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Consumer Modification of Copyrighted Works

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INTRODUCTION

Whether they are writings, musical compositions, works of visual art, or dramatic presentations,1 traditional works of authorship offer consumers a simple alternative: “take it or leave it.” However much consumers may desire it, Rick cannot join Ilsa on the plane leaving Casablanca; Ahab cannot survive the voyage of the Pequod; and a recorded performance of Mozart’s Symphony No. 40 in G Minor cannot be heard, even on the most sophisticated reproduction equipment, in any key other than G minor. That is not to say that consumers are powerless; they exercise their power by “leaving it”—by forsaking authors who fail to satisfy in favor of others who succeed. Consumers change the channel, cancel their subscription, or choose another book.

New technologies assign consumers a more active role in shaping their experience of copyrighted works. Recent video games, for example, provide the complex plots and immersive settings of motion pictures, but in a way that allows consumers to

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1. Copyright protection extends to “original works of authorship fixed in any tangible medium of expression,” including, among other things, literary works, musical works, motion pictures, pictorial and sculptural works, sound recordings, and architectural works. 17 U.S.C. § 102 (2000).
participate in the unfolding narrative. Internet Web sites feature graphics and the written word in the nonlinear medium of hypertext, which invites readers to explore according to their own predilections. In these cases, the author intends the work to be experienced in this flexible, interactive fashion; however, as technologies develop and consumer expectations change, the desire of individuals to customize their experience will come into conflict with the desire of authors to control how their works are presented. The recent and well-publicized dispute between certain motion picture directors and editing service ClearPlay shows that the conflict has already begun. For a fee, ClearPlay allows consumers who have purchased a DVD copy of a copyrighted motion picture to experience that motion picture without profanity, vulgarity, or violence. Critics describe this practice as an assault on the director’s artistic integrity and a violation of copyright. Consumers might defend it as a prerogative of ownership, an exercise of their individuality, or a defense of “family values.” As more works of authorship are delivered through digital media, the temptation can only grow to improve, rearrange, customize, and remix.

Traditionally, copyright law has been a product of compromise, balancing the rights of authors against the interests of those who would benefit from their work. The ultimate goal of copyright, as stated in Article 1, Section 8 of the Constitution, is to promote “the Progress of Science,” which may be expressed in modern terms as the advancement of knowledge and the development of culture. If the rights of authors are too weak, copyists reap the benefits of their work, and deny authors the financial rewards necessary to spur their labors. Authors produce less and the intellectual life of the nation suffers. Yet “the Progress of Science” also depends upon some freedom to build upon existing works of authorship. Works of art allude to prior works,
established styles, and familiar subject matter; factual works benefit from existing research; works of scholarship and criticism, to the extent they refer to some prior work, often reproduce a portion of that work in order to make their point.\(^{10}\) If the law allowed authors to prevent such uses of their work, the harm would be immeasurable.

The tension between the needs of earlier authors and subsequent authors, each of which must be respected to achieve the constitutional objectives of copyright,\(^{11}\) can be identified as the source of much that is fundamental in copyright doctrine. An infringing work need not be identical, but must be "substantially similar," to the copyrighted work.\(^{12}\) Independent creation is a complete defense, no matter how similar a new work may be to an existing one.\(^{13}\) Authors can borrow facts and "ideas" from earlier works, but only if those facts and ideas are clothed in new "expression."\(^{14}\) Authors cannot object to the "fair use" of their copyrighted works by subsequent authors for purposes such as criticism, scholarship, and commentary.\(^{15}\) The rights of consumers are comparatively upstaged.\(^{16}\) Certain property rights flow from the ownership of a physical copy of a copyrighted work, such as the right to sell, lend, or otherwise dispose of that copy.\(^{17}\) But little has been said, in the Copyright Act or in the case law interpreting it, about the freedom of consumers to modify a copyrighted work—not consumers who as authors themselves have their own ideas to contribute to public discourse, but consumers who seek to enhance their private enjoyment of the copyrighted works they have purchased.

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Public Domain, 39 EMORY L.J. 965, 966 (1990) ("[T]he very act of authorship in any medium is more akin to translation and recombination than it is to creating Aphrodite from the foam of the sea." (emphasis in original)).

10. Parody also must duplicate some aspects of the work it lampoons. See Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 588 (1994) ("Parody's humor, or in any event its comment, necessarily springs from recognizable allusion to its object through distorted imitation. Its art lies in the tension between a known original and its parodic twin. When parody takes aim at a particular original work, the parody must be able to 'conjure up' at least enough of that original to make the object of its critical wit recognizable.").

11. See Nash v. CBS, Inc., 899 F.2d 1537, 1541 (7th Cir. 1990) ("At each instant some new works are in progress, and every author is simultaneously a creator in part and a borrower in part. In these roles, the same person has different objectives. Yet only one rule can be in force. This single rule must achieve as much as possible of these inconsistent demands.").

12. See Murray Hill Publ'ns, Inc. v. Twentieth Century Fox Film Corp., 361 F.3d 312, 316–18 (6th Cir. 2004); Shaw v. Lindheim, 919 F.2d 1353, 1356 (9th Cir. 1990); Arnstein v. Porter, 154 F.2d 464, 468–69 (2d Cir. 1946) (referring to nonliteral but "illicit" copying).

13. See Calhoun v. Lillenas Publ'g, 298 F.3d 1228, 1232–33 (11th Cir. 2002); Ellis v. Diffie, 177 F.3d 503, 507 (6th Cir. 1999).

14. See Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348 (1991) ("[I]f the compilation author clothes facts with an original collocation of words, he or she may be able to claim a copyright in this written expression. Others may copy the underlying facts from the publication, but not the precise words used to present them."); Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 547 (1985) ("[N]o author may copyright facts or ideas. The copyright is limited to those aspects of the work—termed 'expression'—that display the stamp of the author's originality." (citation omitted)).


Perhaps consumer modification has received little attention because it is comparatively infrequent. Passive consumption of copyrighted works has always been the norm. Modifications that occur in the privacy of a consumer’s home are also difficult to detect, and, in any particular instance, the harm to the copyright owner is minimal. Even if, in theory, copyright owners have had a cause of action against consumer modification, they may have had little incentive, and few opportunities, to seek redress. All of this is likely to change. Not only will new technologies make consumer modification more common, but the businesses that provide the tools to allow such modification—businesses like ClearPlay—will become attractive targets for litigation. It is a fitting time, therefore, to consider what legal rights consumers have, or should have, to modify for their own use the copyrighted works they have purchased, as well as what rights others should have to facilitate such modification. If it is again a question of balance, it is in many respects a more difficult matter than balancing the rights of author against author. At least in that case there is a single goal—promoting the development of culture through the creation and dissemination of works of authorship. When the interests of consumers are at stake, new terms enter the debate—terms such as privacy, individual autonomy, and the privileges of ownership associated with physical property—none of which mix easily with the constitutional objective of copyright.

Part I of this article reviews the rights and privileges of modification under the copyright laws, including the right to create “derivative works,” the protection of “moral rights,” the emergence of the “transformative” standard for defining fair use, and the possibility of “de minimis” infringement. Part II examines the comparatively few cases concerning the modification of copyrighted works by consumers for their own use. Part III discusses the specifics of the film-modification dispute. Part IV considers arguments for and against permitting consumer modification, including economic arguments based on the optimal allocation of society’s resources, as well as arguments accounting for the emotional well-being of authors and consumers. Part V explores mechanisms for distinguishing between permissible and impermissible consumer modifications. These include (1) assuming a consumer right to modify unless permission has been expressly withheld—an approach similar to what patent law provides; (2) relying on the “fair use” doctrine to provide consumers a limited, case-specific freedom to modify; and (3) providing consumers a well-defined “safe harbor” for certain kinds of modification.

I conclude that the interests of consumers are too important to ignore. The freedom of consumers to take charge of their own experiences, at least in the privacy of their homes and using physical property they own, should be balanced against the economic and noneconomic interests of those who produce and distribute copyrighted works. Consumers’ interests are selfish interests, in the sense that private modifications contribute little or nothing to “the Progress of Science.” Nevertheless, copyright law can foster that constitutional goal without entirely discounting other values. I further conclude that a market-based solution dependent on the approval of copyright owners may not serve consumers’ needs, due in part to transaction costs and privacy concerns, and in part to a fundamental inconsistency between personal autonomy and the need to seek permission.

In this era of ever-expanding rights for copyright owners, it is unrealistic to believe that the exclusive right to create derivative works will be radically curtailed, even if that were desirable. Some lines have to be drawn. I suggest, as a modest starting point, recognizing a consumer’s fair use right to modify a copyrighted work for private
consumption if the modification is ephemeral or if the consumer legitimately possesses a copy of a work available in many copies, and the modification alters, at most, only that particular copy. Such modification would not be copyright infringement, nor would providing consumers the tools to modify be contributory infringement. This safe harbor would apply, however, to modifications done by the consumer. The more difficult question is whether third parties should be permitted to modify copyrighted works on consumers’ behalf, effectively offering an alternative version of the work. Here consumers revert to their role as members of a passive audience and exercise choice only through how they direct their purchases in the marketplace. Now the consumer’s interest in privacy and autonomy is much weaker, and, on balance, it is more difficult to justify the unauthorized modification. In these cases, a less-forgiving, case-specific analysis based on traditional fair use factors, such as the effect on the market for the copyrighted work, would be more appropriate.

I. EXPRESSION TRANSFORMED

Copyright is, primarily, a means to “increase . . . the harvest of knowledge.”18 By providing authors certain exclusive economic rights, assuring “contributors to the store of knowledge a fair return for their labors,”19 copyright encourages the production of expressive works to inform and entertain the public. Authors forced to compete for sales with copiers, whose prices need reflect only the costs of duplication and not the potentially much higher costs of authorship, could find their efforts unprofitable. Samuel Johnson may have exaggerated when he remarked that “No man but a blockhead ever wrote, except for money,”20 but certainly the supply of authored works would decline if it were difficult to make them pay. By protecting the financial rewards of authors (and the publishers who back them), at least in those cases where there is a demand for the author’s work in the marketplace, copyright serves the constitutional mandate to “promote the Progress of Science.”

It must be remembered, however, that the primary beneficiary of copyright law is the public.21 On some occasions, what would be of immediate benefit to the author would, in the long run, disadvantage the public. For example, author A might be given discretion to forbid author B from producing a valuable but critical assessment of author A’s works. Author A’s right to forbid author B would enhance author A’s satisfaction, increasing author A’s incentive to produce. Alternatively, author A might demand payment from author B, increasing the rewards of author A’s original labor. Yet the advantages may be outweighed by the loss to society of author B’s work, or by the higher price author B must charge to meet his obligations to A. This risk to public welfare is reduced by mechanisms such as fair use.22

19. Id. at 546.
22. See infra Part I.D.
The exclusive rights of the copyright owner, subject to numerous exceptions,\(^\text{23}\) include the right to reproduce the copyrighted work, to distribute it, to display it,\(^\text{24}\) to perform it in public,\(^\text{25}\) and to adapt it to produce a "derivative work."\(^\text{26}\) These exclusive rights may be infringed directly (e.g., by distributing unauthorized copies of the copyrighted work) or indirectly, by contributory infringement. A contributory infringer is "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another."\(^\text{27}\) This is an important concept where litigation against the direct infringer\(^\text{28}\) may be unattractive to the copyright owner. For example, rather than proceed against consumers who had used their Betamax recorders to make unauthorized copies of television shows—a strategy that would have been difficult for practical reasons as well as poor public relations—the owners of some of those television shows sued Sony, who produced and sold the machines knowing that consumers would use them to make recordings.\(^\text{29}\)

In Parts I.A–B, I discuss the exclusive right most clearly implicated by consumer modification—the right to create derivative works. Then, in Part I.C, I discuss the "moral rights" of authors, which in some cases permit authors to restrain alterations of their work in ways injurious to their reputations and integrity. In Part I.D, I provide an overview of the fair use defense, which allows uses of a copyrighted work, including adaptations, that otherwise would be considered infringements. In Part I.E, I consider the potential of a "de minimis" defense to excuse minor instances of modification.

### A. Derivative Works

In 1853, author Harriot Beecher Stowe, invoking the copyright laws of the time, objected to an unauthorized German translation of her novel *Uncle Tom's Cabin*. The court hearing her case determined that the translation was not a *copy*, and therefore not a violation of her exclusive rights:

A "copy" of a book must . . . be a transcript of the language in which the conceptions of the author are clothed; of something printed and embodied in a

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\(^{23}\) The exceptions include "fair use," set forth in § 107 of the Copyright Act and discussed *infra* Part I.D. Section 108 allows reproduction in certain cases by libraries and archives. Section 109 establishes the "first sale" rights discussed in Part II.A. Section 110 allows certain performances and displays for educational, religious, or charitable purposes. Section 117 permits archival copies of computer programs, or adaptations necessary to render a program compatible with particular hardware. See *infra* Part II.C.3.

\(^{24}\) The right of display is limited to "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." 17 U.S.C. § 106(5) (2000).

\(^{25}\) The right of performance is limited to "literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works." 17 U.S.C. § 106(4) (2000).

\(^{26}\) See *infra* Part I.A.

\(^{27}\) PAUL GOLDSMITH, COPYRIGHT § 6.0, at 6:2 (2d ed. Supp. 2005) (quoting Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971)).

\(^{28}\) Contributory infringement can occur only if someone else directly infringes the copyright. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 434 (1984).

\(^{29}\) See discussion of the Sony litigation *infra* Part II.B.
tangible shape. The same conceptions clothed in another language cannot constitute the same composition, nor can it be called a transcript or "copy" of the same "book." I have seen a literal translation of Burns' poems into French prose; but to call it a copy of the original, would be as ridiculous as the translation itself.\textsuperscript{30}

The court observed that an effective translation "often requires more learning, talent and judgment, than was required to write the original."\textsuperscript{31} Being more than a literal reproduction of the original work and exhibiting more than "merely colorable variations," the translation had to be considered a "new work" rather than a "copy."\textsuperscript{32} Because the author's rights only included the rights to print, reprint, and vend the original novel or copies of it,\textsuperscript{33} the claim had to be dismissed.\textsuperscript{34}

The scope of copyright has, since then, expanded considerably. The 1976 Copyright Act includes, among the rights explicitly granted to authors, the exclusive right "to prepare derivative works based upon the copyrighted work."\textsuperscript{35} Section 101 of the Act defines a "derivative work" 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."\textsuperscript{36} A wide variety of unauthorized productions, based in some fashion on a copyrighted work, have been held to be derivative works, including not only obvious adaptations such as translations, abridgments, and dramatizations, but also more remote cousins of the original work, such as three-dimensional toys based on two-dimensional drawings,\textsuperscript{37} cassette tapes designed to function with a copyrighted talking teddy bear,\textsuperscript{38} and trivia books based on the television series \textit{Twin Peaks}.\textsuperscript{39} The expansion of exclusive rights

\begin{enumerate}
\item Stowe v. Thomas, 23 F. Cas. 201, 207 (C.C.E.D. Pa. 1853) (No. 13,514).
\item Id.
\item Id. at 207–08. The court also recalled "many cases" holding that a "bona fide abridgment" is not a violation of the right to make copies. \textit{Id.} at 207.
\item Id. at 208. By 1870, the Copyright Act had been expanded to include an exclusive right to dramatize and make translations. \textit{Act of July 8, 1870, ch. 230, § 86, 16 Stat. 198, 212}.
\item Although the result would clearly be different today, some of the court's rhetoric mirrors the idea/expression dichotomy, which still has currency. The author, the court explained, has no exclusive right to "his conceptions and inventions, which may be termed the essence of his composition." \textit{Stowe}, 23 F. Cas. at 207. It is still true that the exclusive rights of an author do not run to the general "ideas" embodied in the work, but cover only the particular expression of those ideas. See 17 U.S.C. § 102(b) (2000) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."); \textit{Nichols v. Universal Pictures Corp.}, 45 F.2d 119, 121 (2d Cir. 1930). However, a character like Uncle Tom would today, in all likelihood, be considered a protected expression of a more general concept.
\item Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905, 908–09 (2d Cir. 1980).
\item Twin Peaks Prods., Inc. v. Publ'ns Int'l, Ltd., 996 F.2d 1366, 1373 (2d Cir. 1993); see
allows authors to channel their efforts and investments toward works that may find much of their value in derivative markets. For example, a novelist assured of derivative rights might choose to write about gangsters rather than cowboys, reasoning that the motion picture rights for a gangster story would be more valuable.

Two aspects of derivative works have been the source of some confusion. First, in spite of the reasoning to the contrary exhibited in Stowe, a recasting of a copyrighted work in a new form might be considered a copy of the original work. Today, copyright protects against more than verbatim reproduction; an author's copyrightable expression is said to extend to a higher level of abstraction. In the case of a novel, copyright might confer rights to the characters and incidents, even against infringers who choose different words to depict them. Hence, there is considerable overlap between the right to "reproduce" the copyrighted work and the right to create derivative works. A motion picture based on a novel, including the same characters and the same plot developments, might be considered both an adaptation of the novel and, in a nonliteral sense, a copy or reproduction of the novel. Before passage of the 1976 Copyright Act, the Register of Copyrights advocated the inclusion of an explicit right of adaptation on the grounds that it had "long been looked upon as a separate exclusive right," and that to omit any reference to it would invite misunderstanding. This explanation suggests, however, that there is little within the scope of the adaptation right that is not already covered by the right to reproduce.

If a derivative work is merely a different form in which a work may be copied, one may ask whether the same standard of infringement should be applied as in cases of outright duplication. Although different courts have expressed the standard in different ways, a copier essentially violates copyright by producing a work of "substantially similar" expression. Such similarity is easy to discern in many derivative works—motion pictures based upon novels or sculptures based upon drawings—in spite of the differences in media. In a few cases, however, courts have seemed to find it sufficient to violate the right of adaptation if the defendant's work is derived, in some sense, from the plaintiff's, even though little or nothing of the original can still be perceived. One court, for example, suggested that copyright in a collection of physics problems could be infringed by an unauthorized publication of answers for those problems.

also Goldstein, supra note 27, § 5.3, at 5:82–83 (discussing the breadth of the exclusive right to create derivative works).

