to veto any text in the publishers’ guides. It also forbids its licensees to reveal that they are licensees of Ty.

The court found that this licensing strategy was akin to a book publisher who utilizes licensing rights to prevent poor book reviews. Ty used its licensing rights to potentially deceive consumers: although Ty could veto any negative criticism of its products or practices by its licensees, Ty represented to consumers that it did not have a hand in the licensees’ publications.

In an attempt to convince the court that PIL copied more than necessary to produce its guide, Ty argued that the books reproduced images of the entire line of Beanie Babies, similar to a book reviewer who reproduces the whole book. Yet, Judge Posner emphasized that a

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52 Id. at 518-19.
53 Id. at 519.
54 Id.
55 Id.
56 Id. at 520.
57 Id.
58 The court noted that 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.’” Id.
59 Id. at 521.
collector’s guide must be comprehensive in order to compete in the marketplace.\(^{60}\) Because Ty licensed collector’s guides containing the full line of Beanie Babies, a competitor would be pushed out of the market if it could not provide the same comprehensive treatment.\(^{61}\) Ty further argued that PIL could not publish any photos whatsoever, and would have to be satisfied with a verbal description of the Beanie Babies.\(^{62}\) The court found this argument unconvincing because such a requirement would devastate the guide’s chances in the marketplace.\(^{63}\)

Judge Posner articulated the fair use test in *Ty* as follows: “The question is whether it would be unreasonable to conclude, with reference to one or more of the enjoined publications, such as the *Beanie Babies Collector’s Guide*, that the use of the photos is a fair use because it is the only way to prepare a collectors’ guide.”\(^{64}\) Rather than mechanically applying the four statutory factors, the *Ty* court primarily relied on the purposes of the doctrine.\(^{65}\) However, the court did acknowledge that its distinction between complementary and substitutive uses was related to the fourth factor of the statutory test.\(^{66}\) Ultimately, the court held that the district court erred by failing to apportion the original damage award between the different texts based on the potential fair use implications of each individual book.\(^{67}\) The court also directed that if Ty could prove infringement on remand, it would not be entitled to all of PIL’s profits; Ty would only be entitled to profits attributable to the infringing images.\(^{68}\)

The *Ty* decision is important to a revised fourth factor analysis because it (1) attempted to comply with the original purpose of the doctrine, (2) distinguished between substitutive and complementary uses, and (3) apportioned damages based on the profits attributable to infringing uses. The Seventh Circuit’s recognition of complementary uses is akin to the *Sony* court’s consideration of the benefits that the VTR provided for copyright holders. Similarly, the Ninth Circuit also properly

\(^{60}\) *Id.*

\(^{61}\) *Id.*

\(^{62}\) *Id.*

\(^{63}\) *Id.*

\(^{64}\) *Id.* at 522.

\(^{65}\) In doing so, the court invoked the congressional intent that “courts continue the common law tradition of fair use adjudication . . . [which] permits and requires courts to avoid rigid application of the copyright statute, when, on occasion, it would stifle the very creativity which that law is designed to foster.” *Id.* (quoting Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 577 (1994)).

\(^{66}\) *Id.*

\(^{67}\) *Id.* at 524.

\(^{68}\) *Id.*
balanced both the harms and benefits of a potentially infringing use in *Kelly v. Arriba Soft*.

The Ninth Circuit’s decision in *Kelly v. Arriba Soft* addressed the fair use implications of images located on an Internet search engine. Search engines have become the standard tool for users to navigate through the expanse of online information. Like the more traditional categorizing device of the collectors’ guide from *Ty*, search engines utilize copyrighted information to direct users to the original works. Thus, they inherently complement the copyrighted work, fostering and expanding the market for those works. Also similar to collectors’ guides, search engines rely on comprehensiveness to attract users. A search engine’s worth is measured primarily by its ease of use, speed, and its ability to direct users to the sought after information while excluding unwanted results. These measures of worth increase with increased comprehensiveness, assuming that the speed of the search engine is not adversely affected.

In *Kelly*, the Ninth Circuit held that the use of thumbnail images of larger copyrighted images to display search engine results was protected as a fair use. Arriba Soft operated an Internet search engine and chose not to display the search engine’s results as text, but as thumbnail images. Kelly, a professional photographer, sued Arriba Soft for displaying his copyrighted works as thumbnail images on the search engine’s results page. To create its results page, Arriba Soft developed a “crawler” program that searched the web for images. The images were then indexed onto Arriba Soft’s server and used to create the smaller, lower resolution thumbnail images. The full-sized images originally retrieved by the crawler program were deleted from Arriba Soft’s server.

In applying the fair use doctrine, the Ninth Circuit noted that fair use “permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster.” Further, the court noted that the statutory factors were not meant to be an exhaustive or definitive test, but were to be

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69 336 F.3d 811 (9th Cir. 2003).
70 *Id.*
71 A thumbnail image is a lower resolution, miniature version of a larger image. *Id.* at 815.
72 *Id.*
73 *Id.*
74 *Id.*
75 *Id.* at 817 (quoting Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc., 109 F.3d 1394, 1399 (9th Cir. 1997)).
applied with the purpose of the copyright statute in mind.\textsuperscript{76} As a result, the Ninth Circuit’s determination provided a balancing approach in which the benefits of the search engine outweighed any potential negative implications to the copyright holder.\textsuperscript{77}

Writing for the majority, Judge Nelson applied the four-factor statutory test. On the first factor, “the purpose and character of the use,”\textsuperscript{78} the court found that the use was transformative. Rather than being created for the purposes of artistic expression, the thumbnail images served the purpose of “improving access to information on the internet . . . .”\textsuperscript{79} Regarding the second factor, “the nature of the copyrighted work,”\textsuperscript{80} the court found that the creative nature of the copyrighted work weighed slightly in favor of Kelly.\textsuperscript{81} And as to the third factor, “the amount and substantiality of the portion used in relation to the copyrighted work as a whole,”\textsuperscript{82} the court noted that “[i]f the secondary user only copies as much as is necessary for his or her intended use, then this factor will not weigh against him or her.”\textsuperscript{83}