41. See Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930).
42. See 1 Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 8.01(B) (1978).
44. Nimmer concludes that reproduction is merely a species of copying that results in a material object in which the copy is fixed. 1 Nimmer & Nimmer, supra note 42, § 8.02(A).
45. See Goldstein, supra note 27, § 7.3.1, at 7:21 ("Under the standard formulation of the rule, to show improper appropriation, the plaintiff must meet two tests. First, the plaintiff must show that the defendant's work appropriated protected expression from the copyrighted work. Second, the plaintiff must show that audiences will perceive substantial similarities between the defendant’s work and plaintiff's protected expression."); Shaw v. Lindheim, 919 F.2d 1353, 1356 (9th Cir. 1990).
46. See Addison-Wesley Publ'g Co. v. Brown, 223 F. Supp. 219 (E.D.N.Y. 1963). The opinion is rather obtuse, and the court may have relied in part on the reproduction of some part
Another source of confusion stems from the fact that a derivative work may be itself a copyrightable work.\textsuperscript{47} One might copyright, for example, a motion picture based upon a novel. Copyright in a derivative work extends “only to the material contributed by the author of [the derivative] work, as distinguished from the preexisting material.”\textsuperscript{48} If the preexisting material is itself copyrighted, copyright in the derivative work “does not extend to any part of the work in which such [preexisting] material has been used unlawfully.”\textsuperscript{49} A derivative work can only be copyrighted if it meets certain standards applied to any copyrightable work. It must be “original,” and it must be “fixed in . . . a tangible medium of expression.”\textsuperscript{50} The question is whether those same standards apply to an infringing derivative work. Must it also be “original” and “fixed”?

To require originality in an infringing work may seem perverse; what makes an infringing work objectionable is the extent to which it is unoriginal. Nevertheless, because the second sentence of the statutory definition of “derivative work” refers to “an original work of authorship,”\textsuperscript{51} some have argued that even an infringing derivative work must exhibit some degree of originality.\textsuperscript{52} Others, referring to the first sentence of the definition which omits any reference to originality, argue the contrary.\textsuperscript{53} The Seventh Circuit Court of Appeals, acknowledging support for each point of view in “both cases and respected commentators,” found it unnecessary to take sides.\textsuperscript{54} Indeed, the standard for “originality” is so low\textsuperscript{55} that it would be rare for any form in which a work might be recast to fail to be original. On those occasions, infringement could often be found in the right of duplication.

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\textsuperscript{47} 17 U.S.C. § 103(a) (2000).
\textsuperscript{48} Id. § 103(b) (alteration added).
\textsuperscript{49} Id. § 103(a).
\textsuperscript{50} Id. § 102(a) (“Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . . .”). A work is “fixed” “when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” Id. § 101.
\textsuperscript{51} Both sentences read as follows: “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, 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.
\textsuperscript{52} See Lee v. A.R.T. Co., 125 F.3d 580, 582 (7th Cir. 1997); 1 NIMMER & NIMMER, supra note 42, § 3.03[B][1], at 3-16.1 (criticizing decision finding that mounting an artwork created an infringing derivative work because it is difficult to imagine that, had the plaintiff done this himself, he could have separately copyrighted the result as an original work of authorship).
\textsuperscript{53} See Lee, 125 F.3d at 582. Professor Goldstein, who is cited as a proponent of the view that an infringing derivative work may be an unoriginal “mechanical” transformation, writes that “the reproduction right leaves off and derivative rights begin at that point at which the contribution of independent expression to an existing work effectively creates a new work for a different market.” GOLDSTEIN, supra note 27, § 5.3.1, at 5:84-1.
\textsuperscript{54} Lee, 125 F.3d at 582.
Whether an infringing derivative work must be fixed is at least as controversial. Here the treatise authors, Goldstein and Nimmer, diverge. Professor Goldstein quotes the House Report accompanying the 1976 Copyright Act, where it states that the right to prepare derivative works is "broader" than the right of reproduction "in the sense that reproduction requires fixation in copies or phonorecords, whereas the preparation of a derivative work, such as a ballet, pantomime, or improvised performance, may be an infringement even though nothing is ever fixed in tangible form." This seems to demonstrate, Goldstein concludes, that derivative works must be fixed to be copyrighted, but not for purposes of infringement. The United States Court of Appeals for the Ninth Circuit, in Lewis Galoob Toys, Inc. v. Nintendo, reached the same conclusion. The Nimmer treatise, on the other hand, dismisses the Galoob authority as dictum and the legislative history as unhelpful in the absence of statutory ambiguity. Identical language, Nimmer argues, should be interpreted identically, and the statute refers to only one "derivative work" as both a form of copyrightable work and as a form of infringement. Furthermore, Nimmer asks why one should be permitted to reproduce a poem verbatim in the sand as the tide approaches (which Nimmer assumes is too transitory to constitute a fixed copy violative of the right of reproduction), but forbidden to reproduce a condensed version of the same poem under the same circumstances. The kinds of works mentioned in the House Report, it may be noted, are generally performed in public, and the exclusive right of public performance does not require fixation.

As we will see, in the context of consumer modifications that may infringe the right of adaptation, the issues of originality and fixation are important. Even if the standard of originality is low, the kinds of modifications of physical copies that consumers typically engage in (e.g., underlining passages in a book, tearing recipes from a magazine) could still be considered unoriginal. Similarly, some consumer modifications (e.g., skipping portions of a video tape, programming tracks on a compact disc) do not produce any fixed alteration. Still other consumer modifications may not alter the copyrighted work at all, except by changing its surroundings (e.g.,

56. GOLDSTEIN, supra note 27, § 5.3.1, at 5:84-2 (quoting H.R. Rep. No. 94-1476, at 62 (1976)).
57. Id. at 5:84-2 n.21.
58. 964 F.2d 965, 968 (9th Cir. 1992) ("A derivative work must be fixed to be protected under the Act . . . but not to infringe.") (emphasis in original). The Galoob case is discussed in Part II.C.1.
59. 1 NIMMER & NIMMER, supra note 42, § 3:809[A], at 8-139 to 8-140.
60. Id. § 8-141.
61. Professor Tyler Ochoa argues that "the exclusive right to prepare derivative works is not independent of the other four exclusive rights, but is infringed only in conjunction with at least one of the other four exclusive rights" (i.e., reproduction, distribution, public performance, or display). Tyler T. Ochoa, Copyright, Derivative Works and Fixation: Is Galoob a Mirage, or Does the Form(gen) of the Alleged Derivative Work Matter?, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 991, 1020 (2004) (emphasis in original). Because public performances of a copyrighted work need not be fixed to be infringing, adapted public performances need not be fixed to violate the exclusive right of adaptation. See id.
mounting a copyrighted photograph in a bright-pink, heart-shaped plastic frame). Whether this kind of "transformation" produces a derivative work is the subject of Part B.

B. Transformation and Presentation

Albuquerque A.R.T. Co. is a New Mexico business known for mounting existing works of art on ceramic tiles. In a series of cases challenging that practice, the Ninth Circuit and the Seventh Circuit each adopted seemingly contradictory positions regarding the meaning of "derivative work." In the first case, *Mirage Editions, Inc. v. Albuquerque A.R.T. Co.*, 64 the defendant had disassembled a book of prints by the artist Patrick Nagel, glued individual prints to pieces of black plastic, glued the plastic to white ceramic tiles, sealed the whole with a transparent film, and offered the result for sale. 65 Affirming summary judgment of copyright infringement, the Ninth Circuit held that the defendant had created "another version" of the plaintiff's artworks: "By borrowing and mounting the preexisting, copyrighted individual art images without the consent of the copyright proprietors... appellant has prepared a derivative work and infringed the subject copyrights." 66 Appealing to the broad language in which the statute characterizes a derivative work, the court held that the defendant had "recast or transformed the individual images by incorporating them into its tile-preparing process." 67

In 1993, an Alaska district court reached similar conclusions where copyrighted notecards were affixed to ceramic tiles. 68 Here the court responded directly to the argument that mounting a work on a tile does not transform, recast, or adapt the work at all; rather, it is a manner of displaying the work, no different than mounting a picture in a frame. 69 Relying in part on the decision in *Mirage*, the court found otherwise:

The court cannot agree that permanently affixing a notecard to a ceramic tile is not recasting, transforming or adapting the original art work. Placing a print or painting in a frame and covering it with glass does not recast or transform the work of art. It is commonly understood that this amounts to only a method of display. Moreover, it is a relatively simple matter to remove the print or painting and display it differently if the owner chooses to do so. Neither of these things is true of the art work affixed to a ceramic tile. Moreover, tiles lend themselves to other uses such as trivets (individually) or wall coverings (collectively). 70

The Ninth Circuit affirmed without opinion. 71

64. 856 F.2d 1341 (9th Cir. 1988).
65. Id. at 1342.
66. Id. at 1343.
67. Id. at 1344.
69. Id. at 314.
70. Id.
71. Id.
In 1997, in *Lee v. A.R.T. Co.*, the Seventh Circuit confronted a nearly identical situation. The same defendant had been accused of affixing notecards and small lithographs to ceramic tiles. This time the defendant prevailed. The court concluded that the defendant, by mounting the notecards on ceramic tiles, had not "recast, transformed, or adapted" them. The cards themselves were not changed in any respect; they "still depict[ed] exactly what [they] depicted when [they] left Lee's studio." The tiles were simply "flush frame[s]," and "no one believes that a museum violates [the right to prepare derivative works] every time it changes the frame of a painting that is still under copyright, although the choice of frame or glazing affects the impression the art conveys, and many artists specify frames (or pedestals for sculptures) in detail." Lee argued that the permanence of the bond distinguished the tile making process from ordinary framing, effecting a genuine "transformation" of the artwork. Like the district court, the Seventh Circuit held this a "distinction without a difference." Either framing creates a derivative work, in which case "what happens later is not relevant," or it does not create a derivative work.

Under § 109(c) of the Copyright Act, notwithstanding a copyright owner's exclusive right of display under § 106, "the owner of a particular copy... is entitled, without the authority of the copyright owner, to display that copy publicly... to viewers present at the place where the copy is located." The purchaser of a painting, for example, is entitled to exhibit it. The purchaser's choices regarding the display of that painting—choosing a darkened corner instead of the sunlit atrium, choosing a simple frame instead of an ornate one, surrounding the painting with minor works by abstract expressionists—inevitably change the impression the painting conveys. If such choices constituted the preparation of an unauthorized derivative work, the purchaser's right of display would mean very little. Allowing the copyright owner to veto such choices would also ignore freedoms, like the freedom to choose a frame, that "no one believes" (or, at least, few believe) are inconsistent with the rights of copyright owners. The question is where presentation ends and transformation begins. The circuit split leaves the answer unclear. The Ninth Circuit might make permanence the deciding factor, the Seventh Circuit whether the transformation alters the original or merely places it in a new context.

The Seventh Circuit was concerned, as well, with the plaintiff's contention that "any alteration of a work, however slight, requires an author's permission." "If Lee (and the [N]inth [C]ircuit) are right about what counts as a derivative work," the court observed, "then the United States has established through the back door an extraordinarily broad version of authors' moral rights, under which artists may block

72. 125 F.3d 580 (7th Cir. 1997).
73. Id. at 582.
74. Id. at 581.
75. Id.
76. Id.
77. Id.
79. *Lee*, 125 F.3d at 581.
80. Id. at 582 (emphasis in original). The de minimis defense to copyright infringement is discussed in Part I.E.
any modification of their works of which they disapprove." The "moral rights" of authors, another potential hurdle for consumers who would modify a copyrighted work, are discussed in Part C.

C. Moral Rights

Economic interests are the principle concern of copyright, insofar as authors are concerned. Exclusive rights provide authors the income to pursue their craft, to the ultimate benefit of the consuming public. Authors have other interests in their works that are more difficult to characterize as economic. For example, an artist who saw her work passed off as the work of another artist, or who saw the work of another artist passed off as her own, might feel a sense of outrage or violation. An author's reputation as an artist, and perhaps much of an artist's self-image, is a product of the works he or she produces. Misattribution may be felt as an injury to the artist's identity, in both a public and a personal sense. Similar claims might be made where the artist's work has been altered, changing the message the artist had meant to convey. In these cases, it could be said that an actionable injury has occurred to the "moral rights" of the author—rights dependent on the natural interests of creators and their emotional ties to their works.

Until recently, the closest United States copyright law had come to recognizing moral rights was in the 1976 case of Gilliam v. American Broadcasting Co. Because Gilliam is reminiscent of the dispute involving ClearPlay and similar services, it is worth a close analysis. The plaintiffs were members of the British comedy troop Monty Python, known for its irreverent sketch comedy. The ABC television network secured, from the BBC, permission to air Monty Python television specials in the United States. Before they were aired, the sketches written and performed by the plaintiffs were edited for ABC, both to reserve time for commercials and to omit material that ABC judged offensive or obscene. The plaintiffs had not authorized the editing, nor did their license to the BBC permit it. When the comedians viewed the result, they professed to be "appalled" at the "mutilation" of their work. The editing, in some cases, created inexplicable discontinuities in the scene—a character, for example, suddenly appearing wet although the viewer had not seen him doused with water. The district court, although denying a preliminary injunction, observed that the editing had impaired the "integrity" of the plaintiffs' work, causing it "to lose its iconoclastic verve."

On appeal to the Second Circuit, the court held the edited television program to be an unauthorized derivative work—unauthorized because it went beyond the limited terms of the comedians' license to the BBC. Moreover, the alterations made to the

81. Id.
82. 538 F.2d 14 (2d Cir. 1976).
83. Id. at 18.
84. Id.
85. Id. at 25 n.12. The edited versions "at times omitted the climax of the skits to which appellants' rare brand of humor was leading and at other times deleted essential elements in the schematic development of a story line." Id. at 25.
86. Id. at 18.
87. "One who obtains permission to use a copyrighted script in the production of a
plaintiffs' work, but still presented under the plaintiffs' names, supported a claim under § 43(a) of the Lanham Act, dealing with trademark infringements and other false representations in commerce. Much of the court's opinion concerns itself with the potential injury to the comedians' reputation. If the insensitive editing made the plaintiffs' work seem inferior, "it is likely that many members of the audience, many of whom, by defendant's admission, were previously unfamiliar with [the plaintiffs], would not become loyal followers of Monty Python productions." The injury to the plaintiffs' reputation "would imperil their ability to attract the large audience necessary to the success of their venture."

These observations are consistent with an analysis based solely on the financial interests of authors and the injury to the "Progress of Science" if those financial interests are undercut. Although economic injury by damaging an author's reputation is more indirect than economic injury by offering a substitute for the author's wares, in either case the infringer's actions impair the rewards of authorship and, consequently, the incentive to produce. However, there are suggestions in Gilliam of a deeper interest in an author's integrity. The court observes that "the ability of the copyright holder to control his work remains paramount in our copyright law," and that "copyright law should be used to recognize the important role of the artist in our society."

The court held it likely that the plaintiffs would succeed in demonstrating "an actionable mutilation" of their work. An action "seeking redress for deformation of an artist's work" is one that "finds its roots in the continental concept of droit moral, or moral right, which may generally be summarized as including the right of the artist to have his work attributed to him in the form in which he created it." As such, it might be a step beyond the ordinary copyright case. "American copyright law," the court admitted, "does not recognize moral rights or provide a cause of action for their violation, since the law seeks to vindicate the economic, rather than the personal, rights of authors." Nevertheless, because it is inconsistent with the economic interests of authors to deny them relief for the mutilation of the works on which they are financially dependent, decisions under United States law, perhaps invoking noncopyright theories such as breach of contract or unfair competition, had "properly vindicate[d] the derivative work . . . may not exceed the specific purpose for which permission was granted. . . . The rationale for finding infringement when a licensee exceeds time or media restrictions on his license—the need to allow the proprietor of the underlying copyright to control the method in which his work is presented to the public—applies equally to the situation in which a licensee makes an unauthorized use of the underlying work by publishing it in a truncated version." Id. at 20–21.

88. 15 U.S.C. § 1125(a) (2000) creates a cause of action in cases where the use of "any word, term, name, symbol, or device . . . or any false designation of origin . . . is likely to cause confusion, or to cause mistake, or to deceive . . . as to the origin, sponsorship, or approval" of goods in commerce.
89. Gilliam, 538 F.2d at 19.
90. Id.
91. Id. at 21.
92. Id. at 23.
93. Id. at 23–24.
94. Id. at 24.
95. Id.
author's personal right to prevent the presentation of his work to the public in a distorted form.\textsuperscript{96}

\textit{Gilliam} is, to be sure, an uncertain move in the direction of moral rights. Read narrowly, the decision rests more on breach of contract and misrepresentation than on infringement of copyright. Analytically, the court seems to exclude moral rights from the front door as it slips them in through the back. But the same concern for the "author's personal right" to prevent distortion of his or her work would eventually lead to an amendment of the Copyright Act, through legislation known as the Visual Artists Rights Act of 1990, or VARA.

VARA created § 106A of the Copyright Act, which secures to the authors of certain "work[s] of visual art" rights of attribution and integrity. The right of attribution allows the author to claim authorship when the work is genuine,\textsuperscript{97} or to prevent the use of the author's name when the work was created by someone else.\textsuperscript{98} The author can also prevent the use of his or her name "in the event of a distortion, mutilation, or other modification of the [author's] work which would be prejudicial to his or her honor or reputation."\textsuperscript{99} Adopting similar language, the right of integrity allows an author of a work "to prevent any intentional distortion, mutilation, or other modification of the work which would be prejudicial to his or her honor or reputation."\textsuperscript{100} These rights apply only to certain kinds of works, and they are subject to important exceptions.