Addressing the fourth factor, “the effect of the use upon the potential market for or value of the copyrighted work,”\textsuperscript{84} the Ninth Circuit emphasized the complexities associated with the analysis, explaining that courts are obligated to analyze “not only the extent of market harm caused by the particular actions of the alleged infringer, but also whether unrestricted and wide-spread conduct of the sort engaged in by the defendant . . . would result in a substantially adverse impact on the potential market for the original.”\textsuperscript{85} The court determined that Kelly’s images were related to several markets.\textsuperscript{86} One of the markets was the market of Internet users who would be attracted by Kelly’s photographs to his website. The website also sold advertising space, books, and travel packages.\textsuperscript{87} Another market was the licensing market, in which Kelly could license his images to other sites or to a photo database.\textsuperscript{88}

\textsuperscript{76} Id.
\textsuperscript{77} Id. at 822.
\textsuperscript{79} Kelly, 336 F.3d at 819.
\textsuperscript{80} § 107.
\textsuperscript{81} Kelly, 336 F.3d at 820.
\textsuperscript{82} § 107.
\textsuperscript{83} Kelly, 336 F.3d at 821.
\textsuperscript{84} § 107.
\textsuperscript{85} Kelly, 336 F.3d at 821 (quoting Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 590 (1994)).
\textsuperscript{86} Id.
\textsuperscript{87} Id.
\textsuperscript{88} Id.
Of particular relevance to the fourth factor analysis was the fact that users would have to access Kelly’s webpage for the full-sized image.\textsuperscript{89} Rather than prematurely finding that Arriba Soft’s use was detrimental to Kelly’s licensing market, the court made the opposite finding - instead of harming the market, the use of the images on Arriba Soft’s search engine directed users to Kelly’s site.\textsuperscript{90} The thumbnails could not serve as a substitute due to their lower resolution.\textsuperscript{91} No matter how widespread the use of the thumbnail images, any such widespread use would not replace the necessity of visiting Kelly’s site for the larger, clearer images.\textsuperscript{92} Although the court made clear that the poor quality of the thumbnails was not necessarily a factor weighing in favor of fair use, in this instance, the quality of the images was central to their value as photographic images.\textsuperscript{93} An additional factor that influenced the fair use determination was the fact that Arriba Soft did not sell or license the thumbnails.\textsuperscript{94} The court held that the use of Kelly’s images as thumbnails was not harmful to the market for, or value of, the images, and thus, this factor worked in favor of a finding of fair use.\textsuperscript{95}

Ultimately, the court found that factors one and four worked in favor of Arriba Soft, factor three was neutral, and factor two weighed slightly in favor of Kelly.\textsuperscript{96} As a result, the Ninth Circuit held that the thumbnails constituted a fair use.\textsuperscript{97} Despite the influence of Justice Blackmun’s dissent in \textit{Sony}, the Ninth Circuit did not require that “the infringer . . . demonstrate that he had not impaired the copyright holder’s ability to demand compensation from (or to deny access to) any group who would otherwise be willing to pay to see or hear the copyrighted work.”\textsuperscript{98} \textit{Kelly} proved to be a high-water mark for search engine validity in which the court properly balanced the harms and benefits of the unauthorized use on the market for the original work.

\textsuperscript{89} \textit{Id}.
\textsuperscript{90} \textit{Id}.
\textsuperscript{91} \textit{Id}.
\textsuperscript{92} \textit{Id}.
\textsuperscript{93} \textit{Id}. at 821 n.37.
\textsuperscript{94} \textit{Id} at 821.
\textsuperscript{95} \textit{Id}. at 822.
\textsuperscript{96} \textit{Id}.
\textsuperscript{97} \textit{Id}.
B. The Third Circuit’s Finding Against Fair Use in Video Pipeline

The Third Circuit’s decision in Video Pipeline, Inc. v. Buena Vista Home Entertainment, Inc.\(^9\) dealt a blow to the fair use status of copyrighted material on search engines. The court’s decision illustrates the flaws of fourth factor analysis as to “the effect of the use upon the potential market for or value of the copyrighted work.”\(^1^0\) Although the fourth factor analyses used by the Seventh Circuit in Ty and the Ninth Circuit in Kelly were not structured enough to provide a legitimate standard for uniform future application, the courts had at least taken steps in the right direction. The Seventh and Ninth Circuits both recognized the importance of distinguishing between substitutive and complementary uses, and the inherent benefits that accrue to the copyright holder when the use is deemed complementary. Further, the Ty Court separated the potentially infringing uses by instrumentality, For the Love of Beanie Babies and Beanie Babies Collectors’ Guide, and limited the remedy of the copyright holder to the profits directly derived from the infringing use as opposed to all profits that PIL had derived from both books.\(^1^1\) Despite these key additions to the fourth factor analysis, the Third Circuit failed to separate the fair use analyses of the instrumentalities at issue in Video Pipeline and also fell victim to the circular reasoning of the Sony dissent.\(^1^2\)

In Video Pipeline, the Third Circuit reviewed the district court’s preliminary injunction against Video Pipeline for the company’s unauthorized display of Disney “clip previews” on its websites.\(^1^3\) From the outset, Video Pipeline stood little chance of success due to the court’s question-begging definition of “clip previews” as two-minute segments from a video, displayed without authorization from the creator, and “used in the same way as an authorized movie ‘trailer.’”\(^1^4\) This court-imposed definition presupposed that the clip previews were “used in the same way” as the derivative-work trailers.\(^1^5\) Thus, the court began by assuming that the clip previews were not transformative, a first factor determination which has a significant bearing on the outcome of the fourth factor as well.\(^1^6\)

\(^9\) 342 F.3d 191 (3d Cir. 2003).
\(^1^1\) See Ty, Inc. v. Publ’n Int’l Ltd., 292 F.3d 512, 524 (7th Cir. 2002).
\(^1^2\) Video Pipeline, 342 F.3d 191.
\(^1^3\) Id. at 194.
\(^1^4\) Id.
\(^1^5\) Id.
\(^1^6\) Id. at 198-200.
Video Pipeline was originally granted a license to use Disney trailers on promotional videos created by Video Pipeline for sale to retail stores.\textsuperscript{107} However, in 1997, Video Pipeline began to use the Disney trailers, along with its other licensed trailers, on its Internet sites.\textsuperscript{108} Video Pipeline then entered into agreements with retail websites to provide the retailers with access to the Video Pipeline trailers.\textsuperscript{109} To ensure that the retailers’ customers could not save the trailers on their computers after viewing, the trailers were streamed, i.e. the videos could neither be downloaded to nor stored on the customers’ computers.\textsuperscript{110} Among the retail websites that paid Video Pipeline for this service were well-known media companies like Yahoo!, Amazon, and Best Buy.\textsuperscript{111}

Despite the commercial nature of VideoPipeline.net, Video Pipeline also operated VideoDetective.com, which consisted of a publicly searchable database of previews.\textsuperscript{112} The database allowed visitors to search for a movie by title, actor, scene, or genre and then provided access to the trailers from VideoPipeline.net.\textsuperscript{113} In addition, when searching for a particular video, the site provided a link to online retailers that sold the video.\textsuperscript{114}

Disney requested that Video Pipeline remove its trailers from both VideoPipeline.net and VideoDetective.com, and the company promptly acquiesced.\textsuperscript{115} However, Video Pipeline then replaced the deleted trailers with its own two-minute previews, which contained scenes from the original movies rather than from the trailers.\textsuperscript{116} The Third Circuit noted that these “clip previews” were significantly different from the trailers.\textsuperscript{117} Disney emphasized that it also displayed its own trailers on the Internet and used the presence of trailers on its websites to cross-promote other

\textsuperscript{107} Id. at 195.  
\textsuperscript{108} Id.  
\textsuperscript{109} Id.  
\textsuperscript{110} Id.  
\textsuperscript{111} Id.  
\textsuperscript{112} Id.  
\textsuperscript{113} Id.  
\textsuperscript{114} Id.  
\textsuperscript{115} Id.  
\textsuperscript{116} Id.  
\textsuperscript{117} The Third Circuit found that  
\hfill [e]ach clip preview opens with a display of the Miramax or Disney trademark and the title of the movie, then shows one or two scenes from the first half of the movie, and closes with the title again. Disney’s trailers, in contrast, are designed to entice sales from a target market by using techniques such as voice-over, narration, editing, and additional music. Video Pipeline’s clip previews use none of these marketing techniques.  
\textit{Id.} at 195-96.
products. For example, Disney had an agreement with Apple to provide links to the Apple website.119

The Third Circuit began its fair use analysis by noting that it must “bear in mind [copyright law’s] purpose to encourage ‘creative activity’ for the public good.”120 Additionally, the court claimed that its analysis would “take into account where relevant Disney’s original full-length films and its trailers” because “the statute directs [the court’s] attention under factor four to the effect of the allegedly infringing uses on both the potential market for any derivative works . . . and the potential market for the originals.”121 Despite this initial declaration that the court would engage in a principled fourth factor analysis of both the original works and the derivative works, the court ultimately failed to follow its own advice.

Writing for the court, Judge Ambro found that the first factor weighed against a finding of fair use.122 It was clear that Video Pipeline’s use of the clip previews was commercial in nature because the company charged retail websites to stream its previews.123 As part of a first factor inquiry, the court went on to examine whether the use was transformative.124 Although the clip previews did not serve the same purpose as the full length films, the clip previews did essentially serve the same purpose as the derivative trailers.125 Invoking the rationale of Judge Posner in Ty, the court emphasized that the clip previews were substitutes rather than complements of the Disney trailers.126

Of relevance to the categorizer debate, the court attempted to distinguish the Video Pipeline database from that in Kelly.127 Although the Third Circuit noted that the thumbnail images used in Arriba Soft’s search engine constituted a fair use, the court found that Video Pipeline’s database did not serve the same purpose as Arriba Soft’s search engine.128 The court stated:

As used with retailers’ web sites, VideoPipeline.net does not improve access to authorized previews located on other web

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118 Id. at 196.
119 Id.
120 Id. at 198 (citing Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984)).
121 Id.
122 Id. at 200.
123 Id. at 198.
124 Id. at 198-200.
125 Id. at 198-99.
126 Id. at 199.
127 Id.
128 Id.
sites. Rather, it indexes and displays unauthorized copies of copyrighted works. VideoDetective.com does permit viewers to link to legitimate retailers’ web sites, but a link to a legitimate seller of authorized copies does not here, if it ever would, make prima facie infringement a fair use.\footnote{Id.}

The court’s failure to see the similarities between the two categorizers is apparent from the initial description of the Video Pipeline database as displaying “unauthorized copies of copyrighted works.”\footnote{Id.} The court also misinterprets the holding in \textit{Kelly}.\footnote{See \textit{Kelly v. Arriba Soft Corp.}, 336 F.3d 811 (9th Cir. 2003).} Rather than improving access to “authorized” works on other websites, the Arriba Soft search engine’s greatest asset, as in any search engine, was “improving access to information on the internet.”\footnote{Id. at 819.} Judge Nelson’s fair use finding in \textit{Kelly} was not predicated on the fact that the search engine only provided results that were “authorized.”\footnote{Id.} The improvement of access was the essential finding that led to a finding in favor of Arriba Soft.\footnote{Id.} Perhaps the Third Circuit in \textit{Video Pipeline} was not referring to the websites to which the users of the Arriba Soft search engine were directed, but rather to the results page which included the thumbnail images. If that was the case, the Third Circuit’s analysis fails as well, because the results (the thumbnail images) were “authorized” precisely because they were found to be a “fair use.”\footnote{Id.}

In concluding that the first factor weighed against Video Pipeline’s fair use defense, the court failed to analyze the nature of Video Pipeline’s database.\footnote{Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc., 342 F.3d 191, 198-200 (3d Cir. 2003).} Rather than simply displaying individual clips, the web site categorized all of its previews in terms of title, actor, scene, and genre.\footnote{Id. at 195.} The structure within which the clip previews was situated, as a categorizing mechanism, should have been evaluated by the Third Circuit in its analysis of the first factor. Absent any further analysis into the nature of the search engine’s structure, the first factor determination against fair use crippled any hopes of a favorable fourth factor finding—the use was determined to be commercial and the use was found not to be transformative.
As to the second fair use factor, the court determined that the original motion pictures and derivative trailers were creative works. As a result, these creative works were closer to the core of copyright protection. Although Disney had not released all of its movies to the public, the court concluded that the second factor weighed against a finding of fair use.

The court found that the third factor weighed in Video Pipeline’s favor. Assessing the “amount and substantiality of the portion used in relation to the copyrighted work as a whole,” the court noted that the clip previews consisted of only two minutes from the full length films. Additionally, the previews did not reveal the heart of the movies. Therefore, the amount copied was small enough to warrant a finding in favor of Video Pipeline. It is important to note that this factor was weighed as against the original and not the derivative work.