The rights of attribution and integrity only extend to "work[s] of visual art," a term supplied with a complicated definition. Works of visual art include paintings, drawings, prints, sculptures, and still photographs of which there is a single copy, or which exist in a limited edition of 200 or fewer signed and numbered copies.\textsuperscript{101} Not included are posters, maps, technical drawings, motion pictures, audiovisual works, books, newspapers, periodicals, databases, electronic publications, advertising materials, or "works made for hire."\textsuperscript{102} Exceptions to the "modifications" made actionable by § 106A include modifications resulting from the passage of time,\textsuperscript{103} or, except in cases of gross negligence, from conservation or "public presentation, including lighting and placement."\textsuperscript{104} Special rules apply when the work of visual art is part of a building.\textsuperscript{105} The rights specified in § 106A last, in most cases, for the life of the author,\textsuperscript{106} and they belong only to the author, regardless of whether the author is the

\textsuperscript{96} Id.
\textsuperscript{98} Id. § 106A(a)(1)(B).
\textsuperscript{99} Id. § 106A(a)(2).
\textsuperscript{100} Id. § 106A(a)(3)(A). Section 106A(a)(3) empowers the authors of certain works of "recognized stature" to prevent their destruction by deliberate acts or gross negligence.
\textsuperscript{101} Id. § 106A(a)(3). Sculptures may be "marked" rather than "signed," and photographs must have been "produced for exhibition purposes only." Id.
\textsuperscript{102} Id. A "work made for hire" includes "a work prepared by an employee within the scope of his or her employment." Id. Television programs and motion pictures are typically works made for hire.
\textsuperscript{103} Id. § 106A(c)(1).
\textsuperscript{104} Id. § 106A(c)(2).
\textsuperscript{105} See id. § 113(d).
\textsuperscript{106} Id. § 106A(d). With respect to works created before the effective date of the VARA legislation, and to which title had been retained by the author, the rights under § 106A "shall be coextensive with, and shall expire at the same time as, the rights conferred by section 106." Id.
copyright owner.\textsuperscript{107} The rights may not be transferred, but may be waived by a signed instrument.\textsuperscript{108} Ownership of the rights of attribution and integrity is distinct from ownership of a physical copy of the work, and transfer of the physical copy does not transfer or waive the author’s rights.\textsuperscript{109}

In certain cases, §\ 106A would provide the author of a copyrighted work an additional tool to prevent unwanted modifications by consumers. For example, a sculptor with a reputation to protect might object if a purchaser, before installing a sculpture in her front yard, modified it to serve double duty as a lawn sprinkler. On the other hand, VARA is legislation of great intricacy, and it carefully excludes many of the kinds of works with which consumers are most likely to take liberties—such as motion pictures, books, recordings, and musical compositions. If in a few instances it explicitly restricts the rights of those who own copies of copyrighted works, one could argue that the omissions are equally important. Even with respect to the kinds of works that are covered by §\ 106A, the legislation shows some concern for the legitimate interests of consumers in matters of conservation, presentation, and (in cases where the practical needs of building owners intrude) destruction of the physical property they own. VARA may represent a first step toward similar rights granted to a wider variety of works, or it may represent the very limit to which Congress is willing to go in extending the scope of moral rights.

D. Fair Use

Even the moral rights of §\ 106A are subject to the defense of fair use.\textsuperscript{110} Fair use may be more litigated in the courts, and more debated in the scholarly literature, than any other issue in copyright. Perhaps this is because fair use is notoriously difficult to define and, potentially, the most important counterweight to the more explicit rights granted to authors in the Copyright Act. Indefinite as fair use may be, it is critical to assessing the rights of consumers, if any, to modify copyrighted works in the absence of explicit statutory guidance. Fair use, one might say, is the wild card in the copyright deck.

Current formulations of the fair use defense may be traced to some remarks of Justice Story in \textit{Folsom v. Marsh},\textsuperscript{111} an 1841 case involving a published collection of letters by George Washington. After observing that both patents and copyrights “approach...what may be called the metaphysics of the law, where the distinctions

\textsuperscript{107} Section 106A begins, “Subject to section 107 [regarding fair use]...” Nevertheless, the House Report comments that fair use claims will seldom be effective in this context, in part because “the modification of a single copy or a limited edition of a work of visual art has different implications for the fair use doctrine than does an act involving a work reproduced in potentially unlimited quantities.” \textsc{Goldstein, supra} note 27, § 5.14.2, at 5:236 n.18 (quoting \textsc{H.R. Rep. No. 101-514, at 22 (1990)}). Presumably, injury to a single copy of a work available in multiple copies is more tolerable to the author—and hence more “fair” when weighed against other circumstances—than injury to a copy that is, relatively speaking, irreplaceable.

\textsuperscript{110} 9 F. Cas. 342 (C.C.D. Mass. 1841) (No. 4901).
are, or at least may be, very subtile and refined, and, sometimes, almost evanescent,"\textsuperscript{112} Justice Story observed that questions of "piracy" in copyright

often depend upon a nice balance of the comparative use made in one of the materials of the other; the nature, extent, and value of the materials thus used; the objects of each work; and the degree to which each writer may be fairly presumed to have resorted to the same common sources of information.\textsuperscript{113}

As an example, he explains that "a reviewer may fairly cite largely from the original work, if his design be really and truly to use the passages for the purposes of fair and reasonable criticism," but that the same reviewer would commit piracy "if he thus cites the most important parts of the work, with a view, not to criticize, but to supersede the use of the original work, and substitute the review for it."\textsuperscript{114} The use in the first instance would be fair; in the second, unfair.

The fair use doctrine, as summarized by the Supreme Court, "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."\textsuperscript{115} Currently, the fair use defense is codified in § 107 of the Copyright Act. In its broadest and most conclusory terms, § 107 states that "[n]otwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work . . . is not an infringement of copyright."\textsuperscript{116} Section 107 further provides examples of the kinds of use that might be fair, including uses "for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research."\textsuperscript{117} It does not appear that all such uses must be fair. Finally, § 107 directs that in any particular case the factors to consider must 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.\textsuperscript{118}

Each factor has been subject to judicial gloss. The "purpose and character of the use"—specifically, whether the use is "commercial" or nonprofit—may give rise to an evidentiary presumption. In \textit{Sony Corp. of America v. Universal City Studios, Inc.},\textsuperscript{119} Justice Stevens, author of the majority opinion, wrote that "every commercial use of copyrighted material is presumptively an unfair exploitation of the monopoly privilege
that belongs to the owner of the copyright."\textsuperscript{120} Where the use is "for commercial gain," a likelihood of harm to the copyright owner "may be presumed."\textsuperscript{121} "[N]oncommercial uses are a different matter," and, in such cases, the likelihood of harm "must be demonstrated."\textsuperscript{122} In \textit{Campbell v. Acuff-Rose Music, Inc.},\textsuperscript{123} the Court softened the presumptions, if it did not reject them entirely. Complaining that the Court of Appeals for the Sixth Circuit had given "virtually dispositive weight" to the for-profit nature of 2 Live Crew's parody of Roy Orbison's song "Oh, Pretty Woman,"\textsuperscript{124} the court abjured sharp categorizations in the area of fair use.\textsuperscript{125} \textit{Sony}, the Court explained, had created no "hard evidentiary presumption" for commercial uses, but had considered the commercial nature of the use as one factor weighing against the defendant.\textsuperscript{126} Any presumption that might be justified by \textit{Sony} would be limited to outright duplication for commercial uses, as opposed to more complex situations like parody.\textsuperscript{127} The Court had less occasion to comment on the fair use presumption for noncommercial uses, though the general criticism of bright-line tests may cast even that into doubt.

With respect to the second factor—"the nature of the copyrighted work"—courts have observed that works of fiction may receive more protection than works of fact.\textsuperscript{128} That a work is unpublished may also weigh against fair use, though it is not dispositive.\textsuperscript{129} The third factor—"the amount and substantiality of the portion used in relation to the copyrighted work as a whole"—is relatively straightforward, but as the \textit{Sony} case demonstrates, even duplication of an entire work may be fair use.\textsuperscript{130} One

\textsuperscript{120} \textit{Id.} at 451.
\textsuperscript{121} \textit{Id.}
\textsuperscript{122} \textit{Id.}
\textsuperscript{123} 510 U.S. 569 (1994).
\textsuperscript{124} \textit{Id.} at 584.
\textsuperscript{125} Congress resisted attempts to narrow the ambit of this traditional enquiry by adopting categories of presumptively fair use, and it urged courts to preserve the breadth of their traditionally ample view of the universe of relevant evidence. Accordingly, the mere fact that a use is educational and not for profit does not insulate it from a finding of infringement, any more than the commercial character of a use bars a finding of fairness. If, indeed, commerciality carried presumptive force against a finding of fairness, the presumption would swallow nearly all of the illustrative uses listed in the preamble paragraph of § 107, including news reporting, comment, criticism, teaching, scholarship, and research, since these activities 'are generally conducted for profit in this country.'


\textsuperscript{126} \textit{Campbell}, 510 U.S. at 584–85.
\textsuperscript{127} \textit{Id.} at 591.
\textsuperscript{128} \textit{See Harper & Row}, 471 U.S. at 563 ("The law generally recognizes a greater need to disseminate factual works than works of fiction or fantasy."). Works of fiction are also likely to include a greater proportion of protectable expression.

\textsuperscript{129} \textit{See id.} at 554 ("We conclude that the unpublished nature of a work is '[a] key, though not necessarily determinative, factor' tending to negate a defense of fair use." (alteration in original) (citations omitted)). The reason for the difference is that "publication of an author's expression before he has authorized its dissemination seriously infringes the author's right to decide when and whether it will be made public, a factor not present in fair use of published works." \textit{Id.} at 551.

\textsuperscript{130} \textit{See Sony Corp. of Am. v. Universal City Studios, Inc.}, 464 U.S. 417, 449–50.
factor weighing in favor of fair use, even where the entire work is copied, would be that the work is otherwise unavailable.\textsuperscript{131} The last fair use factor—"the effect of the use upon the potential market for or value of the copyrighted work"—has frequently been described as the most important,\textsuperscript{132} probably because it goes to the heart of the financial reward offered to authors as an incentive to create. As Justice Story observed, a use that substitutes in the marketplace for the author's work hurts him most directly. A use, such as a review, that does not substitute for the original causes less harm to the author's financial incentives,\textsuperscript{133} so that the positive benefits of the use can more easily predominate.

In recent years, the question of whether the challenged use is "transformative" has assumed an important role in the fair use analysis. A transformative use is one that "adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message."\textsuperscript{134} Parody, which requires original thought and expression and which conveys an entirely new message, is one example of a potentially transformative use. Transformative uses are favored because they further the goal of copyright, which is to foster the exchange of ideas by encouraging the creation and dissemination of new works of authorship.\textsuperscript{135} A transformative work is a new work, offering additional expression or a new point of view. Moreover, to the extent that the new work is genuinely "transformed" in comparison to the original, it is less likely to substitute for the original in the marketplace. Consumers attracted to Roy Orbison's version of "Oh, Pretty Woman" might purchase a similar rendition by another artist, but they are unlikely to consider 2 Live Crew's impressionistic rap parody an acceptable substitute.\textsuperscript{136}

The fair use inquiry is not designed with sharp distinctions in mind. The combination of factors to consider, inconclusive examples to ponder, and a general direction to permit only uses that are "fair," invites courts to exercise a great deal of

\begin{itemize}
  \item \textsuperscript{131} See Harper \& Row, 471 U.S. at 553.
  \item \textsuperscript{132} See Stewart v. Abend, 495 U.S. 207, 238 (1990); Harper \& Row, 471 U.S. at 566. But see Leibovitz v. Paramount Pictures Corp., 137 F.3d 109, 113 (2d Cir. 1998) (concluding that the preeminence of this factor was "modified" in Campbell by the aggregate consideration of all factors).
  \item \textsuperscript{133} A negative review may reduce the demand for the copyrighted work, but that is not the kind of marketplace injury that counts in a fair use analysis. See Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 592 (1994) ("This distinction between potentially remediable displacement and unremediable disparagement is reflected in the rule that there is no protectible derivative market for criticism. The market for potential derivative uses includes only those that creators of original works would in general develop or license others to develop. Yet the unlikelihood that creators of imaginative works will license critical reviews or lampoons of their own productions removes such uses from the very notion of a potential licensing market.").
  \item \textsuperscript{134} Id. at 579.
  \item \textsuperscript{135} See id. ("Although such transformative use is not absolutely necessary for a finding of fair use, the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works. Such works thus lie at the heart of the fair use doctrine's guarantee of breathing space within the confines of copyright, and the 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." (citations omitted)).
  \item \textsuperscript{136} See id. at 591 ("[A]s to parody pure and simple, it is more likely that the new work will not affect the market for the original . . . by acting as a substitute for it . . . ").
\end{itemize}
discretion. This permits useful flexibility, accommodating the differences presented by disparate factual situations, but at the cost of a glaring absence of predictability. The propensity of the fair use analysis to breed close calls is well illustrated by Sony. Although that decision has had as much impact on people's daily lives as any in the recent history of copyright, the outcome turned on the vote of a single Justice.

1. Theoretical Approaches

A number of copyright scholars have attempted to construct a more rigorous fair use analysis, grounded in fundamental policy objectives. Wendy Gordon's frequently cited article Fair Use as Market Failure looks to economics. Economists approach the marketplace as a mechanism for distributing society's resources. When the marketplace functions correctly, resources, through the process of exchange, find their way to the individuals who value them the most—an outcome beneficial to individuals and to society at large.  

137 If there were no copyrights, authors would still have, as their incentive to create, the rewards available in a competitive marketplace. However, those rewards would be undermined by the "public goods" nature of works of authorship. A public good is one that is difficult to protect from unauthorized use, and that is "inexhaustible," in the sense that additional consumers do not diminish the supply of the good or detract from its utility.  

138 A lighthouse is a public good; its benefits cannot be limited to a privileged group (because anyone can see it) and its use for navigation by an unauthorized sailor makes it no less useful to those who paid for it. Works of authorship, to a degree, have the same characteristics. When they are easy to copy (as many are, thanks to modern technology), their use is difficult to restrict. They are also "nonrivalrous"; one who reads a novel without permission does not detract from the enjoyment of an authorized reader. If left to the marketplace, public goods, whether lighthouses or novels, will be produced in smaller numbers than their value to society warrants. That is because it is difficult to prevent "free riders" from enjoying the benefit of the good while doing nothing to defray the costs.  

139 The consequence of free riding is that society's resources are diverted toward less desirable, but more profitable, uses. In the case of works of authorship, the solution to this problem is to provide legal sanctions against copying, thereby erecting a barrier against unauthorized use and restoring to the author the financial incentive to create.  

140 Copyright creates a functioning market for works of authorship. As with all markets, however, the reality can diverge from the ideal in ways that threaten the optimal distribution of resources. Transaction costs, for example, can prevent desirable outcomes. Suppose that consumer A values his use of B's copyrighted work in an amount equal to x. In a frictionless market, A would gladly pay B as much as x for that use, and, assuming that the use by A did not detract from any other opportunities or

138. Id. at 1610–11.
139. Id. at 1611. The marketplace can be relied upon to produce the socially optimal goal only when "all costs and benefits [are] 'internal' to the transactions that generate them, in the sense that the costs or benefits [are] borne by persons with decision-making power in a given transaction and not by persons external to it." Id. at 1607.
140. Id. at 1610–13.
otherwise injure him, B would gladly accept that amount. The benefit enjoyed by A would then figure in B's incentive to produce. But A may incur costs in appraising the value of B's copyrighted work, locating B, negotiating with B, and transferring funds to B. If those costs exceed x, the transaction cannot be completed; A cannot benefit from B's work, nor can B profit from the usefulness of his work to A. Value that cannot be captured leads to a misallocation of resources. It is a "market failure."141

Fair use, in Professor Gordon's view, is a partial remedy for market failure. The fair use defense should privilege the use of a copyrighted work if (1) there is a market failure of the kind described above; (2) permitting the use is "socially desirable"; and (3) the result would not substantially undermine the incentives available to the copyright owner.142 This approach would suggest that fair use should be applied sparingly; if there is nothing stopping the user from paying, then the user must pay.

An economic justification for depriving a copyright owner of his market entitlement exists only when the possibility of consensual bargain has broken down in some way. Only where the desired transfer of resource use is unlikely to take place spontaneously, or where special circumstances such as market flaws impair the market's ordinary ability to serve as a measure of how resources should be allocated, is there an economic need for allowing nonconsensual transfer. Thus, one of the necessary preconditions for premising fair use on economic grounds is that market failure must be present.143

Some attempts to rationalize fair use look more broadly to the constitutional goals of copyright. Pierre Leval's *Toward a Fair Use Standard* begins by exposing a lack of coherence and consistency in applying the doctrine. Judges, he concludes, share no common understanding of what fair use means, leading to results that are unpredictable if not unprincipled.144 Judge Leval's solution lies in attention to the fact that "copyright

141. *See id.* at 1608 ("[P]erfect competition depends on the absence of transaction costs. If all desirable transfers are to occur, it must be costless to obtain knowledge, costless to locate all persons affected by a transaction, costless to dicker with them over prices and terms, and costless to maintain an enforcement mechanism to ensure that the bargain is adhered to. . . . When the transaction costs outweigh the net benefits that the parties would otherwise anticipate from a transfer, then the presence of the transaction costs may block an otherwise desirable shift in resource use.” (footnotes omitted)).

142. *Id.* at 1614. ("The first element of this test ensures that market bypass will not be approved without good cause. The second element of the test ensures that the transfer of a license to use from the copyright holder to the unauthorized user effects a net gain in social value. The third element ensures that the grant of fair use will not undermine the incentive-creating purpose of the copyright law.” (footnote omitted)).

143. *Id.* at 1615. When the user cannot pay, because the conditions of the market would not make payment rational, fair use may still be denied based on more indefinite factors such as whether the use is "socially desirable." Note that even when permitting the use leads to a more desirable outcome, it is not the ideal outcome from the resource-allocation perspective because the author's reward (and incentive to create) does not reflect the full value of the work.

144. Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1106–07 (1990) ("The assumption of common ground is mistaken. Judges do not share a consensus on the meaning of fair use. Earlier decisions provide little basis for predicting later ones. Reversals and divided courts are commonplace. The opinions reflect widely differing notions of the meaning of fair use.” (footnotes omitted)).
Copyright, instead, is a vehicle for encouraging authors to contribute to "the intellectual enrichment of the public." Emphasis on the public interest puts fair use in proper perspective. Fair use is best seen not as "a bizarre, occasionally tolerated departure from the grand conception of the copyright monopoly" but as "a necessary part of the overall design," and one that is "integral to copyright's objectives" of benefiting society. It is for that reason that the Copyright Act's fair use provision singles out uses of obvious public benefit—criticism, comment, news reporting, teaching, scholarship, and research. Accordingly, fair use should generally be held to apply where "the use [is] of a character that serves the copyright objective of stimulating productive thought and public instruction without excessively diminishing the incentives for creativity."

This focus leads Judge Leval to emphasize transformative use as the clearest form of fair use. Where a transformative use "adds value to the original," contributing "new information, new aesthetics, new insights and understandings," such use is "the very type of activity that the fair use doctrine intends to protect for the enrichment of society." Only when it substantially impairs the author's financial rewards should a transformative use be denied the status of fair use. It is reasonable to conclude that Judge Leval would find the fair use defense applicable in more instances than would Professor Gordon. A romantic ballad transformed into a rap parody provides an entirely new work for the public to enjoy, at a cost to the original author that may be relatively small, both in terms of substituted sales and lost licensing income. Yet the losses may not be so insignificant, or the transaction costs so high, that the rap artist could not have paid for the privilege due to market failure. Indeed, the facts in Campbell were that 2 Live Crew sought permission to parody Roy Orbison's song, and were refused. A rejected deal is not, necessarily, an instance of market failure; the

145. Id. at 1107.
146. Id. "The copyright law embodies a recognition that creative intellectual activity is vital to the well-being of society. It is a pragmatic measure by which society confers monopoly-exploitation benefits for a limited duration on authors and artists ... in order to obtain for itself the intellectual and practical enrichment that results from creative endeavors." Id. at 1109.
147. Id. at 1110.
148. Id.
149. Id.
150. See id. at 1111.
152. "By definition every fair use involves some loss of royalty revenue because the secondary user has not paid royalties. Therefore, if an insubstantial loss of revenue turned the fourth factor in favor of the copyright holder, this factor would never weigh in favor of the secondary user. And if we then gave serious deference to the proposition that it is 'undoubtedly the single most important element of fair use,' fair use would become defunct. The market impairment should not turn the fourth factor unless it is reasonably substantial. When the injury to the copyright holder's potential market would substantially impair the incentive to create works for publication, the objectives of the copyright law require that this factor weigh heavily against the secondary user." Leval, supra note 144, at 1124–25 (footnotes omitted).
153. See Campbell, 510 U.S. at 572–73.
copyright owner may simply have calculated that the costs of ridicule were higher than any plausible fee. Unless the cost of ridicule could be treated as a substantial blow to the author’s incentive—contrary to the usual view that the market impact of negative commentary should be left out of the fair use analysis—Judge Leval would likely conclude, market failure or not, that the public interest in having the parody demands that it be considered fair use.

Criticizing the fair use inquiry as it was prior to *Campbell*, Judge Leval complained that “[d]ecisions ... seem rather to result from intuitive reactions to individual fact patterns.” Judges relied on “notions of fairness, often more responsive to the concerns of private property than to the objectives of copyright.” Lloyd Weinreb, however, has advocated just such a wide-ranging fair use inquiry, not limited by economic analysis, by the four factors enumerated in §107, or even by the instrumentalist goal of copyright. “Fair use,” he argues, “does not exclude consideration of factors not related to the utilitarian justification for copyright—other social values or, more simply, fairness.” The four factors specifically enumerated in §107 are “central,” but not exclusive; “copyright is itself set in a social context, and more general considerations of fairness may come into play.” The “concerns of private property” are exactly the sort of consideration that lead to an understanding of what is fair or unfair, and, in the end, a judge’s instincts play a critical role.

To those who argue that such an ad hoc approach leads to inconsistency, Weinreb replies:

I doubt that the results in concrete cases can be made predictably responsive to a limited set of definite principles—certainly not large, general principles and not very often even more specific, intermediate ones. Rather, fair use has historically been and ought to remain what its name suggests: an exemption from copyright infringement for uses that are fair. What is fair is as fact-specific and resistant to generalization in this context as it is in others. Development of the doctrine of fair use ought to proceed, therefore, not by deduction from principle but by induction from concrete cases. That approach will give us as much predictability as the subject allows.

154. See id. at 591–92 (“[W]hen a lethal parody, like a scathing theater review, kills demand for the original, it does not produce a harm cognizable under the Copyright Act.”).
155. See Leval, supra note 144, at 1128–29 (excluding artistic integrity from the factors properly considered in a fair use analysis).
156. Id. at 1107.
157. Id.
159. Id. at 1150.
160. Id. at 1152.
161. Id.
162. Leval, supra note 144, at 1107. “For it is the very point of having something as property that one does not have to justify its use; ‘It’s mine’ is all one needs to say.” Weinreb, supra note 158, at 1139.
163. Weinreb, supra note 158, at 1138 (emphasis in original).
Less content with that confused state of affairs, William Fisher offers two ambitious schemes for refashioning fair use—one based on maximizing the efficient allocation of resources, and the other designed to promote a utopian conception of “the good life.” The latter model, which Fisher seems to hold in higher regard, posits that “the good life” is a life in which individuals do not merely accept their circumstances, but in which they take charge, fashioning themselves and their environments by exercising their freedom of choice. Fisher endorses John Stuart Mill’s conclusion that “perception, judgment, discriminative feeling, mental activity, and even moral preference, are exercised only in making a choice,” and that “[t]he mental and moral, like the muscular powers, are improved only by being used.” Exercising an active mind is “good for the soul.”

In matters of the intellect, persons living the good life are not passive consumers, but active participants in the exchange of ideas. Fostering that goal, and facilitating choice, demands copyright laws that “provid[e] the populace as wide a range of cultural artifacts as possible.” Consumers who can choose between Roy Orbison’s version of “Oh, Pretty Woman” and 2 Live Crew’s are enriched as human beings. Fisher suggests, therefore, “giv[ing] special consideration, when deciding which uses of a type of copyrighted material should be deemed fair, to those likely to produce ‘derivative works’ that will add to the variety of intellectual products available to the public.”

Fisher’s vision of “the good life” provides the strongest support for a broad right of consumer modification. In comparison, Professor Gordon’s “market failure” approach leads to sharply limited rights, and the utilitarian emphasis of Judge Leval leaves almost as many questions unanswered as Professor Weinreb’s maxim of “fair’s fair.” If one is seeking a sharp boundary on which consumers can rely, it is not to be found in fair use, particularly when the entire doctrine is subject to so many competing rationales. Because many instances of consumer modification are small in scale, surer guidance might be found in the principle of de minimis infringement.

165. This portion of Fisher’s argument is notable for its advocacy of rules allowing copyright owners to engage in price discrimination. See id. at 1742 (“[J]udges should watch for situations in which unauthorized use of copyrighted material undermines price discrimination schemes and should be chary of holding such uses fair.”). The potential advantages of price discrimination are discussed in Part IV.A.
166. Fisher, supra note 164, at 1744.
167. Id. at 1748–49.
168. Id. at 1749 (quoting JOHN STUART MILL, ON LIBERTY, reprinted in THE PHILOSOPHY OF JOHN STUART MILL 252 (M. Cohen ed. 1961)).
170. See id.
171. Id. at 1772.
172. Id. (quoting 17 U.S.C. § 106 (1982)).
E. De Minimis Infringement.

Where patents are concerned, no infringement is too small to count. Copyright, on the other hand, has a tradition of overlooking trivial instances of copying, in some cases invoking the principle of de minimis non curat lex. Where only a tiny fragment of the copyrighted work has been misappropriated, the copying may be so insignificant that it falls short of the quantitative threshold of "substantial similarity." Also, if the copied portion is small this may figure heavily in the fair use analysis, which takes into account "the amount and substantiality of the portion used in relation to the copyrighted work as a whole." More problematic are cases where a substantial portion of the copyrighted work has been duplicated, but the consequences of the trespass are insignificant. These are the cases where a separate de minimis defense may be most needed, yet many courts, following what Nimmer describes as "the overwhelming thrust of authority," hold defendants liable in cases of significant copying, even in the absence of significant injury. For example, in Warner Bros., Inc. v. Dae Rim Trading, Inc., the Court of Appeals for the Second Circuit, while deploring the "high-handed" methods of Warner Brothers' attorneys, still affirmed an award of $100 in damages against a "mom and pop" store that had offered for sale twelve infringing toys, half of them purchased by Warner Brothers' agent for $15.

173. See Embrex, Inc. v. Service Eng'g Corp., 216 F.3d 1343, 1352-53 (Fed. Cir. 2000) (Rader, J., concurring) ("Since its inception, this court has not tolerated the notion that a little infringement—de minimis infringement—is acceptable infringement or not infringement at all. The statute states directly that any unauthorized use of a patented invention is an infringement. Thus, the statute leaves no leeway to excuse infringement because the infringer only infringed a little. Rather, the statute accommodates concerns about de minimis infringement in damages calculations." (citations omitted)).  
174. See 1 NIMMER & NIMMER, supra note 42, § 8.01[G], at 8-24 ("The legal maxim of de minimis non curat lex applies to copyright actions no less than to other branches of the law."); GOLDSSTEIN, supra note 27, § 5.0, at 5:7 ("Although the 1976 Copyright Act does not categorically exempt private uses from copyright control, courts applying the Act have drawn an ad hoc line for de minimis trespasses, technical violations 'so trivial that the law will not impose legal consequences.'" (italics in original) (citation omitted)).  
175. Ringgold v. Black Entm't Television, Inc., 126 F.3d 70, 74 (2d Cir. 1997); see also Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255, 267-68 (5th Cir. 1988) (copying of thirty characters from fifty pages of software source code was too insignificant to support a claim of substantial similarity).  
176. 17 U.S.C. § 107. In Ringgold, Judge Newman argued that the concept of de minimis infringement should not be interjected in the fair use analysis because the "amount" factor "concerns a quantitative continuum" having "no precise threshold below which the factor is accorded decisive significance." Ringgold, 126 F.3d at 75-76.  
177. See 1 NIMMER & NIMMER, supra note 42, § 8.01[G], at 8-24.  
178. Id.  
179. See GOLDSSTEIN, supra note 27, § 5.0, at 5:7-8 ("Copyright law sets the de minimis hurdle to infringement relatively low, and even the briefest, most incidental, uses can be actionable." (italics in original)).  
180. 877 F.2d 1120 (2d Cir. 1989).  
181. Id. at 1122.  
182. One instance in which relief was denied on the basis of de minimis infringement was Knickerbocker Toy Co. v. Azrak-Hamway Int'l, Inc., 668 F.2d 699, 703 (2d Cir. 1982).
Much of the positive discussion of the de minimis defense can be found in opinions declining to apply it. A recent example is Judge Leval's opinion in On Davis v. The Gap, Inc., where the court held The Gap liable for publishing an advertisement in which a model wore the plaintiff's copyrighted eyewear. Given the prominence of the eyewear in the advertisement and the fact that others had paid licensing fees in similar situations, the court found that the plaintiff's injury, while small, was not sufficiently trifling for de minimis treatment. Nevertheless, the court described the de minimis doctrine as "an important aspect of the law of copyright" because it protects the trivial instances of copying that are "a significant part of modern life."  

Most honest citizens in the modern world frequently engage, without hesitation, in trivial copying that, but for the de minimis doctrine, would technically constitute a violation of law. We do not hesitate to make a photocopy of a letter from a friend to show to another friend, or of a favorite cartoon to post on the refrigerator. Parents in Central Park photograph their children perched on Jose de Creeft's Alice in Wonderland sculpture. We record television programs aired while we are out, so as to watch them at a more convenient hour. Waiters at a restaurant sing "Happy Birthday" at a patron's table. When we do such things, it is not that we are breaking the law but unlikely to be sued given the high cost of litigation. Because of the de minimis doctrine, in trivial instances of copying, we are in fact not breaking the law.

As Judge Leval noted, courts are rarely called upon to rule in such cases because the copyright owner has little incentive to sue.  

Private uses of the kind described in On Davis seem the best candidates for the de minimis defense. If they harm the copyright owner at all, it is only by denying him a fee for the use, and in many cases one would expect that a consumer required to pay a fee would simply avoid using the copyrighted work at all. Many common instances of consumer modification are similar. Strictly speaking, tearing a few recipes from a magazine might constitute an "abridgement" violative of the right of adaptation, but the copyright owner would be unlikely to sue, and a court unlikely to grant relief. The problem with depending on the de minimis defense as the guardian of consumer modifications (apart from the scarcity of authority on which to rely) is that when enough trivial instances are aggregated, as they may be when accomplished through defendant had used an illustration of the plaintiff's copyrighted toy on its own "blister card," but only as a mock-up for internal use. Id. at 702.

183. 246 F.3d 152 (2d Cir. 2001).
184. Id. at 173.
185. Id.
186. Id. Statutory damages are available under 17 U.S.C. § 504(c) in an amount up to $30,000 for each infringement (or $150,000 for each willful infringement), but judges have discretion to award far smaller amounts, and would likely do so in the kinds of situations described by Judge Leval, even if they did not apply the doctrine of de minimis infringement.
187. See Am. Geophysical Union v. Texaco, Inc., 60 F.3d 913, 916 (2d Cir. 1994) (distinguishing between institutional photocopying of technical articles for use by 400–500 scientists and the hypothetical case of photocopying "by an individual, for personal use in research or otherwise (not for resale); in the latter case, "under the fair use doctrine or the de minimis doctrine, such a practice by an individual might well not constitute an infringement").
188. See supra Part I.A.
specialized technologies, they are no longer so trivial. Suppose that thousands of consumers subscribed to an electronic gourmet magazine, and a third party programmer supplied those consumers with software specifically designed to extract certain recipes from that magazine based on ingredients, cooking methods, or health benefits. A single use of that software might be de minimis, but together they could not be dismissed as trivial. The software manufacturer who made it all possible would be a reasonable target for litigation, and the amount at stake, in light of the manufacturer's aggregate revenue and the fee that such a manufacturer might reasonably pay (and, through its pricing, require consumers to pay), would be too significant to overlook.

II. EXPERIENCE TRANSFORMED

The emphasis in Part I was on legal doctrines that affect the rights of consumers, but that are more typically used in balancing the rights of author against author. Part II begins by examining certain rights granted to consumers in the Copyright Act, including those embraced by the principle of "first sale." Next is a discussion of Sony, the most important case on what might be termed "selfish uses"—uses benefiting consumers without contributing, in any direct manner, to the "Progress of Science." Part II concludes with a review of cases discussing a consumer's right to modify copyrighted computer software.

A. First Sale and Other Statutory Rights

Courts once presumed that the purchaser of a painting automatically acquired the right to reproduce the work, unless the artist who sold it had made an express reservation of rights. Today, the Copyright Act draws a sharp distinction between ownership of a tangible embodiment of a copyrighted work and ownership of the work in the abstract. Section 202 provides:

Ownership of a copyright, or of any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied. Transfer of ownership of any material object, including the copy or phonorecord in which the work is first fixed, does not of itself convey any rights in the copyrighted work embodied in the object; nor, in the absence of an agreement, does transfer of ownership of a copyright or of any exclusive rights under a copyright convey property rights in any material object.

The purchaser of a painting, book, compact disc, or DVD does not acquire, automatically, the exclusive right of reproduction, performance, display, or adaptation, even if the purchaser acquired the single tangible embodiment of the work. Ownership of copyright can be transferred (except by operation of law) only by a written instrument.

Section 109 of the Copyright Act describes rights that are obtained by lawful acquisition of a particular copy of a copyrighted work—the so-called "first sale" rights.

191. Id. § 204(a) (2000).
Section 109 states that, notwithstanding the language of § 106(3) giving the copyright owner the exclusive right "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," the "owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord." Section 109(b)(1)(a), however, severely limits opportunities for renting, leasing, or lending sound recordings and computer software. Section 109(c) states that, notwithstanding the exclusive right of public display conveyed to the copyright owner in § 106(5), the "owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located." Note that § 109 conveys no right of reproduction or adaptation.

Section 117 of the Copyright Act allows the owner of a copy of a computer program to make a copy, or an adaptation, of that program if it is "an essential step in the operation of the computer program in conjunction with a machine and ... it is used in no other matter." Similarly, a copy or adaptation may be made if it is "for archival purposes only" and "all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful." Certain temporary copies of software may be generated in conjunction with computer maintenance and repair. Section 1008 of the Copyright Act bars infringement actions based on noncommercial use by consumers of devices for making analog or digital musical recordings.

Section 120(b) of the Copyright Act protects the rights of building owners following the addition of architectural works to the catalog of copyrightable subject matter. Notwithstanding the copyright owner’s exclusive right of adaptation under § 106, "the owners of a building embodying an architectural work may, without the consent of the ... copyright owner ... make or authorize the making of alterations to such building, and destroy or authorize the destruction of such building." A separate work of art incorporated in a building, such as a mural painted in the lobby, raises more complicated issues. Such works may qualify as works of visual art protected under § 106(A)(a)(3) from certain instances of distortion, mutilation, modification, or destruction. If the owner of the building wishes to remove the work, and it can be removed without distortion, mutilation, modification, or destruction, the owner must attempt to notify the author so that the author may remove it or pay for its removal. If the author fails to act, the work need not be preserved.

194. Id. § 117(a)(2).
195. See id. § 117(c).
196. Manufacturers of digital recording devices and media have to pay royalties to compensate copyright owners for the use of such devices. See id. §§ 1003–1007.
197. Id. § 120(b).
198. See supra Part I.C.
199. 17 U.S.C. § 113(d)(2). If the author pays for the removal, the author thereafter owns the work. Id. The author’s rights do not apply where the author consented to the installation of the
These explicit concessions reflect the interests of consumers in their enjoyment of, and dominion over, their tangible property. Consumers expect the freedom to sell their possessions, give them away, or display them in their homes. Owners of computers expect to be able to use them as they were intended to be used, or repair them when they are broken. Within limits, building owners expect the freedom to remodel their buildings or demolish them and start over. All of these conventional uses of property fall on the "material object" side of the § 202 divide. In contrast, the purchaser of a single copy of a copyrighted novel would not ordinarily expect the freedom to distribute multiple copies. Copying for such purposes is an act more related to "the work" than to the "material object" the owner may possess. If ownership of a single copy conferred rights in unlimited copies, the distinction between the work and the material object could not be maintained.

Consumers could be said to receive other rights by omission. In contrast to patent law, which provides the owner of a patent the exclusive right to "use" the patented invention, copyright law provides the owner of the copyright no exclusive right to use the copyrighted work. One does not need the permission of the copyright owner to read a novel, study a painting, or look up information in a directory. In addition, the performance and display rights of § 106 are limited to public performances and displays. A performance is "public" if it occurs "at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances are gathered." By implication, consumers can, without the permission of the copyright owner, perform or display a copyrighted work in the privacy of their homes. Consumers can sing in the shower, or enjoy a movie with family and friends, without owing royalties.