Although the district court found that the fourth factor weighed neither for nor against either party, the Third Circuit concluded that this factor weighed against Video Pipeline. Citing Campbell, the court emphasized that this factor “must take [into] account not only . . . harm to the original but also . . . harm to the market for derivative works.” The court clearly understood its obligation to consider both the original full-length films and the derivative trailers. In addition, the Third Circuit noted that “the statute directs [the court’s] attention under factor four to the effect of the allegedly infringing uses on both the potential market for any derivative works . . . and the potential market for the originals.” Despite this statutory mandate, the court ignored any analysis of the effects on the original work. Dismissing, rather offhandedly, the statutory mandate to balance the effect of Video Pipeline’s use upon both the original work and the derivative works, the court simply noted that

[b]ecause the issues pertaining to the potential harm to the market
for Disney’s derivative trailers are more straightforward, we

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138 Id. at 201.
139 Id.
140 Id.
142 Id.
143 Id.
144 Id.
145 Id. at 203.
146 Id. at 202 (quoting Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 590 (1994)).
147 Id.
148 Id. at 198 (emphasis added).
149 Id. at 202.
focus our analysis on this area and do not review the District Court’s conclusion as to harm to the market for the original full-length films. It is in this context that we conclude that the fourth factor weighs in Disney’s favor. 150

As to the fourth factor, Video Pipeline made the initial argument that no one would pay for trailers alone. 151 This argument was easily countered with evidence that retail websites had, in fact, paid Video Pipeline for access to its previews database. The court emphasized that Video Pipeline’s interpretation of fourth factor harm was too narrow. Instead of considering only the effect on the market, the statute directed the court to also consider the effect of the use on the value of the work. 152 Despite this emphasis on the use’s effect on the value of the original work, the court again failed to follow its own account of the relevant legal standard. 153 Rather than broadly analyzing Video Pipeline’s use on the value of Disney’s films, which would include analysis of the benefits accruing to Disney as a result of the unauthorized use, the court narrowly analyzed the use and focused only on the loss of licensing revenues that Disney might suffer as a result of the unauthorized clip previews. 154

Disney introduced evidence that its use of authentic trailers on its sites led to cross-promotional advertising with other retailers like Apple, and the lure of the trailers was used to attract visitors to its own site, which allowed Disney to sell its own products and obtain marketing information. 155 Based on these findings, the court concluded that the infringing use would have a deleterious effect on the market for the authentic Disney trailers. 156

Reiterating the impact of its first factor analysis upon the fourth factor, the court summarized by stating that the clip previews lacked transformative quality and therefore, would act as substitutes for the derivative work trailers. The court found that such a result would create cognizable harm to the derivatives. 157 The court noted that this substitutive effect would result in retail websites using the services of Video Pipeline rather than entering into direct licensing agreements with

150 Id.
151 Id.
152 Id.
153 The standard for a proper fourth factor analysis was articulated earlier in the opinion as mandating an analysis “under factor four . . . [of] the effect of the allegedly infringing uses on both the potential market for any derivative works . . . and the potential market for the originals.” Id. at 198 (emphasis added).
154 Id. at 202-203.
155 Id.
156 Id. at 203.
157 Id. at 202-03.
Disney. The court also found that Internet users searching for Disney trailers may be drawn to websites utilizing Video Pipeline’s searchable database rather than to Disney’s sites. Thus, the Third Circuit held that “unrestricted and widespread conduct of the sort engaged in by [Video Pipeline] . . . would result in a substantially adverse impact on the potential market for the [derivative works].”

The strengths and flaws of the fourth factor analyses in each of these cases, Ty, Kelly, and Video Pipeline indicate the need for a more comprehensive and sound fourth factor analysis. Because the court in Video Pipeline limited its fourth factor analysis to the effect of the use on the market for the derivative trailers, it failed to consider the beneficial aspects of the use as a result of its inclusion in a publicly available searchable database. Although the market for derivative trailers was most likely harmed by the use, the analysis should have been more comprehensive, considering the effects upon both the derivative trailers and the original films. This broader analysis would have been in keeping with the Supreme Court’s Sony analysis of both the positive and negative effects of the VTR. Additionally, the court’s fourth factor analysis did not separate the potentially infringing uses by instrumentality, a separation that would have required separate fair use analyses for VideoPipeline.net and VideoDetective.com. This type of separation was recognized by the Ty court as a means of providing the appropriate measure of damages.

The current climate of technological innovation and information overload makes categorizers an absolute necessity. In an Internet-age where information is most easily accessible online, the potential social benefits of this ever-growing system can only be maximally harnessed if the viability of search engines is not impeded by possible copyright implications. The future of the fourth factor analysis will have a significant impact on the development of search engines and on the risks that firms are willing to take to provide the most efficient and socially beneficial mechanisms of information navigation.

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158 Id. at 203.
159 Id.
160 Id. (quoting 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05(A)(4) (1993)).
161 Id. at 202.
162 Ty, Inc. v. Publ’n Int’l Ltd., 292 F.3d 512, 524 (7th Cir. 2002).
IV. A MODEL FOURTH FACTOR ANALYSIS

While both the Seventh and Ninth Circuits have found that categorizers are entitled to fair use protection, the Third Circuit’s decision in Video Pipeline has created a circuit split as to the legitimacy of these categorizers. The inconsistencies inherent in the Seventh, Ninth, and Third Circuits’ applications of the fourth factor analysis have made future litigation unpredictable. Such unpredictability creates a potential chilling effect on the development of online catalogues and indexers, particularly in a climate of rapid technological innovation. A model application of the fourth factor analysis to these cases should avoid the circularity of the Sony dissent, which finds that every unauthorized use immediately harms the potential licensing market and renders the fourth factor an automatic plus for the copyright holder. Particularly, given the nature of online categorizers and the advertising markets made available through in-line linking, clear limits must be placed on copyright holders to ensure that the temporary monopoly given to them is not abused to the detriment of the copyright statute’s ultimate purpose, “[t]o promote the Progress of Science and useful Arts.” A thorough and searching inquiry into the markets for the original work as well as for derivative works is necessary to appropriately balance the harms and benefits to the original copyright holder. Anything less than this will result in a skewed analysis based not on equitable rationales, but on

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163 The Ninth Circuit in Kelly described in-line linking as follows:
In-line linking allows one to import a graphic from a source website and incorporate it in one’s own website, creating the appearance that the in-lined graphic is a seamless part of the second web page. The in-line link instructs the user’s browser to retrieve the linked-to image from the source website and display it on the user’s screen, but does so without leaving the linking document. Thus, the linking party can incorporate the linked image into its own content.