It is possible that consumers receive further rights by implied license. Although copyrights can be transferred only by a written instrument, nonexclusive licenses may be implied under the circumstances. For example, a newspaper receiving a letter to the editor usually has an implied license to print it. Implied rights for consumers is an area relatively unexplored and, as discussed in Part IV.B., it is one potential mechanism for dealing with consumer modifications intended for private consumption.

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201. Section 101 of the Copyright Act states that to perform or display a work "publicly" means—
(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or
(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same or at different times.

202. If the letter is edited contrary to express restrictions by the sender, the situation may require a more complex fair use analysis. See, e.g., Diamond v. Am-Law Pub. Corp., 745 F.2d 142 (2d Cir. 1984).
B. The Consumer Right to Time-Shift

Some new technologies, such as photocopiers, strain the traditional balance of copyright simply by facilitating copying to a degree never experienced before. Other technologies mark a distinct qualitative break with the past, making possible uses of copyrighted works with no obvious historical analogs. The latter raise the most difficult legal questions. The ability to record broadcast television programs made possible by the home video tape recorder is one example. Saving a television program for later viewing was not a magnified instance of what consumers had done in the past, only more so, but rather something entirely new. In superficial terms, at least, the Copyright Act addresses it; home taping is an instance of copying, and copying is one of the exclusive rights of the copyright owner, unless subject to an exception such as fair use. Yet the private nature of the copying, the questionable impact of the copying on the copyright owners’ revenues, the fact that the broadcast television programs were initially made available without charge, and the unfamiliar convenience of time-shifting combined to present a genuinely novel situation and a difficult test for the concept of fair use.

The movie-studio plaintiffs in Sony challenged sales of the Betamax video recorder as an act of contributory infringement. Sony’s liability, if any, would have to “rest on the fact that it [had] sold equipment with constructive knowledge . . . that its customers [(i.e., consumers using the machines in their homes)] may use that equipment to make unauthorized copies of copyrighted material.” The majority of the Supreme Court found no precedent in copyright law for such a theory, and the closest parallel was the patent law doctrine of contributory infringement through sales of articles that may be used in practicing the patented invention. One can infringe a patent by selling a component of a patented machine, or an apparatus used in a patented process, when the article sold is “especially made or especially adapted for use in an infringement” and “not . . . suitable for substantial noninfringing use.” The principle that supports an action for contributory infringement of a patent also supports

203. See Sony, 464 U.S. at 467 n.16 (Blackmun, J., dissenting). Justice Blackmun observed that hand-copying by consumers had always been possible, but the “drudgery” of hand-copying ensured that it was never more than small-scale. However, “[t]he recent advent of inexpensive and readily available copying machines . . . has changed the dimensions of the problem.” Id.

204. Consumers certainly used audio recording devices to record radio broadcasts, but not until the introduction of the video tape recorder, with its built-in timer to capture a scheduled broadcast, could true time-shifting (as opposed to broadcast archiving) become convenient and widespread.


206. Id. at 439.

207. Id. at 439–42.

208. 35 U.S.C. § 271(c) (2000) ("Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer."); see also Husky Injection Molding Sys., Ltd. v. R&D Tool & Eng’g Co., 291 F.3d 780, 784 (Fed. Cir. 2002).
such an action under copyright law: "adequate protection of [the] monopoly may require the courts to look beyond actual duplication of a device or publication to the products or activities that make such duplication possible." An opportunity to challenge those who supply the means for infringement satisfies the "copyright holder's legitimate demand for effective—not merely symbolic—protection of the statutory monopoly." However, patent owners are not permitted to control the sale of articles having substantial noninfringing uses, because such power would extend the patent owner's dominion beyond the limits of the statutory grant. By the same token, "the sale of copying equipment . . . does not constitute contributory infringement if the [equipment] is widely used for legitimate, unobjectionable purposes," or indeed, for any "substantial noninfringing uses."

In this case, the noninfringing use was "private, noncommercial time-shifting in the home," which according to survey evidence was the primary use for the Betamax device. Time-shifting means "the practice of recording a program to view it once at a later time, and thereafter erasing it." It "enables viewers to see programs they would otherwise 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." Time-shifting is a noninfringing use, according to the majority in Sony, because some copyright owners do not object to it, and because, in any event, it is a legitimate fair use of copyrighted material.

Several factors were important to the majority's conclusion that time-shifting is a fair use. The most general consideration is that copyright exists for the public benefit; the private advantages to the copyright holder are secondary, and material only to the extent that, by stimulating the creative activities of authors, they ultimately serve the public interest in access to works of authorship. In each case, "the private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts." By increasing access to television programs, time-shifting promotes such "availability." On the motivational side of the balance, the plaintiffs had failed to prove any likelihood of financial injury. Because time-shifting is a "noncommercial" use of copyrighted material, the plaintiffs bore the burden of proving

209. *Sony*, 464 U.S. at 442.
210. *Id.*
211. *See* 35 U.S.C. § 271(c) (limiting contributory infringement to sale of an article that is "not . . . suitable for substantial noninfringing use"); Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 189-201 (1980) (discussing the history of contributory infringement and the goal of limiting the patentee to a monopoly of appropriate scope).
212. *Sony*, 464 U.S. at 442.
213. *Id.*
214. *Id.* at 423.
215. *Id.*
216. *Id.*
217. Fred Rogers, for one, testified that he had no objection to viewers taping *Mr. Rogers' Neighborhood*. He considered it "a real service to families to be able to record children's programs and to show them at appropriate times." *Id.* at 445.
218. *Id.* at 442.
219. *Id.* at 429, 431-32.
220. *Id.* at 432.
221. *See id.* at 421 (time-shifting "enlarges the television viewing audience").
such injury. Yet, for the most part they had characterized their grievance in terms of “a point of . . . philosophy,” a passing of “invisible boundaries,” or a loss of “control over [the] program.”

Where the majority differed most sharply with the Ninth Circuit’s opinion upholding the studio’s claim was in the distinction between “productive” and “nonproductive” uses of copyrighted works. In the Ninth Circuit’s view, copying for the sake of convenience is not productive in the same sense as copying in order to create a new and distinct work of authorship; nonproductive copying—copying, that is, for one’s own selfish benefit—is categorically unfair. The Supreme Court admitted that the notion of productive and unproductive uses may be helpful in “calibrating” the balance of interests required by a fair use analysis, but it rejected any absolute distinction. Copying “to promote a scholarly endeavor” may be more readily judged a fair use than “copying to avoid interrupting a poker game,” but productivity in general provides no certain guide to assessing the public benefit of unauthorized copying, or consistency with the general objectives of copyright. As the court explained:

A teacher who copies to prepare lecture notes is clearly productive. But so is a teacher who copies for the sake of broadening his personal understanding of his specialty. Or a legislator who copies for the sake of broadening her understanding of what her constituents are watching; or a constituent who copies a news program to help make a decision on how to vote. Making a copy of a copyrighted work for the convenience of a blind person is expressly identified by the House Committee Report as an example of fair use, with no suggestion that anything more than a purpose to entertain or to inform need motivate the copying. In a hospital setting, using a [video recorder] to enable a patient to see programs he would otherwise miss has no productive purpose other than contributing to the psychological well-being of the patient. Virtually any time-shifting that increases viewer access to television programming may result in a comparable benefit. The statutory language does not identify any dichotomy between productive and nonproductive time-shifting . . .

Justice Blackmun, writing for the four dissenting justices, characterized the fair use doctrine differently. Fair use, he argued, is meant to encourage activities that benefit others—activities like the research, teaching, scholarship, and news reporting

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222. "What is necessary is a showing by a preponderance of the evidence that some meaningful likelihood of future harm exists. If the intended use is for commercial gain, that likelihood may be presumed. But if it is for a noncommercial purpose, the likelihood must be demonstrated. In this case, respondents failed to carry their burden with regard to home time-shifting." Id. at 451.

223. Id.


225. Sony, 464 U.S. at 455 n.50.

226. Id. at 455 n.40.

227. Id.

228. Id. at 496 (Blackmun, J., dissenting).
specifically mentioned in § 107. Fair use supports "socially laudable purposes," typically, if not exclusively, involving the use of the copyrighted work by a second author. Copying a copyrighted work entirely for one's own benefit is not such a laudable activity, but more akin to stealing. Moreover, Justice Blackmun found nothing in copyright law or policy justifying an exemption from liability for uses that occur in private. Congress declined opportunities to create such an exemption explicitly, and by limiting certain rights (such as the right of performance) to public environments, Congress had implicitly rejected any such limitation on the right of reproduction. Some private uses may be so insignificant that "the effect on the author is truly de minimis." Such uses, which might include "[p]hotocopying an old newspaper to send to a friend" or "pinning a quotation on one's bulletin board," would not undermine the author's incentive to create and, for that reason, might be considered fair use, even if "unproductive." But as a rule, Justice Blackmun would find that "when a user reproduces an entire work and uses it for its original purpose, with no added benefit to the public, the doctrine of fair use . . . does not apply." Time-shifting is not a use that benefits the public, nor does it have an insignificant impact on the author's financial interests when considered in the aggregate. The invention of the video recorder had opened up a new market for copyrighted television programs, and the authors of those programs were entitled to share with Sony in the profits to be made.

Although time-shifting is an example of consumer copying, many of the issues debated in Sony are relevant to consumer modification of copyrighted works.

229. Id. at 478 ("Each of these uses . . . reflects a common theme: each is a productive use, resulting in some added benefit to the public beyond that produced by the first author's work.").
230. Id. at 479.
231. Id. at 478 n.31.
232. "Time-shifting involves no such humanitarian impulse. It is likewise something of a mischaracterization of time-shifting to describe it as noncommercial in the sense that that term is used in the statute. As one commentator has observed, time-shifting is noncommercial in the same sense that stealing jewelry and wearing it—instead of reselling it—is noncommercial. Purely consumptive uses are certainly not what the fair use doctrine was designed to protect, and the awkwardness of applying the statutory language to time-shifting only makes clearer that fair use was designed to protect only uses that are productive." Id. at 496.
233. "Indeed, it appears that Congress considered and rejected the very possibility of a special private use exemption. The issue was raised early in the revision process, in one of the studies prepared for Congress under the supervision of the Copyright Office. . . . Rejecting [an explicit exemption for private or personal use], the Register of Copyrights recommended that the revised copyright statute simply mention the doctrine of fair use and indicate its general scope." Id. at 465–66.
234. See id. at 468.
235. Id. at 482.
236. Id. at 481–82.
237. Id. at 480.
238. "Although such a use may seem harmless when viewed in isolation, '[i]solated instances of minor infringements, when multiplied many times, become in the aggregate a major inroad on copyright that must be prevented.'" Id. at 482 (alteration in original) (quoting S. REP. No. 94-473, at 65 (1975)).
Consumer modification also occurs in the privacy of the home. The benefits of modification, like the benefits of time-shifting, are enjoyed by the consumer himself; they do not flow to society at large. Yet as time-shifting increases the availability of copyrighted works, modification increases their usefulness and appeal, which may in some broader sense satisfy the objectives of copyright policy. In each case, the injury to the copyright owner is debatable. The studios could not demonstrate that time-shifting a program initially offered for free had any significant impact on their revenues. Copyright plaintiffs who complain of modification have similar problems, largely because consumers engaging in modification have already purchased the copyrighted work, perhaps in greater numbers because it could be adapted to satisfy their individual needs. On the other hand, the possibility of modification adds value to a copyrighted work, and denying copyright owners the chance to charge for it may be little better than stealing. Whatever the outcome, when the Supreme Court eventually turns to the issue of consumer modification, it is likely to draw heavily from its analysis in *Sony*.

**C. Modifications of Copyrighted Software**

The most malleable works of authorship are those that exist in the form of data. Modifying a law review article printed on paper is a relatively difficult task, and the results, whether achieved by cutting and pasting, or crossing out and interlineating, are likely to be unattractive. Modifying the same article in electronic form is easy. One can delete the author’s concluding paragraph and substitute one’s own, or one can select the entire document and replace Times New Roman font with Albertus Extra Bold font. With little effort, the result can look as pleasing as the original. It is unsurprising, therefore, that the first copyright cases to deal with consumer modification involve some form of computer software.

1. The Game Genie

Lewis Galoob Toys sold a device known as the Game Genie as an accessory for Nintendo’s NES home video game consoles. Rather than insert a videogame cartridge directly into the Nintendo console, purchasers of Galoob’s device would insert the cartridge into the Game Genie, and the Game Genie into the console.\(^240\) The purpose of the Game Genie was to intercept data transmitted from the cartridge to the console and transmit other data instead, allowing users to change the parameters of the game. By selecting one of the approximately 1,660 codes listed in the Game Genie code book, users could, for example, begin the Nintendo game at a more advanced level, avoid obstacles, or increase their opportunities to win.\(^241\) Some might call it cheating; others might call it enhancing the player’s experience. Nintendo called it copyright infringement, and filed suit in the Northern District of California.

The direct infringers of Nintendo’s copyrights, if any, would be consumers using the Game Genie to alter their experience of the games.\(^242\) The alteration, according to


\(^{241}\) See id. at 1289.

\(^{242}\) Id. at 1291.
Nintendo, constituted the creation of an unauthorized derivative work. The District Court, however, held that the altered game was not a derivative work because it was not fixed. The modifications were temporary, and disappeared as soon as the Game Genie was unplugged. The court also concluded that treating such temporary modifications by consumers as derivative works would be inconsistent with the fundamental balance between encouraging authors through financial incentives and ensuring, at the same time, the wide enjoyment of copyrighted works:

The Game Genie is a tool by which the consumer may temporarily modify the way in which to play a video game, legally obtained at market price. Any modification is for the consumer's own enjoyment in the privacy of the home. Such a process is analogous in purpose, if not in technology, to skipping portions of a book, learning to speed read, fast-forwarding a video tape one has purchased in order to skip portions one chooses not to see, or using slow motion for the opposite reasons. None of those practices permanently modifies or alters the original work, none produces a separate work which can then be transferred in any way, none replaces the original work, and none deprives the copyright holder of current or expected revenue.

The parties agreed (though not everyone might) that it would be acceptable to publish a book instructing purchasers of a traditional copyrighted board game how to modify the rules, and it would be equally acceptable for consumers to experiment on their own. Having purchased a board game, "a consumer is free to take the board

243. See supra Part I.D. The Seventh Circuit, in Midway Mfg. Co. v. Artic Int'l, Inc., 704 F.2d 1009 (7th Cir. 1983), discussed whether speeding up a copyrighted video game creates an unauthorized derivative work. In that case, the enhancement was not performed by the consumer, but by a company offering substitute circuit boards for Midway's Galaxian arcade game. The court observed that speeding up a phonograph record (e.g., by playing it at 78 RPM instead of 33 1/3) would probably not infringe the record producer's copyright, but video games are another matter. While there is little demand for speeded-up records, "there is a big demand for speeded-up video games." Faster video games may be more popular because they are more challenging, and, because they end sooner, they may increase the game operator's cash flow. "Video game copyright owners would undoubtedly like to lay their hands on some of that extra revenue and therefore it cannot be assumed that licensees are implicitly authorized to use speeded-up circuit boards in the machines plaintiff supplies." Id. at 1013. In the case of the accelerated record, the court concluded, the additional value to the copyright owner in having that (slender) market to itself would be "too trivial to warrant legal protection for that right," but not so for the more exciting and more lucrative accelerated arcade game. Id. at 1014.

244. Galoob, 780 F. Supp. at 1291 ("Viewing the Copyright Act as a whole ... and considering the policies behind that Act, this Court concludes that inherent in the concept of a ‘derivative work’ is the ability for that work to exist on its own, fixed and transferable from the original work, i.e., having a separate ‘form.’"). The debate over whether a derivative work must be "fixed" is discussed in Part I.A, supra.

245. Galoob, 780 F. Supp. at 1289 ("The effects of the Game Genie last only for the temporal period in which a particular sequence of play continues. Its effects vanish as the player ends a sequence of play by disconnecting the power to the game or by resetting and starting over. The Game Genie codes cannot change the plot, theme, or characters of any game.").

246. Id. at 1291.

247. Id.
home and modify the game in any way the consumer chooses, whether or not the
method used comports with the copyright holder's intent. The copyright owner,
"having received expected value, has no further control over the consumer's private
enjoyment of that game." Consumers who own video games, the court concluded,
are no less entitled to experiment, even if their experimentation requires more
advanced technology.

If the Game Genie had produced a derivative work, the District Court would have
held the defense of fair use applicable, adopting the principles announced by the
Supreme Court in Sony. Like time-shifting, using the Game Genie was not a
commercial activity but a matter of "personal enjoyment," placing the burden on
Nintendo to demonstrate financial injury. But the Game Genie did not substitute for
any Nintendo product, including the games Nintendo claimed to have been infringed,
and Nintendo did not contend that users of the Game Genie would purchase fewer
Nintendo products. In fact, the evidence of record showed that the Game Genie was
likely to increase Nintendo's sales. Nintendo theorized that the Game Genie could
suppress sales for slightly altered versions of its existing games, but Nintendo offered
no such versions at present and the court found the theory unduly speculative.

The Galoob case nicely illustrates the tension between an author's desire to present
a work as the author intends, and a consumer's desire to experience the work as the
consumer prefers. Nintendo's principle argument for damages rested on alleged injury
to the "Nintendo culture," described by the district court as "a mind-set intentionally
created by Nintendo in its consumers" which "[l]ike most cults, fads or addictions . . .
thrives when fueled by constant peer pressure." If one can change the rules of the
game, perhaps allowing less adept players to experience achievements beyond their
skills, participation in the "Nintendo culture" might lose its cachet—a cachet on which
Nintendo's marketing strategy depended. For that reason, Nintendo, which had
"rescued the video game industry from the shambles of the early 1980s," believed that
it was "entitled to decide how its games should be enjoyed, by whom, and under what
circumstances, even after the consumer has paid full price." The court disagreed,
noting that consumers who had purchased Nintendo games possessed rights at least equal, if not superior, to the rights of consumers who received television programming for free. Although Game Genies and video recorders function differently, both devices implicate Congress's reluctance to "carry copyright protection into the home." As to Nintendo's position as the guardian of "Nintendo culture" and protector of consumer satisfaction, the court found no empirical evidence "to support the claim that Nintendo is better able to judge when a player is having fun than is the player herself." In short, once the consumer has paid full price for the copyrighted Nintendo game and removed it to the privacy of the consumer's home, it is no longer Nintendo's business to tell the consumer how to enjoy it.

On appeal, the Ninth Circuit affirmed the result, though its reasoning differed slightly from that of the district court. That the altered game experience was not fixed the Ninth Circuit held to be immaterial; "derivative work[s] must be fixed to be protected under the Act . . . but not to infringe." However, an infringing derivative work must incorporate the copyrighted work in some form, as a play based upon a novel incorporates elements of the novel. The Game Genie supplemented the copyrighted Nintendo games, but did not include any portion of them. Devices that enhance copyrighted works without substituting for them, like a kaleidoscope that might be pointed at a copyrighted painting, should not be treated as derivative works. Referring to its earlier decision in *Mirage Editions*, the court observed that the holding would have been "much different" if, instead of offering a tile-bound version of the copyrighted work that could supplant demand for the original, the defendant had "distributed lenses that merely enabled users to view several artworks simultaneously." Furthermore, if consumers using the Game Genie create derivative works based on Nintendo's copyrighted games, it is a fair use. Recalling *Sony*, and anticipating the dispute over video editing technologies, the court found it "difficult to imagine that the [Supreme] Court would have reached a different conclusion if Betamax purchasers were skipping portions of copyrighted works or viewing

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260. See id. at 1294.
261. See id. at 1293.
262. Id. at 1297.
263. Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965 (9th Cir. 1992).
264. Id. at 968 (emphasis in original).
265. See id. at 967.
266. See id. at 968-69. The court is rather vague on the more salient points: (1) whether the consumer using the Game Genie creates an altered experience (fixed or not) which does incorporate elements of the original copyrighted game, and (2) whether the consumer-assembled (but Galoob-enabled) combination of the Nintendo game plus the programmed Game Genie amounts to a derivative work incorporating portions of the original game. As to the latter, the court states: "Some time ago . . . computer companies began marketing spell-checkers that operate within existing word processors by signalling the writer when a word is misspelled. These applications, as well as countless others, could not be produced and marketed if courts were to conclude that the word processor and spell-checker combination is a derivative work based on the word processor alone." Id. at 969.
267. See id. at 968-69.
268. See supra Part I.B.
269. Galoob, 964 F.2d at 968.
denouements before climaxes.” Consumers can time-shift television programming or enhance their enjoyment of a video game because, once a copyrighted work is given to the public, the copyright owner “cannot dictate how the work is to be enjoyed.”

2. Duke Nukem 3D

In *Micro Star v. Formgen, Inc.*, the Ninth Circuit considered a computer game called Duke Nukem 3D, in which “a beefy commando type named Duke . . . wanders around post-Apocalypse Los Angeles, shooting Pig Cops with a gun, lobbing hand grenades, searching for medkits and steroids, using a jetpack to leap over obstacles, blowing up gas tanks, [and] avoiding radioactive slime.” The look and events of the game were determined by “MAP files,” containing data to instruct the program in charge (the “game engine”) to select certain visual elements stored in “art files.” On a particular game level, the MAP file might instruct the game engine to place scuba gear in a given location, and the game engine would retrieve the appropriate image from the art file to make the scuba gear appear on the player’s screen. The court compared the system to a paint-by-numbers kit. Duke Nukem creator Formgen encouraged consumers to construct new MAP files generating new game experiences, and provided them with the tools to do it. These consumer-generated MAP files could be shared with Formgen’s blessing, as long as they were not sold for profit. Micro Star, however, compiled and offered for sale a collection of consumer-created files, prompting Formgen to file an action for copyright infringement.

Relying on *Galoob*, Micro Star contended that MAP files are not derivative works because they do not embody the copyrighted work in any permanent form; like a more advanced version of the Game Genie, they simply substitute new values for those employed in the original game. The Ninth Circuit rejected the analogy. The Game Genie allows only temporary modifications of a player’s experience. The court compared it to a hypothetical device it called the “Pink Screener”—a sheet of pink cellophane to be placed in front of a television to “make[] everything on the screen look pinker.” A recording of the result might be considered a derivative work (as an adaptation of a copyrighted television program), but the Pink Screener itself could not. The Pink Screener, like the Game Genie, would not embody the copyrighted work in any permanent form. The MAP files, on the other hand, constituted painstaking descriptions of adapted Duke Nukem 3D displays. Just as a copyrighted melody (or an adaptation of it) can be embodied in sheet music, a copyrighted visual display (or an

270. *Id.* at 971.
271. *Id.*
272. 154 F.3d 1107 (9th Cir. 1998).
273. *Id.* at 1112.
274. *Id.* at 1110.
275. *Id.*
276. *Id.*
277. *Id.* at 1109.
278. *Id.* at 1113.
279. *Id.* at 1111.
280. *Id.* at 1111 n.4.
281. *Id.*
adaptation of it) can be embodied in a MAP file. In response to the argument that the MAP files included none of Formgen's copyrightable expression—because all of the visual elements existed in the art files—the court replied that it was the story of Duke Nukem that was infringed, and that the MAP files amount to unauthorized sequels to that story. Finally, Micro Star argued that it was consumers using the MAP files who actually created any derivative work, and that such consumer modifications, under Galoob, should be deemed fair use. The Ninth Circuit characterized the fair use analysis of Galoob as unnecessary dicta, since the court had already determined, in that case, that the Game Genie did not create derivative works. Moreover, the case differed from Galoob in that Formgen accused Micro Star of direct copyright infringement through the unauthorized sale of the consumer-created MAP files. The distinction between the Game Genie and a MAP file may not be as clear as the Ninth Circuit made it out to be. The MAP files would be meaningless without the Duke Nukem game engine and the art files, but when they are combined they can produce (in a consistent, repeatable fashion) an altered Duke Nukem game experience. Similarly, the Game Genie includes no part of a video game, but used in combination with the Nintendo products and certain code values—some of them provided by Galoob in its code book—the user can create (in a consistent, repeatable fashion) an altered Nintendo game experience. In fact, the Galoob code book is perhaps the better analog to the MAP files than the Game Genie, because in it is embodied, in a very abstract and incomplete way, the makings of an altered game experience. The chief differences lie in the complexity of the recorded information (a small set of numerical values in Galoob for any particular game variation, an elaborate piece-by-piece description of a game level in Micro Star), the magnitude of the effect on the original game (in Galoob a minor change such as extra "lives," in Micro Star an entirely new game level, albeit composed of existing pieces), and the level of participation required of the game player in effecting the changes (in Galoob setting the altered game parameters, in Micro Star simply choosing an alternative MAP file).

3. HK Digitizer

*Foresight Resources Corp. v. Pfortmiller* discusses § 117 of the Copyright Act, setting forth the explicit right of a consumer who owns a copy of a copyrighted computer program "to make or authorize the making of . . . [an] adaptation of that computer program," where the adaptation is an "essential step in the utilization of the . . . program." Asbestos-removal consulting business Hall-Kimbrell owned a copy of Drafix 1+, a computer-assisted design (CAD) program produced by Foresight Resources. Hall-Kimbrell paid a programmer, Larry Pfortmiller, to adapt Drafix 1+ to add new features. The new program, known as HK Digitizer, included five original files created by Pfortmiller, but much of the program was identical to the original. Hall-Kimbrell used the adapted program entirely in-house and did not offer copies for sale.

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282. *See id.* at 1111–12.
283. *Id.* at 1112.
Discussing whether the adaptation fell within the privilege of § 117, the court quoted extensively from the 1978 report\(^2\) of the National Commission on New Technological Uses of Copyrighted Works (CONTU), appointed by Congress to study the interaction of copyright law and computer technology. Recommending a right of adaptation that would include adding new features to a lawfully-acquired program, the commission wrote (and the court repeated), “it is likely that many transactions involving copies of programs are entered into with full awareness that users will modify their copies to suit their own needs, and this should be reflected in the law.”\(^2\) The commission compared the practice of modification to “extensive marginal notetaking in a book.”\(^2\) Either is, arguably, the creation of an unauthorized derivative work, but in neither case does the copyright owner have reason to be concerned, as long as the variant is not copied and offered for sale.\(^2\) If the seller of the original program really did object, the commission observed, it could enforce its desires through contract.\(^2\)

With little discussion of the facts (particularly on the issue of how “essential” the adaptation was), the court determined that the Hall-Kimbrell adaptation of the copyrighted program should come within the protection of § 117. Allowing “enhancements,” but only as long as they are used strictly in-house, would “serve two important goals of the copyright laws.”\(^2\) It would “eliminate[] the [sophisticated consumer’s] need to choose between either buying the latest version of a program or possibly infringing the program’s owner’s copyright,” while “preserv[ing] the market for improvements made by the copyright holder.”\(^2\) The court also held that Pfortmiller should be considered “authorized” to make the adaptation under § 117. Because few program owners have the experience or equipment to modify a computer program for themselves, § 117 provides meaningful rights only if the owner of a program can authorize an independent programmer like Pfortmiller to create a “custom-made enhancement.”\(^2\)

4. Pop-ups and Pixels

In a series of recent cases,\(^2\) internet Web site operators have challenged the actions of marketing firm WhenU.com, whose software, when it resides on an individual user’s computer, causes targeted “pop-up” advertisements to appear when the user visits certain Web sites. For example, when a computer user equipped with WhenU software

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287. NAT’L COMM. ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS (1978) [hereinafter CONTU REPORT].
289. Id.
290. Id.
291. Id. (quoting CONTU REPORT at 13–14).
293. Id.
294. Id.
visits the 1-800 Contacts Web site, a new window might appear on the user’s computer screen, featuring an advertisement for rival Vision Direct.\(^{296}\) The Web site operators—1-800 Contacts, U-Haul, and Wells Fargo—charged that the display of the unauthorized advertisement in conjunction with their copyrighted Web site content constituted the preparation of an infringing adaptation. In each case, the court found no copyright infringement. Although the actions were brought against a business, each opinion speaks to the rights of individual consumers to control the appearance of material displayed on their computer screens.

In 1-800 Contacts, the New York district court held that even when the unauthorized pop-up advertisement obscured a portion of the plaintiff’s Web site, it did not "re-cast, transform, or adapt[]" the Web site so as to create a derivative work.\(^{297}\) The original Web site content remained "intact" in its own display window, and the effect of the advertisement was too temporary to be considered "fixed."\(^{298}\) More broadly, the court noted that the "modern computer environment" enables a good deal of overlapping content and user-effected changes to the appearance of the windows displaying Web site content.\(^{299}\) "If obscuring a browser window containing a copyrighted website with another computer window produces a ‘derivative work,’ then any action by a computer user that produced a computer window or visual graphic that altered the screen appearance of Plaintiff’s website, however slight, would require Plaintiff’s permission."\(^{300}\) The court found it both "jarring" and inconsistent with the statutory definition\(^ {301}\) of "derivative work" that "a multi-tasking Internet shopper whose word-processing program obscures the screen display of Plaintiff’s website" might be liable for the creation of an unauthorized derivative work.\(^ {302}\)

In U-Haul, the Virginia district court reached similar conclusions. The court observed that the advertisement appears in a separate window and is a "distinct occurrence" from the U-Haul web page.\(^ {303}\) The effect is transitory and "may not be exactly duplicated in that or another user’s computer."\(^ {304}\) Like the New York court, the U-Haul court shrank from the broader implications of finding that one who overlaps a copyrighted work with an advertisement unauthorized by the Web site operator\(^ {305}\) has created an infringing adaptation of the partially obscured work. Computer users, the

\(^{296}\) See 1-800 Contacts, 309 F. Supp. 2d at 476–79.

\(^{297}\) "None of these three actions seems to describe what is done to Plaintiff’s website by Defendants’ pop-up ads, since Plaintiff’s website remains ‘intact’ on the computer screen. Defendants’ pop-up ads may ‘obscure’ or ‘cover’ a portion of Plaintiff’s website—but they do not ‘change’ the website, and accordingly do not ‘recast, transform or adapt’ the website." Id. at 487.

\(^{298}\) Id. “Defendants’ pop-up ad windows may be moved, obscured, or “closed” entirely—thus completely disappearing from perception, with a single click of a mouse.” Id.

\(^{299}\) 1-800 Contacts, 309 F. Supp. 2d at 485.

\(^{300}\) Id. at 487.

\(^{301}\) See supra text accompanying note 36.

\(^{302}\) Id. at 487–88.

\(^{303}\) U-Haul, 279 F. Supp. 2d at 731.

\(^{304}\) Id.

\(^{305}\) The court found that WhenU.com’s software “resides in individual computers as the result of the invitation and consent of the individual computer user.” Id. at 725. Of course, some software of this kind may be placed on consumers’ computers without their knowledge and to their considerable annoyance.
court observed, "would infringe copyrighted works any time they opened a window in front of a copyrighted web page."\textsuperscript{306}

The arguments presented in \textit{Wells Fargo} may have been the most sophisticated. In that case, Wells Fargo argued before a Michigan district court that when a computer user visits its Web site, the content is temporarily stored in the computer's "video memory," which contains a pixel-by-pixel representation of what is to be displayed on the user's screen. Whenever the defendant's software causes an advertisement to appear on the screen, the representation of the web page stored in the video memory is correspondingly altered, producing, Wells Fargo argued, an unauthorized derivative work.\textsuperscript{307} Again, the court found the effect too ephemeral and the argument too broad. The video memory is modified (and updated every 1/70 of a second) whenever any change visible on the screen occurs, including each time "a user opens a new application, receives an instant message, or uses his mouse to move the cursor across the screen."\textsuperscript{308} The window with the advertisement is physically distinct from the window displaying the Wells Fargo Web page, and does nothing to alter its contents.\textsuperscript{309} As soon as the advertisement is closed or minimized, the web page is visible as before.\textsuperscript{310} On the broader issue of who controls the look of a user's computer screen, the court wrote that the screen pixels affected by the defendant's product "form part of the hardware of a computer and are owned and controlled by the computer user who chooses what to display on the screen."\textsuperscript{311} A Web site operator, the court concluded, "do[es] not have any property interest in the content of a user's pixels, much less a copyright interest."\textsuperscript{312}

5. Ferrets and Frames

In \textit{RealNetworks, Inc. v. Streambox, Inc.},\textsuperscript{313} the plaintiff distributed a program known as "RealPlayer," which allows music or other media files to be downloaded and performed on a computer. Streambox offered a "plug-in" for RealPlayer known as "the Ferret." When a consumer possessing a copy of RealPlayer installed the Ferret, the latter would change the RealPlayer interface so that the user could switch between RealPlayer's "Snap" search engine and a Streambox alternative.\textsuperscript{314} Because this changed the appearance and operation of the copyrighted RealPlayer interface, RealNetworks argued that consumers who installed the plug-in had created an infringing derivative work, making Streambox liable for contributory infringement.\textsuperscript{315} RealNetworks moved for a preliminary injunction.

Relying on \textit{Galoob}, Streambox argued that installing the plug-in did not create a derivative work. However, the court distinguished \textit{Galoob}, finding that "the alterations

\textsuperscript{306} Id. at 731.
\textsuperscript{307} See \textit{Wells Fargo}, 293 F. Supp. 2d at 748.
\textsuperscript{308} Id.
\textsuperscript{309} Id. at 769.
\textsuperscript{310} Id. at 770.
\textsuperscript{311} Id. at 770–71.
\textsuperscript{312} Id. at 771.
\textsuperscript{314} Id. at *15.
\textsuperscript{315} Id. at *30–31.
to the Real Player assume a more concrete form [than] the altered displays at issue in Galoob.\textsuperscript{316} With even less explanation, the court held that the facts and issues in Micro Star, the case on which RealNetworks relied, also did “not appear to be completely analogous.”\textsuperscript{317} Resolving little, the court declared itself unpersuaded that RealNetworks was likely to succeed on its claim of contributory infringement, yet it found “serious questions” as to whether consumers using the Ferret plug-in did create an unauthorized derivative work.\textsuperscript{318} Based on the balance of hardships, the court granted the preliminary injunction.\textsuperscript{319}

Details are also absent in Futuredontics, Inc. v. Applied Anagramics, Inc.,\textsuperscript{320} mentioned here because of its references to Galoob and Mirage.\textsuperscript{321} Applied Anagramics’s web page included a link to Futuredontic’s web page, which if selected by the user would cause the content of the Futuredontic’s page to appear in an Applied Anagramics “frame.”\textsuperscript{322} Futuredontics argued that displaying its copyrighted content in such a frame constituted the preparation of an unauthorized derivative work. Applied Anagramics compared the frame to a “lens” through which a user could view Futuredontic’s content.\textsuperscript{323} The court found neither Mirage nor Galoob decisive; an electronic border was not the same as a ceramic tile, and, contrary to Galoob, Futuredontics might be able to demonstrate that Applied Anagramics’ web page “duplicates or recasts” their own.\textsuperscript{324} The court therefore denied Applied Anagramics’ motion to dismiss.

6. Summary

Courts may differ in their reasoning, some relying on fair use and others on a limited definition of “derivative work,” but all seem inclined to permit consumer modifications of computer software when the effects are temporary, the modification is for personal use, the immediate financial harm to the copyright owner is questionable, and the act of modification is difficult to separate from consumers’ customary dominion over their tangible property and their private affairs. Under these circumstances, consumers would be most likely to expect a right to modify, particularly when they have paid the copyright owner a fair price for the software. The case that stands out for its contrary result is Micro Star. The accused infringer in Micro Star was a business, offered altered game experiences to the general public, profited from those sales, and ignored express restrictions imposed by the copyright owner. The same observations might be applied to Galoob, but the cases differ in one important respect. The Game Genie can fairly be described as a tool provided to consumers—a tool that allows consumers to experiment on their own, using their own property in their own homes, and achieving their own results from a limitless range of possibilities. In

\begin{itemize}
\item \textsuperscript{316} Id. at *32.
\item \textsuperscript{317} Id.
\item \textsuperscript{318} Id. at *32–33.
\item \textsuperscript{319} Id. at *33–34.
\item \textsuperscript{320} 45 U.S.P.Q.2d 2005 (C.D. Cal. 1998), aff’d, 152 F.3d 925 (9th Cir. 1998).
\item \textsuperscript{321} See supra Part II.C.1–2.
\item \textsuperscript{322} Futuredontics, 45 U.S.P.Q.2d at 2009.
\item \textsuperscript{323} Id. at 2010.
\item \textsuperscript{324} Id.
\end{itemize}
contrast, the MAP files in *Micro Star* can fairly be described as *alternative versions* of the copyrighted work. Once they are created, the work is done. Players who choose alternative MAP files are not experimenters achieving uniquely personal results; they are the passive recipients of someone else’s labor. The distinction is not crystal clear—if there were 32,000 randomly generated MAP files to choose from and only a few Game Genie settings, the situation might be reversed. Nor is it easy to relate this difference to the explicit language of the Copyright Act. Nevertheless, the general distinction between the active consumer and the passive consumer, or between a tool for modifying and an alternative version of the work, may play a useful role in distinguishing permissible and impermissible modifications.