Kelly v. Arriba Soft Corp., 336 F.3d 811, 816 (9th Cir. 2003)

164 U.S. CONST. art. I, § 8, cl. 8. The Sony majority noted Justice Stewart’s approach to copyright ambiguities:
The immediate effect of our copyright law is to secure a fair return for an “author’s” creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. “The sole interest of the United States and the primary object in conferring the monopoly, this Court has said, lie in the general benefits derived by the public from the labors of authors.”

Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 432 (1984) (quoting Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975)).

preconceived judicial preferences for private commercial gains over public access to information.\textsuperscript{166}

The analysis requires that courts first divide any potentially infringing uses by the instrumentalities that enable those potential infringements. Then, after distinguishing between the potentially infringing instrumentalities, the court must define the actual and potential markets for the original work. The court must further define the actual and potential market for derivative works. After determining both the actual and potential markets for the originals and derivatives, the court can finally determine how the unauthorized use in question has affected those markets. A summary of the multi-step approach is provided in Appendix A.

\textit{A. Developing a Multi-Step Inquiry}

Several attempts have been made to revise the application of the fourth factor, yet these revisions have not been adopted by the courts.\textsuperscript{167} These approaches either fail to consider the economic motivations of the copyright holder or require too rigid an analysis, thereby undermining the equitable nature of the inquiry. A multi-step approach would provide a balance between judicial discretion and a greater degree of predictability for copyright holders and fair use proponents.

The very nature of the fourth factor analysis necessitates a comprehensive judicial inquiry. Courts must assess “the effect of the use upon the potential market for or value of the copyrighted work.”\textsuperscript{168} Prior to examining the markets for the original or derivative works, the court should first divide any potentially infringing uses by the instrumentalities that enable those potential infringements. This step was taken by the Seventh Circuit, resulting in differing damage calculations for the two books at issue in that case. Although the copyright owner’s complaint alleged that the potentially infringing publications involved in \textit{Ty} were both infringing uses, Judge Posner determined that only \textit{For the Love of Beanie Babies} infringed and that the use of Ty’s images in \textit{Beanie Babies Collectors’ Guide} was a fair use.

\textsuperscript{166} Although a thorough and searching analysis of markets for the copyrighted work may be undesirable due to the burden it places on courts, such a burden is not undue because of the constitutional mandates at issue as well as relevant precedent. The comprehensive analyses employed by the Supreme Court in \textit{Sony} and the Seventh Circuit in \textit{Ty} are examples of such cases.


After distinguishing between the potentially infringing instrumentalities, the court must define the actual and potential markets for the original work, which involves a value judgment as to whether the original owner should be allowed to monopolize a potential market.\textsuperscript{169} In doing so, the court must determine a number of potential markets for the copyrighted work, which entails a speculative inquiry into markets the copyright holder is likely to pursue.\textsuperscript{170} In order to contain the analysis of potential markets, courts should first rely on the copyright holder’s business model to determine the actual targeted markets. The Sony case provides a prime example of this business model inquiry. The Sony majority relied largely upon the factual findings of the district court in regard to the markets at issue. The district court noted five markets that were targeted in Universal’s business model: (1) theater, (2) television, (3) network telecasts, (4) local telecasts, and (5) theater redistribution.\textsuperscript{171} The Court then noted that the primary revenue for Universal in running its programs was through advertising revenues.\textsuperscript{172} As a result of VTR time-shifting, more viewers were exposed to commercials than if the VTR did not exist.\textsuperscript{173} The Court relied on empirical data demonstrating that VTR copying was predominantly used so that viewers who were unable to watch the shows could do so at a later time.\textsuperscript{174} Ultimately, the most practical method of determining the potential markets for an original work and derivative works should be based on the copyright holder’s interpretation. Yet, the primacy of the copyright holder in this regard should only be a rebuttable presumption. A claim by the copyright holder that its copyright extends to any particular market can be rebutted by evidence showing that it has no concrete basis for its assertion, i.e. no plans to infiltrate that particular market or no research examining the profitability of that market.

\textsuperscript{169} Matthew Africa has noted: 

It is more difficult to determine whether a copyright holder should control the new market where the alleged infringer uses copyrighted expression in a market that the copyright holder might not enter. The court must determine prospectively whether the copyright holder should control the market and if so, whether requiring a license is appropriate. Matthew Africa, Comment, \textit{The Misuse of Licensing Evidence in Fair Use Analysis: New Technologies, New Markets, and the Courts}, 88 CALIF. L. REV. 1145, 1156 (2000).

\textsuperscript{170} As noted in \textit{Campbell v. Acuff-Rose Music Inc.}, “the market for potential derivative uses includes only those that creators of original works would in general develop or license others to develop.” 510 U.S. 569, 592 (1994).


\textsuperscript{172} \textit{Sony Corp. of Am.}, 464 U.S. at 453 n.36.

\textsuperscript{173} \textit{Id.} at 454.

\textsuperscript{174} \textit{Id.} at 424 n.4.
After defining the actual and potential markets at issue for the original work, the court must then define the actual and potential market for derivative works, which also involves a value judgment as to whether the original owner should be allowed to monopolize the market. The consequences of the potential derivative market analysis are particularly acute in the case of online categorizers. In theory, a court could conclude that any use of any frame of a movie on an online categorizer would cut into the potential licensing market for the derivative market for film frames. However, in this case, the correct question for the court is whether the original copyright holder is likely to pursue an online market for the placement of its film frames on searchable databases. More likely than not, most producers of films are not in the business of producing searchable online databases.

After determining both the actual and potential markets for the originals and derivatives, the court must determine how the unauthorized use in question has affected those markets. This analysis will further require an analysis of not only the harms to the potential licensing markets, but also the benefits that the use creates to the copyright holder. Appendix B provides an example of how this analysis would apply to Video Pipeline. Concededly, the numerical values that approximate the net effect of each potentially infringing use on each market are arbitrary. However, courts are left with the discretion to apply numerical values as they see fit, guided primarily by the insight of valuation experts. Separate analyses are needed for each potential market of the original work and for each potential market for derivative works. If there are two instrumentalities at issue, the court must apply the “effect on the market” analysis to each instrumentality.