III. THE GATHERING STORM

In 2004, RCA introduced, and offered for sale through Wal-Mart and other retailers, its model DRC232N DVD player employing technology from ClearPlay Inc.\(^\text{325}\) The DVD player comes with “filters” for 100 motion pictures preinstalled, and more are available from ClearPlay at a charge of $1.50 each. A filter is a compilation of time codes corresponding to locations on the DVD of material that, in the judgment of ClearPlay and its editors, some viewers might regard as objectionable. Using a series of on-screen checkboxes, the viewer can instruct the player to skip portions of the motion picture where that objectionable material occurs.\(^\text{326}\) Categories of excludable material include violence, sexual situations, nudity, profanity, ethnic and social slurs, crude humor, and references to the deity.\(^\text{327}\) When the player reaches the time code for the offensive material, the player mutes the audio output until the moment has passed, or the player skips ahead—in some cases, several minutes ahead.\(^\text{328}\)

Other companies, with names like Clean Flicks, Clean Cut Cinemas, Family Shield, and Family Safe, also offer consumers the opportunity to view motion pictures in the privacy of their homes without objectionable content. ClearPlay represents the more


\(^{326}\) See Second Amended Complaint and Jury Demand at 4–5, Huntsman v. Soderbergh, No. 02-CV-1662 (D. Colo. Aug. 29, 2002) (“Using the [ClearPlay] methodology, unaltered commercial movies and separate content filters are placed in a special viewing apparatus that applies filters at viewing time, allowing the viewer to choose to apply or reject edits at viewing time by way of an enhanced remote control.”). All references to pleadings hereinafter are to those filed in the *Huntsman* case.

\(^{327}\) The corresponding list for Movie Shield includes disturbing visuals, immodesty, minor language, major language, nudity, religious references, sexual situations, and violence. The Player Control Parties’ Opening Brief in Support of Their Motion for Summary Judgment at 8 n.3, Huntsman, No. 02-CV-1662 [hereinafter Opening Brief].

\(^{328}\) Motion Picture Studio Defendants’ Answer and Counterclaim at 19, Huntsman, No. 02-CV-1662 (“These title-specific templates instruct a consumer’s DVD drive to skip over designated scenes and/or mute designated dialogue during DVD playback, thus causing an unauthorized edited version of the Studio’s film to be created and performed on any monitor connected to the consumer’s DVD drive on an unlimited number of occasions.”). “Among its most ham-handed edits: In ‘The Matrix Reloaded,’ Neo and Trinity kiss longingly, and then—blink!—instantly appear, sweaty and tousled, chatting in bed. ClearPlay just sent three and a half minutes to the cutting room floor.” Pogue, supra note 325.
sophisticated technology; some others, like Clean Flicks, simply edit their own version of a motion picture and record it for viewing, while maintaining "a one-to-one relationship [between] the number of purchased original versions and the number of corresponding edited versions." Sometimes the altered version is recorded over the original, on a videocassette still bearing the studio's label. Fearing claims of copyright and trademark infringement, a number of these companies banded together and, in August 2002, filed suit in Colorado for declaratory judgment against certain motion picture directors, motion picture studios, and the Directors Guild of America. The name of that suit was Huntsman v. Soderbergh. In defense of the more basic "first generation" technology, the Complaint asserted that the modified motion pictures "target[] a new audience beyond the audience of the original work" by appealing to viewers who would not be interested in the unedited version.

The director defendants counterclaimed for relief under trademark law, arguing that the plaintiffs' modifications had the effect of associating directors in the public mind with versions of their films of which they did not approve. The modifications, they claimed, had been made "without regard for the [directors'] vision, storytelling, and artistry," and had replaced the "vision and craft" of the directors with their own. The studio defendants filed counterclaims for trademark and copyright infringement. In an introductory passage, they noted that the exclusive rights of reproduction and adaptation "permit[] the copyright owners to ensure the continued artistic integrity of the work, and also to protect the continued economic viability of the work (including any potential altered versions) throughout the term of copyright." They criticized the plaintiffs for avoiding the effort and expense of producing their own motion pictures for sensitive audiences, profiting instead by "bowdleriz[ing] versions of other peoples' movies."

In its reply to the defendants' counterclaims, ClearPlay's arguments began to take shape. Employing the first of many analogies to be offered in this dispute, ClearPlay

329. Second Amended Complaint and Jury Demand, supra note 326 at 4.
330. Motion Picture Studio Defendants' Answer and Counterclaims, supra note 328 at 13; [Proposed] Amended Counterclaim at 11, Huntsman, No. 02-CV-1662. Another technology, embodied in the TVGuardian product, uses the closed caption signal and a dictionary of offensive words to identify portions of the audio track that should be muted. The gap is filled by a sentence displayed on screen in text form, with a more "suitable" word substituted for the offensive one. Id. at 15.
331. The directors listed in plaintiffs' Second Amended Complaint and Jury Demand include: Steven Soderbergh, Robert Altman, Michael Apted, Taylor Hackford, Curtis Hanson, Norman Jewison, John Landis, Michael Mann, Phillip Noyce, Brad Silberling, Betty T. Thomas, Irwin Winkler, Martin Scorsese, Steven Spielberg, Robert Redford, and Sydney Pollack. Second Amended Complaint and Jury Demand, supra note 326 at 5. The studios include Metro-Goldwyn-Mayer, Time Warner, Sony Pictures Entertainment, Disney Enterprises, Dreamworks, Universal City Studios, Twentieth Century Fox, and Paramount. Id.
333. Second Amended Complaint and Jury Demand, supra note 326 at 3.
335. Id. at 2-3.
336. See Motion Picture Studio Defendants' Answer and Counterclaims, supra note 328.
337. Id. at 6.
338. Id.
asserted that the studios and directors “have no legal right to dictate all aspects of a consumer’s experience of their works.” For example, they cannot “forbid patrons of movie theaters from leaving a theater briefly to obtain popcorn during a motion picture’s theatrical exhibition,” nor can they “prevent consumers from skipping or fast forwarding motion pictures viewed in the privacy of their homes on DVD.” The ClearPlay technology does nothing to physically alter the authorized DVDs on which it is used; it only changes the consumer’s “experience.” Because using ClearPlay requires the consumer to have already obtained the authorized DVD, the counterclaimants’ right of control has already been “exhausted” by the first sale.

ClearPlay amplified its arguments in a motion for summary judgment brought on behalf of the “Player Control Parties”—those who, like ClearPlay, cause consumers’ DVD players to skip or mute offensive content on-the-fly. With respect to the trademark claims, the Player Control Parties dismissed the idea that a consumer who chooses to employ their editing technology could be confused about the source, sponsorship, or affiliation of the DVDs the consumer has purchased. Gilliam, they argued, is distinguishable in part because the consumer in this case effects the modifications using tools provided by the Player Control Parties. "No family-friendly experience is forced onto the consumers." Addressing the copyright claims, the Player Control Parties argued that what they offer is “a technological equivalent to a parent’s hand over the eyes or ears of a child during a movie in a theater.” Their products “do not make edited copies, or create any permanent form of, any movie, and the software is licensed only for private home use.”

On a more technical note, the Player Control Parties asserted that a derivative work must be fixed. Referring to Galoob, they pointed out that the filtering technology does not alter the original film; the effects are temporary and unfixed. The filters are fixed, but these time code compilations are not adaptations of the copyrighted motion pictures. They refer to specific moments in a motion picture, without reproducing any portion of it. The greatest challenge for the Player Control Parties was to distinguish Micro Star. The filters could be compared to the MAP files in Micro Star, and the

340. Id.
341. Id. at 15.
342. Id. at 16.
343. Id. at 13.
344. Opening Brief, supra note 327 at 3.
345. See supra Part I.C.
346. See Opening Brief, supra note 327 at 4, 20. “The plain fact is that the alleged misconduct is that of the consumers, and that the technology companies’ role was merely to give the consumer the tools to view movies without having to see or hear things the consumer finds offensive.” Id. at 4.
347. Id. at 20.
348. Id. at 24.
349. Id.
350. Id. at 28.
351. See supra Part II.C.1.
352. See Opening Brief, supra note 327 at 28–31.
353. See supra Part II.C.2.
material in authorized copies of the motion pictures to the art files. As the MAP files
direct the assembly of elements in the art files to produce an altered experience of
Duke Nukem, the filters cause a reedited motion picture to be produced from the
original materials on an authorized DVD. The Player Control Parties, however,
rejeced the comparison:

While the MAP files in Micro Star described the audiovisual displays in exact
detail, the Player Control Parties' software filter files neither describe the displays
of the studios' films in exact detail nor incorporate any copyrightable subject
matter from the films at all. Instead, the filter files are a set of timing code
instructions which instruct the DVD player to mute and skip selected portions of
the playback. The filter files do not describe the studios' films in any way, much
less in "exact, down to detail, description of an audiovisual display" as the MAP
files did in Micro Star. . . . The filter files only contain timing instructions and do
not come anywhere near the level of detail of sheet music. Put simply, the timing
files do not describe the studios' films in any way and do not conjure the storylines
or expressions of the films. 354

A better comparison, according to the Player Control Parties, was to the hypothetical
"Pink Screener," 355 which temporarily imparts a pink cast to whatever may be seen on
a television. "The Player Control Parties' products could be characterized as a form of
'black screener' that causes the DVD player to 'go black' at or skip the scenes the
viewer does not want to see, or to mute words the viewer does not want to hear." 356

Amicus briefs filed in support of the motion for summary judgment offered further
analogies. Expressing concern that a ruling adverse to the Player Control Parties
"would chill innovation and stifle the development of new generations of products,
including products designed to empower the individual and enhance the consumer's
lawful and reasonable enjoyment of lawfully acquired entertainment content," 357 Intel
Corporation in its amicus brief imagined a parent reading a Harry Potter book to a
child and skipping over passages "too frightening for one so young." 358

That parent might read the book in advance and tab all the scary passages so he
can avoid them when reading aloud to his child. Once he has done so, he might jot
down his list of scary passages, referring to [them] by page number and paragraph,
and share that list with a friend who's about to read the same book to her child.
Surely he has not violated the author's derivative work right by doing so. The
parent, realizing he's created something that might be of value to other parents,
produces a "Parent's Guide"—a laminated bookmark that identifies parts of the
new Harry Potter book that are likely to be unsuitable for children of specified age
ranges. The Parent's Guide might suggest that, when reading to a 6-year old, a
parent skip the scene at pages 266-268 (in which Harry's friend Mrs. Weasley
dreams that she sees the dead bodies of members of her family), the scene at pages

354. Opening Brief, supra note 327 at 32-33.
355. See supra text accompanying notes 278-79.
356. Opening Brief, supra note 327 at 33.
357. Brief Amicus Curiae of Intel Corp. in Support of the Motion of ClearPlay Inc. for
Summary Judgment at 4, Huntsman v. Soderbergh, No. 02-CV-1662 (D. Colo. filed Aug. 29,
2002).
358. Id. at 7.
Would the “Parent’s Guide” be an infringing derivative work? It would not, Intel concluded, because it would not include any protectable material from the Harry Potter book.360

The Electronic Frontier Foundation (EFF), also writing in support of the Player Control Parties’ motion for summary judgment,361 advanced similar, if less elaborate, analogies. EFF argued that altering the “subjective perceptions” of an audience during the performance of a copyrighted work does not create an infringing derivative work.362 In EFF’s imagined scenario, a parent learns that explosions will occur at a particular moment in a play, and as that moment approaches he covers the ears of a child sensitive to loud noises.363 Copyright law, EFF insisted, does not allow copyright owners to prohibit audiences from experiencing their works in an unintended manner. “The Copyright Act has never denied [one] the right to skip a page in a book, to close one’s eyes during a movie, [to] mute the sound for a given scene or copyrighted commercial, or to get up and go to the bathroom just as the murderer’s identity is being revealed.”364 Likewise, one can solicit the advice of a “trusted neighbor” as to what to watch or to skip.365 The Player Control Parties, according to EFF, are “trusted neighbors” whose technology makes it easy for consumers to adopt their advice.366

The Huntsman case spurred Congressman Lamar Smith of Texas to introduce a bill367 to amend the Copyright Act. The bill, entitled the Family Movie Act of 2004, exempted from claims of copyright infringement practices and technologies that make portions of a motion picture “imperceptible” when exhibited privately in the home.368 Marybeth Peters, serving as the Library of Congress’s Register of Copyrights, testified against the bill before the House Judiciary Committee’s Subcommittee on Courts, the Internet, and Intellectual Property. She found the bill premature and unnecessary—“a solution to a problem that does not exist.”369

No one, she argued, seriously doubts that a consumer, in the home, can use a mute button or fast-forward capability to skip portions of a motion picture found to be offensive or unsuitable for children.370 But she hesitated to conclude that consumers

359. Id. at 7–8.
360. Id. at 8.
362. Id. at 6.
363. Id.
364. Id. at 7.
365. Id.
366. Id. at 8.
368. Id.
370. Id. at 9.
should be able to purchase products that do the editing for them.\(^{371}\) Such editing, she argued, threatens the "moral right" of authors in the integrity of their works,\(^{372}\) and perhaps consumers should simply avoid motion pictures they consider unsuitable.\(^{373}\) Nevertheless, Ms. Peters concluded that alterations in the privacy of the home, implemented by consumers through third-party technology and consisting entirely of temporary omissions, do not seriously infringe the moral rights of an author.\(^{374}\) Consumers using products like ClearPlay know that what they are seeing is not the original presentation of the motion picture.\(^{375}\) Furthermore, Ms. Peters found it "difficult to imagine any economic harm to the copyright owner," because the technology requires the consumer to have acquired an authorized DVD.\(^{376}\) Ms. Peters found no need to amend the Copyright Act to accommodate technologies like ClearPlay; the modified performance, she argued, is not an infringing derivative work under existing law because it is not "fixed."\(^{377}\) But in opposing the bill, she did suggest that the derivative works right may need to be reexamined to address future technologies likely to allow modifications more radical than the omissions facilitated by ClearPlay.\(^{378}\)

The Family Movie Act of 2004 evolved into the Family Movie Act of 2005, a portion of the Family Entertainment and Copyright Act of 2005, signed into law in April 2005.\(^{379}\) It states, in relevant part, that it is not an infringement of copyright in a motion picture to "mak[e] imperceptible, by or at the direction of a member of a private household . . . limited portions of audio or video content of a motion picture, during a performance in . . . that household for private home viewing, from an authorized copy of the motion picture."\(^{380}\) Similarly, it is not infringing to create or provide the enabling technology, so long as it is designed to be used in a private household and no fixed copy of the altered motion picture is preserved.\(^{381}\) The Act does not encompass "the addition of audio or video content that is performed or displayed over or in place of existing content in a motion picture."\(^{382}\)

At least with respect to the more sophisticated technologies like ClearPlay, the new law seems to resolve the Huntsman dispute. However, Ms. Peters is undoubtedly correct that advances in technology will demand a more comprehensive examination of the rights of consumers to modify copyrighted works. Increasingly, works of

\(^{371}\) Id.

\(^{372}\) See supra Part I.C.

\(^{373}\) See Statement of Marybeth Peters, supra note 369 at 9–10.

\(^{374}\) Id. at 11.

\(^{375}\) Id.

\(^{376}\) Id.

\(^{377}\) Id. at 13. She distinguished cases in which offensive material is physically removed from a copy of the motion picture. These, she concluded, are derivative works, and should be forbidden because they can be "redistributed, competing in the marketplace with legitimate copies and perhaps ending up in the hands of recipients who aren't even aware that they are edited versions." Id.

\(^{378}\) Id.


\(^{380}\) Id. § 202(a)(3) (codified at 17 U.S.C. § 110(11)).

\(^{381}\) Id.

\(^{382}\) Id. § 202(a)(4) (codified at 17 U.S.C. § 110).
authorship are delivered to consumers in digital form, where they are more easily
manipulated. Some consumers now choose the iPod over broadcast radio, \(^{383}\) the
internet over newspapers and magazines, \(^{384}\) and video games over television. \(^{385}\) As
broadband becomes more widespread, television programming and motion pictures
will be more common parts of the computer experience. \(^{386}\) As consumers have learned
to expect copyrighted content \textit{when} they want it, soon they will demand the content
\textit{how} they want it. Certain new technologies already suggest the possibilities. For
example, software that strips advertising from internet web pages, or tones them down
by disabling sounds and animation, is widely available and often free. \(^{387}\) While it is
impossible to predict what new options tomorrow’s technology will bring, it is unlikely
that the Family Movie Act spells the end of the controversy. With that in mind, Part IV
considers the arguments in favor of, and against, allowing unauthorized consumer
modifications.

IV. THE PROS AND CONS OF CONSUMER MODIFICATION

If a consumer has paid for, or otherwise lawfully obtained, a copy of a copyrighted
work, should the owner of the copyright have the legal authority to forbid that
consumer from making modifications, where the purpose of the modifications is to
make the work more useful to the consumer or more appealing, or where it satisfies the
consumer's desire to experiment? In Part IV.A, I consider economic arguments
associated with the instrumentalist goals of copyright. In Part IV.B, I discuss the issue
of consumer expectations, with comparisons to the implied right of modification
recognized in patent law. In Part IV.C, I conclude with thoughts on privacy and
autonomy as they affect both authors and consumers.