B. Assessing the Benefits of Search Engines and Searchable Databases

At several points in the multi-step fourth factor analysis, courts are required to weigh both the harms created by the unauthorized use and the benefits that the use creates for the original works and derivative works. To ensure that the circular approach does not continue to undermine the equities involved in fair use cases, it is necessary for courts to consider both the harms to the licensing markets created by unauthorized uses, as well as the benefits conferred upon those works by the unauthorized use. Although several theories have been posited to explain fair use policy,

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175 Numerous market analysis companies retain valuation experts whose testimony would serve as the basis for determining the effects of potentially infringing uses on the market for a copyrighted work. See, e.g., Forrester Research, Inc., http://www.forrester.com/; see also JupiterResearch, http://www.jupiterresearch.com/bin/item.pl/home.
they have either fallen into the circularity of the Sony dissent or fail to consider the capitalist incentives inherent in copyright law.

Following the Sony decision, one of the most cited policy rationales behind the fourth fair use factor is the market failure theory. This theory posits that a party is barred from the fair use defense when “the transaction costs involved in negotiating individual . . . licenses would inevitably exceed the potential gains in trade available.” An alternative theory analogizes the doctrine of fair use to that of eminent domain. This eminent domain theory holds that supporting the purpose of the Copyright Clause, to “promote the Progress of Science and useful Arts,” is the superior motive of the fair use doctrine. Under this theory, rather than allowing the copyright holder a monopoly on the work, unlicensed uses are fair uses when they do not harm, or benefit, the market for or value of the copyrighted work. Such harmless uses would not entitle the copyright holder to “just compensation.” However, where the use does result in harm to the market for or value of the copyrighted work, “just compensation” must be paid in the form of money damages. Therefore, “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.”

Search engines and other online searchable databases confer substantial benefits upon the public, which should factor into a revised fourth factor analysis. These categorizers are the sole providers of metadata, or data about data, and are the primary navigational tools on the Internet. Users rely on the comprehensiveness of these categorizers to attain the information they seek. However, the ability of these search engines to sift through the mass of information available online inevitably collides with copyright law. As exemplified in Kelly, search engines have difficulty determining which results are subject to copyright limitations. Although there are mechanisms by which

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176 Lunney, supra note 165, at 985.
177 U.S. CONST. art. I, § 8, cl. 8.
179 Id. at 730.
180 Id.
181 Id.
182 Id.
183 The Ninth Circuit noted that when Kelly objected to the use of his images on Arriba Soft’s search engine “Arriba deleted the thumbnails of images that came from Kelly’s own web sites and placed those sites on a list of sites that it would not crawl in the future.” Kelly v. Arriba Soft Corp., 336 F.3d 811, 816 (9th Cir. 2003). However,
copyright owners can protect their sites from inclusion on search engines, it is more likely that the search engines will return unauthorized copyrighted results to users before the copyright holder has an opportunity to protect his work from the use. However, in the case of more deliberately constructed searchable databases like Video Pipeline, the inclusion of copyrighted material is most likely within the knowledge of the database creator. Nonetheless, in either case, public benefits accrue as a result of public access to information facilitated by these navigational devices.

Despite the public benefits that accrue to Internet users as a result of the availability of information on search engines and searchable databases, some harm may be done to the original copyright holders. This harm is more prevalent in cases where an entire copyrighted original work is capable of being accessed through the search engine. Although Kelly only addressed the clearly transformative use of copyrighted photographs into distorted thumbnail images, the court in that case did not address the copyright implications of access to the full-sized versions of the photographs.

However, in Video Pipeline, the court was only assessing the harms that Disney faced as a result of short two-minute clips of its movies displayed on VideoDetective.com; there was never the potential for a user to download the entire movie. As a result, in Video Pipeline, for users to access clip previews multiple times on VideoDetective.com, they would have to access the database and type in the correct search parameters. If users could simply download the clip previews once, they would not have to go through the formal search process again and would not be exposed multiple times to advertisements and links to retail

“[s]everal months later, Arriba received Kelly’s complaint of copyright infringement, which identified other images of his that came from third-party web sites.” Id.

184 Video Pipeline originally obtained a license to use Disney trailers, but that license was revoked when Video Pipeline began to display the trailers on its website. Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc., 342 F.3d 191, 195 (3d Cir. 2003).

185 The Kelly court stated that

[the second action involves the display of Kelly’s larger images when the user clicks on the thumbnails. . . . [And] as to the second action, we conclude that the district court should not have reached the issue because neither party moved for summary judgment as to the full-size images and Arriba’s response to Kelly’s summary judgment motion did not concede the prima facie case for infringement as to those images.

Kelly, 336 F.3d at 817.

186 In fact, there was not even the potential for users to download the clip previews onto their computers for later viewing. The Third Circuit recognized that the videos were “streamed” to users and could not be downloaded or saved onto their computers. See Video Pipeline, 342 F.3d at 195.

187 Id. at 195.
providers of the videos being streamed. Thus, the inability to download the clip previews could potentially result in multiple exposures to advertising and marketing techniques, ultimately benefiting the owners of copyrighted works available through the database.

Yet there is still the possibility that any work or derivative work that is available on a searchable database could be subject to a license agreement. However, even when there is the potential for such a licensing scheme, the courts must first determine whether the copyright owner’s protections should be allowed to enter into the market of searchable databases. Surely, licenses would be required if the entire work was available on the database. But when much shorter snippets of a written work or a two-minute clip preview of a film are used, there is room for equity to find against such an extension of the copyright monopoly. As owners of copyrighted works demand licensing fees for smaller segments of their original works, issues regarding the market for derivatives necessarily come into play. In the context of online categorizers and indexers, a finding that any small snippet of information or film available on a database is subject to a license agreement would cripple the ability of such databases to exist. Therefore, limits must be placed on what will constitute a derivative work worthy of the copyright owner’s monopoly power.188

If the efforts of searchable databases to attain an ideal of complete comprehensiveness are quashed by copyright infringement suits, the owners of the original copyrights will be working against their own interests. As the Internet becomes ever more cluttered with information, the search costs necessary to sift through the massive amounts of data would impede any single user from finding the information he or she is seeking. Therefore, the use of small bits of copyrighted material on search engines is necessary so that users can recognize the location of the information they seek and access that information. This creates benefits for both users and copyright owners.

The creation of new information and the placement of that information onto the Internet or into any library-like database has a detrimental effect upon the underlying system. Unless the information is organized in a way that makes it relatively easy for a potential user to

188 See William Patry, The Enumerated Powers Doctrine and Intellectual Property: An Imminent Constitutional Collision, 67 GEO. WASH. L. REV. 359, 382 (1999) (“The commodity approach to intellectual property confuses the fact that a commodity may have a market value with the existence of a legal entitlement to exercise monopoly control over that commodity.”); see also Joanna Pearlstein, 403 Ways to Slice a CD, WIRED, Mar. 2007, http://www.wired.com/wired/archive/15.03/snackmusic.html#two (noting that “Warner Music found 23 ways to market one South Korean pop star’s 16-track album—for a total of 403 SKUs (stock keeping units)).
find, the information is useless and simply clutters the landscape of knowledge. This only makes it more difficult to find the copyright owner’s information, as well as the information of every other participant in the system. Thus, the search costs associated with the glut of available information are a negative externality that results from copyright owners’ creations. 189

Due to the nature of any catalogue, online or print, the inclusion of any individual work has both positive and negative effects upon other works included in the catalogue. As additional works are included, the catalogue may gain popularity as a more exhaustive, and hence, a more reliable source of information. Thus, more users are drawn to the catalogue and the benefits to the copyright holder accrue accordingly. Although the addition of works within a catalogue may diminish the proportional share of total “space” allocated to any one work, the ensuing popularity growth of the catalogue will, in many cases, outweigh any proportional losses to the individual work. 190 Inclusion of a work, or reference to a work, in an online searchable database likewise carries

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189 Frank Pasquale analogizes this informational pollution to environmental pollution:

> 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... 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. They are not simply “free riding” off the labor of copyright holders, but rather are creating the types of navigational tools and filters that help consumers make sense of the ocean of data copyright holders have created.


190 As a catalogue gains in comprehensiveness, it may eventually be considered a “definitive source.” As such, inclusion in a “definitive source” catalogue would provide the copyright holder with marketability and reputational benefits. For example, as noted in Video Pipeline’s Petition for a Writ of Certiorari to the U.S. Supreme Court:

> [Granger’s Index to Poetry] has been the “definitive source” in English for locating a poem... It’s most recent version... provides detailed indexing of 55,000 works by poets such as Shakespeare and Shelley, as well as modern writers like Gary Snyder, Seamus Heaney, and Adrienne Rich. It covers all of Shakespeare’s sonnets, all of Ezra Pound’s cantos, the entire Beatles’ songbook, and the works of such poet/songwriters as Patti Smith and Bob Dylan.

Petition for Writ of Certiorari, *Video Pipeline, Inc.*, 342 F.3d 191 (No. 03-763).
with it significant social capital, which relies in no small part upon the comprehensiveness of the database.\footnote{191}

The case of online databases like that of Video Pipeline, which consisted of short two-minute clip previews, is particularly useful as a means of boosting the popularity of the original work. Because films are experience goods, or goods that consumers are not capable of placing value upon until they have been experienced,\footnote{192} “[w]hen consumers can preview and browse works, they are far more likely to purchase them than when the goods are essentially a black box.”\footnote{193} The court in Video Pipeline noted that “the clip previews do not constitute mere ‘information’ about the movies, as would, for example, a list of the names of the actors starring in a film, or a statement of the rating it received. If Video Pipeline was only dealing in this type of information, the fair use doctrine might not be implicated at all; copyright protection does not include facts and ideas, but only their expression.”\footnote{194} However, this analysis fails to consider that films are experience goods and that therefore, the experience of only two minutes of the full-length film is necessary to entice audiences to purchase the film.

Another potential benefit accruing to Disney from the existence of the clip previews on the searchable database could have been the natural exposure of users to Disney videos even when those users were not particularly looking for Disney videos. Generally, the only users who will view Disney trailers on the Disney website are specifically looking at the Disney site and are targeting Disney merchandise. Yet, by placing the clip previews on a searchable database, Video Pipeline also allowed for those not primarily interested in Disney to view or be exposed to the Disney product. This was accomplished by allowing users to search according to various criteria including genre, actor, and title.\footnote{195} For example, if a user was a fan of Tom Hanks and was interested in purchasing the film, “The Burbs,” the user would run a search for Tom Hanks on the Video Pipeline database. “The Burbs” would appear as one element in a list of Tom Hanks films, but so would Disney’s “Toy

\footnote{191} Pierre Bourdieu defines social capital as “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition.”\textsc{Pierre Bourdieu & Loïc J.D. Waquént, An Invitation to Reflexive Sociology} 119 (1992).


\footnote{193} Pasquale, \textit{supra} note 6, at 806.

\footnote{194} Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc., 342 F.3d 191, 199 n.5 (3d Cir. 2003).

\footnote{195} \textit{Id.} at 195.
Story.” Presumably, the user who has a particular penchant for Tom Hanks may also be drawn to purchase the Disney movie as well. Users searching for Tom Hanks films are unlikely to first search the Disney site for references to Tom Hanks. The case would be the same for a user who is interested in a particular holiday film but cannot remember the title to the film. Using Video Pipeline’s database, the user could search under “genre” for holiday movies. The user then might find a clip preview for “The Santa Clause,” and upon realizing that this was the very movie the user had been searching for, would purchase the film. Essentially, the ability to use various searching criteria allows users to obtain a variety of results that may lead to unexpected or unplanned purchases to the benefit of the copyright holder.

Gregory Duhl has suggested an analysis that focuses on the public benefits that accrue as a result of the unauthorized use.196 His approach would replace the dichotomy between commercial and non-commercial uses with an analysis of the public versus the private benefits of the use. Invoking the constitutional basis of copyright to promote benefits to the public through creativity, Duhl argues that when an unauthorized use benefits the market for the original, only public uses should be deemed fair. Because almost any use can be construed to provide financial gain to the alleged infringer the commercial/non-commercial dichotomy is often unclear. Therefore, the public/private dichotomy is more useful to determine whether an unauthorized use supports the constitutional mandate.197 Because VideoDetective.net was an interactive catalogue open to public use, it should have been assessed for that benefit, in keeping with the constitutional mandate. In fact, as noted in VideoPipeline’s Petition for a Writ of Certiorari, their catalogue is used by public library systems in Seattle and Denver “to promote the public’s access to their video collections.”198

On a broad scale, access to information promotes the public welfare and it is the purpose of copyright law to promote creative activity for the public good. As the Internet has allowed information to become more easily accessible and centrally located, search engines have become the keys to accessibility. Yet the availability of small portions of copyrighted information on search engines will continue to be problematic until a comprehensive fourth factor analysis is adopted by the courts.

196 Duhl, supra note 178, at 734-35.
197 Id. at 734-35.
198 Petition for Writ of Certiorari, Video Pipeline, Inc., 342 F.3d 191 (No. 03-763).
V. CONCLUSION

My proposed methodology provides a comprehensive approach to the statutorily mandated fourth factor analysis. While the approach recommended by this article does not purport to lead to a fair use finding for every use of every search engine, it does provide a framework to preserve the benefits that search engines provide. The multi-step examination is necessary to resolve the inconsistent analyses of the fourth factor. Although it may be true that the individual categorizers at issue in *Ty, Arriba Soft, and Video Pipeline* were distinguishable on the facts, the analyses instituted by the courts differed significantly. Particularly in the area of search engines and searchable databases, consistency of fourth factor application is essential to preserving the great benefits that these categorizers provide to Internet users. Thus, by focusing on both the harm to the markets of copyrighted works as well as the abundance of benefits, including public benefits, that accrue from the proliferation of search engine technology, this new approach comes closer to a realization of copyright’s original mandate.
APPENDIX A: MULTI-STEP FOURTH FACTOR ANALYSIS

Step 1: Separate the potentially infringing instrumentalities

Instrumentality A
Instrumentality B

Step 2: Determine the potential markets for both the original work and derivative works

Potential markets for the original work:
Market 1
Market 2

Potential markets for the derivative work:
Market 1
Market 2

Step 3: Assess the net effect of the potentially infringing uses upon the potential markets

Instrumentality A
Potential markets for the original work:
Market 1 → Net effect of instrumentality A on Market 1 for the original work
Market 2 → Net effect of instrumentality A on Market 2 for the original work

Potential markets for the derivative work:
Market 1 → Net effect of instrumentality A on Market 1 for the derivative work
Market 2 → Net effect of instrumentality A on Market 2 for the derivative work

Instrumentality B
Potential markets for the original work:
Market 1 → Net effect of instrumentality B on Market 1 for the original work
Market 2 $\rightarrow$ Net effect of instrumentality B on Market 2 for the original work

Potential markets for the derivative work:
Market 1 $\rightarrow$ Net effect of instrumentality B on Market 1 for the derivative work
Market 2 $\rightarrow$ Net effect of instrumentality B on Market 2 for the derivative work

*Step 4: Determine the final effect of each use upon the potential market for or value of the original work*

**Instrumentality A**
Net effect of instrumentality A on Market 1 for the original work
Net effect of instrumentality A on Market 2 for the original work
Net effect of instrumentality A on Market 1 for the derivative work
+ Net effect of instrumentality A on Market 2 for the derivative work
= Final effect of instrumentality A upon the potential market for or value of the original work

**Instrumentality B**
Net effect of instrumentality B on Market 1 for the original work
Net effect of instrumentality B on Market 2 for the original work
Net effect of instrumentality B on Market 1 for the derivative work
+ Net effect of instrumentality B on Market 2 for the derivative work
= Final effect of instrumentality B upon the potential market for or value of the original work
APPENDIX B: MULTI-STEP FOURTH FACTOR ANALYSIS APPLIED TO VIDEO PIPELINE

Step 1: Separate the potentially infringing instrumentalities

Instrumentality A – VideoPipeline.net
Instrumentality B – VideoDetective.com

Step 2: Determine the potential markets for both the original work and derivative works

Potential markets for the original work – Films:
Movie theater market
Television market
Home video/DVD market

Potential markets for the derivative work – Online Clip Previews:
Retail in-store video compilations market
Online licensing and cross-promotional advertising market

Step 3: Assess the net effect of the potentially infringing use on the potential markets

Instrumentality A – VideoPipeline.net
Potential markets for the original work – Films:
Movie theater market → Net effect of VideoPipeline.net on Market 1 for films = +1
Television market → Net effect of VideoPipeline.net on Market 2 for films = +1
Home video/DVD market → Net effect of VideoPipeline.net on Market 3 for films = +1
Potential markets for the derivative work – Online Clip Previews:
Retail in-store video compilations market → Net effect of VideoPipeline.net on Market 1 for clip previews = 0
Online licensing and cross-promotional advertising market → Net effect of VideoPipeline.net on Market 2 for clip previews = -2

Instrumentality B – VideoDetective.com
Potential markets for the original work – Films:
Movie theater market $\rightarrow$ Net effect of VideoDetective.com on Market 1 for the original work = +1
Television market $\rightarrow$ Net effect of VideoDetective.com on Market 2 for the original work = +1
Home video/DVD market $\rightarrow$ Net effect of VideoDetective.com on Market 2 for the original work = +2
Potential markets for the derivative work – Online Clip Previews:
Retail in-store video compilations market $\rightarrow$ Net effect of VideoDetective.com on Market 1 for the derivative work = 0
Online licensing and cross-promotional advertising market $\rightarrow$ Net effect of VideoDetective.com on Market 2 for the derivative work = -2

**Step 4: Determine the final effect of each use on the potential market for or value of the original work**

**Instrumentality A – VideoPipeline.net**
Net effect of VideoPipeline.net on movie theater market for the film = +1
Net effect of VideoPipeline.net on television market for film = +1
Net effect of VideoPipeline.net on home video/DVD market for film = +1
Net effect of VideoPipeline.net on retail in-store video compilations market for the derivative work = 0
+ Net effect of VideoPipeline.net on online licensing and cross-promotional advertising market for the derivative work = -2
$\rightarrow$ **Final effect of VideoPipeline.net on the potential market for or value of the original work = +1**

**Instrumentality B – VideoDetective.com**
Net effect of VideoDetective.com on movie theater market for the film = +1
Net effect of VideoDetective.com on television market for the film = +1
Net effect of VideoDetective.com on home video/DVD market for film = +2
Net effect of VideoDetective.com on retail in-store video compilations market for the derivative work = 0
+ Net effect of VideoDetective.com on online licensing and cross-promotional advertising market for the derivative work = -2
$\rightarrow$ **Final effect of VideoDetective.com on the potential market for or value of the original work = +2**