A. An Economic Perspective

Although scholars differ on the role of “moral rights” in copyright law, few could
dispute that the primary objective of copyright is that expressed in the Constitution—to
promote the development of knowledge by assuring authors (and publishers) the
financial rewards associated with certain exclusive rights to the author’s work. Yet
when it comes to determining the \textit{scope} of a copyright owner’s exclusive rights—
striking the appropriate balance between authorial incentive and public enjoyment—
scholars are divided. Some are “maximalists,” who conclude that the value of a
copyrighted work, insofar as possible, should be captured by those who invest in its
creation. Only then does the marketplace ensure that society’s resources are directed

\(^{384}\) See Elyse Ashburn, \textit{Broadband Makes Bigger Impact}, ATLANTA J.-CONST., Aug. 29,
2004, at Q1.
/news/games/0,2101,63449,00.html.
\(^{386}\) See Studios to Offer Movie Downloads, WIRED NEWS, Mar. 6, 2001,
\(^{387}\) Software known as “No! Flash,” for example, blocks certain multimedia and pop-up
advertising. It is available for download at: No! Flash, http://www.bbshare.com/noflash/ (last
toward the most highly valued uses.\textsuperscript{388} Other scholars are "minimalists," who maintain that the intended beneficiary of copyright law is the public and that copyright should provide only as much reward to authors as is necessary to ensure that a work is created. Any additional reward, in the form of more extensive rights for the copyright owner, is wasted on the side of encouragement while affirmatively raising barriers to access. The debate between maximalists and minimalists will not soon be resolved, but neither can it be dismissed as purely academic. Copyright law includes many regions of uncertainty in which one must keep one's bearings by reference to policy.

One of those regions of uncertainty concerns the consumer's right to modify a copyrighted work. Suppose that author A, through his own production company, produces the original copyrighted film \textit{South by Southeast}. It is sold on DVD in New England and the Southern United States. \textit{South by Southeast} is both a love story and a satire, contrasting the cultural values of New England and the Deep South and including many humorous but slighting references to the former. The film is highly popular in the South, but many in New England are offended by scenes critical of their region. Programmer P devises a software filter, compatible with ClearPlay equipped DVD players, which produces a "New England Version" of the film by skipping the offensive scenes. The filter is offered for free. In the modified version, the love story is relatively intact, but much of the humor is lost. Many consumers in New England, however, choose to employ the filter; they enjoy the film more, they are not embarrassed to view it with their neighbors, and they are comfortable with the message it delivers to their children. A accuses P of creating an unauthorized derivative work. P replies that A cannot dictate how consumers who have purchased \textit{South by Southeast} will experience the film in their own homes.

The reason A objects might be that he had intended to authorize editor E to produce a regional edit of his film through the same process, in exchange for a licensing fee. E has backed out of the deal, knowing that New England consumers will choose the free modification from P. This is money lost to A, and to the extent he foresees similar losses in the future, it detracts from his incentive to continue making films. Other filmmakers, seeing what happened to A, will be similarly discouraged. Minimalists might argue that it does not matter, because the extra income from E would not tip the balance between making films and not making them; A will be slightly poorer, but no less productive. In fact, they might argue that P has made A wealthier, by encouraging sales of his DVD to consumers who would have avoided it but for the availability of P's filter. On the other side of the balance, P has been allowed to exercise his own self-expression, and consumers have benefited. Those who use the filters enjoy the film more, and some can enjoy it who otherwise would not have experienced it at all. Even if the latter category of consumers includes some who would have seen the film in E's authorized version, it also includes some who would not, because they would not have paid the price for the film \textit{and} the premium to allow E to recoup his fee to A. On balance, minimalists might conclude that the rights demanded by A do not benefit the public and should be refused.

One of the drawbacks of the minimalist approach is that it is so difficult to determine how much of an incentive is enough. If author A's films barely break even,

the extra income from editor $E$ might be necessary to persuade $A$ to continue. The maximalist approach provides the relative certainty of assigning virtually all rights to the author, or at least those suitable for marketplace transactions, until those rights are licensed to consumers in exchange for fair value. This simplifies decision making, but more importantly it internalizes the latent benefits of the copyrighted work, so that the marketplace can direct resources toward their most valued uses. To put that in more concrete terms, suppose that author $A$ could have released his film on DVD or on videocassette, the latter costing less but not offering the same opportunities to customize the presentation. If it were a close call, $A$’s expectation of receiving money from editor $E$ might convince him to choose the DVD. The fact that consumers (absent the free version) would pay a premium to $E$ for the modified version shows that there is a demand for it. However, if none of this consumer-perceived value translates into money paid to $A$, he may choose the socially less desirable videocassette alternative. Or he may abandon the film altogether, devoting his time and effort to other things. Diverting resources to a less desirable alternative—as measured by what would be produced in a truly comprehensive marketplace, reflecting the costs and benefits of all uses of society’s resources—is an instance of allocative inefficiency.

Author $A$’s inability to capture the entire value of his work may also influence his choice of subject matter. Suppose that $A$ might have made either of two films—the acerbic *South by Southeast* or the blander *Everywhere Is Fine with Me*. The audience for the latter film might be larger than the audience for the unmodified *South by Southeast*, but smaller than the audience for both versions of the satire. In one respect, programmer $P$’s unauthorized filter improves the situation. Modification unleashes the latent broad appeal of *South by Southeast*, leading to increased sales to $A$ for the more popular film. $A$ would prefer to be paid by editor $E$, but at least $A$ is still encouraged to produce the film with the greater demand. The distorting effect may come, however, through hampering $A$’s ability to price discriminate.

Southerners might value copies of the unmodified *South by Southeast* at $20 per copy. Sensitive New Englanders might only pay $10 for the same film. But perhaps New Englanders so enjoy the portions of the film set in New England that, as long as the film is modified so that they are not required to endure the insults, they are willing to pay $30. Ordinarily, author $A$ can charge only one price for the DVD, regardless of who purchases it.³⁸⁹ If he decided to sell just one version of the film, and he chose the *New England Edit* as the version having the broader appeal, he would have to choose between (a) selling all copies at $20, gaining higher sales volume but foregoing some of the profit he could have made from New Englanders—giving them a “consumer surplus” of $10 per copy, or (b) selling only at $30 per copy, foregoing sales to consumers in the South.³⁹⁰ $A$ may find the latter to be the lesser of two evils. It is not, ³⁸⁹. Author $A$ might charge different prices in different parts of the country, but if the difference were substantial enough and transaction costs low enough, he would face the prospect of purchasers in one part of the country reselling to customers in another at less than the going rate in their region.

³⁹⁰. If author $A$ were in competition with producers of other films, and consumers considered those other films perfect substitutes for *South by Southeast*, then the factor determining the price of the film should be its cost of production. I will assume for this hypothetical what should be generally true in reality: consumers distinguish between works of authorship and substitute them only reluctantly. Consequently, copyright owners have some
however, an ideal situation, either for A or for his potential audience. If $20 per copy would still cover A’s costs, the sales he must forego are a “deadweight loss”—lost profits to him, and a lost opportunity to those who would have purchased the film at the lower price. Their resources will be spent on less desired goods or services, leading once again to allocative inefficiency. Moreover, because A cannot capture the full value of South by Southeast, he may decide to make the more innocuous Everywhere Is Fine with Me, valued in both regions at $25.

Deadweight loss can be reduced by price discrimination. If author A can charge one price to Southerners and another to New Englanders, A can maximize his profits, and no viewers are denied access to a film for which they are ready and willing to pay. One way for A to accomplish this result would be to charge everyone $20 for the DVD, while charging those who wish to modify the film an extra $10 for that capability. Programmer P's free filter makes it impossible for A to charge that premium.\footnote{Note that price discrimination, in this or any case, facilitates wealth transfer from consumers to producers. If author A could charge each viewer according to exactly how much that viewer desires his film, A’s profits would be maximized by eliminating consumer surplus—the value of the product for consumers in excess of what they are required to pay. If copyright law exists for the benefit of the public, one might wonder about interpretations of the law that impoverish consumers. Nevertheless, it is \textit{intellectual} benefit that the public should reap, through the advancement of knowledge. Hence, directing resources toward the development of the most highly valued works of authorship may be more important than protecting consumers’ bank accounts.}

Although the analysis would suggest that A should be able to prevent the unauthorized modification of his film in order to preserve his ability to price discriminate, the South by Southeast hypothetical may be criticized as far-fetched. Those who oppose film modification decry the injury to artists’ vision and reputation, not to their ability to charge consumers a premium. Even if that were their hidden agenda, it is difficult to imagine many instances in which a Hollywood producer would abandon a film or change it materially because of the lost opportunity to charge home viewers for editing privileges. The market for authorized edited versions might be undercut, which could be undesirable in some respects; sensitive edits performed by the creators of the film could be displaced by the clumsy edits of third parties, at least if consumers did not sufficiently prefer the former to pay a premium for them. The economic impact, however, would likely be minimal, because every consumer who experienced the unauthorized edit would have to purchase (or otherwise acquire) the authorized DVD. One could speculate that if effective filtering technology became widespread filmmakers would actually make racier films because they could find a wider audience. Yet in the absence of any empirical data, or even sound intuition, there is some comfort in relying on the maximalist’s theoretical default, particularly if one is crafting rules that would affect a broad range of technologies and different types of artistic expression.

The maximalist approach depends both on the initial assignment of rights to the author and on their easy transfer by licensing. In instances of market failure, where, for example, the costs of the transaction would be greater than the value of the right transferred, even maximalists would find reason to limit the author’s rights—perhaps
through the mechanism of fair use.\textsuperscript{392} Would licensing consumer modifications of copyrighted works be limited by market failure? If it were necessary for every consumer to bargain with every author for the right to modify, then the transaction costs could be prohibitively high, particularly in light of the likelihood that each consumer would place relatively small value on the right to modify any particular work. To the extent that licenses can be aggregated, the value of the transaction increases and the costs decrease.

One option would be to require the limited number of companies who provide modification technology to pay for that privilege—a cost they can pass on to consumers. As in the case of video recorders, an objection would be the burden assumed by consumers who use the technology for other tasks, such as modifying their own films. An easier way to satisfy the market for modified films might be for the studios to take modification out of the hands of consumers entirely and simply provide alternative versions themselves, as they already do for use by television broadcasters, airlines, and so forth. This alternative would not provide consumers the same value as the freedom to modify on their own. Even if studios could make available several versions of their films, it probably would not be economical to provide each consumer with a version specifically tailored to his or her needs, even to the extent that technologies like ClearPlay currently allow viewers, through the check box system, to specify the kinds of materials they wish to have eliminated. There is no such objection if copyright owners are willing and able to provide consumers the kind of customizing tools that third parties would provide, and efficient mechanisms can be devised for handling the transactions.

I have assumed so far that copyright owners \textit{would} be willing to allow consumers to modify their works, as long as they are appropriately compensated. Some authors may resist the idea categorically because they are unwilling to surrender control over how their works are experienced. To the extent that it is a question of preserving their reputation, this reluctance does not take us beyond the realm of economic analysis. Authors have a "brand name" to protect, and if clumsy modifications make their works seem inferior their future income as authors may be threatened. Protecting that "brand name" is consistent with the constitutional goal of promoting artistic endeavors through financial reward. This purely economic concern can be partially addressed through practical measures; a consumer who effects modifications himself should know better than to blame the author if he is dissatisfied with the result, and prefabricated modifications of the kind offered by ClearPlay could be accompanied by prominent disclaimers. Authors might not be convinced that such measures would work, but if the licensing fees are high enough any risk becomes acceptable to authors concerned only with their financial reward.\textsuperscript{393}

\textsuperscript{392} See supra Part I.D.

\textsuperscript{393} Some authors may not perceive the situation in terms of financial reward. Some may have an irrational attachment to their artistic vision, in the sense that they would sacrifice material reward beyond any objective measure in order to prevent the modification (or mutilation) of their works. The refusal of such authors to license might be regarded as a kind of market failure. On the other hand, one can simply treat the feelings of the author as one of the factors in the economic equation, and if an author \textit{perceives} an injury that outweighs the value of modification to the consumer (and hence any price consumers are willing to pay), the market has not failed but simply preserved the optimal distribution of rights.
B. Consumer Expectations

Even in an analysis limited to economic factors, there is much to be said for matching the distribution of rights with the expectations of consumers. A consumer may purchase a copy of a copyrighted work with the expectation that it can be modified, and the consumer may value the work more highly because of that freedom. If the consumer subsequently discovers that the work cannot be modified, or cannot be modified without additional payment to the copyright owner, the consumer has overpaid and the marketplace has been distorted. Do consumers have such an expectation?

Courts have long held that purchasers of patented machines have an implied right to modify them without further compensation to the patent owner. The right to modify, like the right to use and repair, is considered a part of the bargain when the consumer purchases the machine. Once the machine is sold, the patentee's interest in that machine is at an end, and the patentee's rights, with respect to that machine, are exhausted. In the context of repair, a patentee can demand further compensation only if the machine is so dramatically rebuilt that it amounts to reconstruction—in other words, to the fabrication of an entirely new machine. Presumably, reconstruction would also be a limiting factor for patent law's implied right of modification.

In Wilbur-Ellis Co. v. Kuther, the Supreme Court held that Wilbur-Ellis did not infringe a patent on a machine for packing fish into cans when it purchased a rusting and inoperative machine, restored it, and resized six of the thirty-five elements in the patented combination so that the machine would pack fish into cans of a different size. By adapting the machines, Wilbur-Ellis had "do[ne] more than repair in the customary sense," but it was "kin to repair for it bore on the useful capacity of the old combination, on which the royalty had been paid." Adapting the machine to pack fish in cans of a different size was "within the patent rights purchased, since size was not an invention." More recently, the Federal Circuit held in Surfco Hawaii v. Fin Control Systems Pty, Ltd., that sales of safer, rubber-edged replacements for the releasable fins in the plaintiff's patented surfboard did not constitute an infringement. "[T]he right to replace or modify a part of a patented device does not require that the part be spent or broken. Infringement liability depends on the extent of the change, not

394. See, e.g., Mitchell v. Hawley, 83 U.S. 544, 548 (1873) ("Sales of the kind may be made by the patentee with or without conditions, as in other cases, but where the sale is absolute, and without any conditions, the rule is well settled that the purchaser may continue to use the implement or machine purchased until it is worn out, or he may repair it or improve upon it as he pleases, in same manner as if dealing with property of any other kind." (emphasis added)).

395. See id. at 546–47.

396. See Surfco Haw. v. Fin Control Sys. Pty, Ltd., 264 F.3d 1062, 1066 (Fed. Cir. 2001) ("The owner may use, repair, and modify the device as long as there is not 'reconstruction of the entity as to in fact make a new machine.'" (quoting Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 346 (1961))).


398. Id. at 423.

399. Id. at 425.

400. Id.

401. 264 F.3d 1062 (Fed. Cir. 2001).
its purpose. . . . Although extension of the useful life of an article is the usual reason for modification or replacement of component parts, it is not the only reason allowed by law.

The clearest rationale for the purchaser's implied right to use, repair, and modify a patented device is that it matches the expectations of the parties and allows them the benefit of their bargain. In distinguishing repair from impermissible reconstruction, courts have considered factors such as "the nature of the device and how it is designed (namely, whether one of the components of the patented combination has a shorter useful life than the whole), whether a market has developed to manufacture or service the part at issue, and objective evidence of the intent of the patentee." Each would have a bearing on the expectations of buyer and seller. In Husky Injection Molding Systems Ltd. v. R&D Tool & Engineering Co., the Federal Circuit held that selling replacement parts to the owners of patented injection-molding machines, to permit the machines to manufacture articles of a different shape, did not require the permission of the patent owner. The court observed that "there may be some concept of proportionality inherent in the distinction between repair and reconstruction"—a proportionality that would put replacement of spark plugs for a patented automobile in the former category, and "replacement of the remainder of the car at a single stroke" in the latter. The court also outlined a "safe harbor" for modifications or repair, when the part concerned is "readily replaceable." Both the concept of proportionality and the safe harbor for readily replaceable parts are consistent with line-drawing based on the likely expectations of the contracting parties. Finally, the implied right to repair and modify can be trumped by an express reservation of rights sufficient to overcome any contrary expectations by the purchaser.

A similar result might be reached under copyright law if consumers who purchase physical objects embodying the seller's intellectual property expect as a part of their

402. Id. at 1066; see also Hewlett-Packard Co. v. Repeat-O-Type Stencil Mfg. Corp., 123 F.3d 1445, 1452 (Fed. Cir. 1997) (finding that modification of patented printer ink cartridges to make them refillable was "not conventional repair," but "more akin to permissible 'repair' than to impermissible 'reconstruction'").
403. See Hewlett-Packard, 123 F.3d at 1451 ("Generally, when a seller sells a product without restriction, it in effect promises the purchaser that in exchange for the price paid, it will not interfere with the purchaser's full enjoyment of the product purchased. The buyer has an implied license under any patents of the seller that dominate the product or any uses of the product to which the parties might reasonably contemplate the product will be put.").
405. See, e.g., id. at 674 (finding evidence that a market for replacement parts has developed "could . . . be a factor tending to prove that there is a reasonable expectation that the part of the patented combination wears out quickly and requires frequent replacement").
406. 291 F.3d 780 (Fed. Cir. 2002).
407. Id. at 786–87.
408. Id. at 787–88.
409. See Mallinckrodt, Inc. v. Medipart, Inc., 976 F.2d 700, 709 (Fed. Cir. 1992) (holding that medical device marked "For Single Patient Use Only" could not be "reconditioned" by purchaser for further use, regardless of whether such reconditioning could be categorized as repair or reconstruction).
bargain the right to modify those objects. Because copyright law includes an express right of adaptation and patent law does not, one might conclude that well-informed consumers would have less expectation of a freedom to modify. Even consumers who are only vaguely familiar with copyright law are probably aware that they cannot reproduce the copyrighted work for sale. It is so much easier to reproduce a copyrighted work than a patented machine, thanks in part to devices such as photocopiers and tape recorders, that consumers may be far more conscious of legal restrictions on their use of copyrighted works than legal restrictions on their use of patented machines. On the other hand, a consumer’s expectations about copying may not extend to modification, and, until recently, the kind of modifications that were practical for consumers were of the handmade kind that consumers probably do assume is proper, such as cutting out recipes from a magazine, or highlighting passages in a book.

In the absence of an empirical study, it is difficult to say what freedom to modify the average consumer expects, particularly in the context of new modification technologies. Some factors that would likely influence consumer expectations include whether the consumer paid to possess a physical artifact that embodies the copyrighted work; whether the modification affects only that single physical artifact; and whether the modification is performed in private, for use in private. A consumer who has paid to possess, for example, a copy of a book, may expect to acquire with that payment a certain dominion over the physical object. He may expect the same freedom to use or abuse that object that he enjoys with other physical objects in his possession. He would not expect (we can easily imagine) the right to reproduce and distribute the contents of the book, to perform it in public, or to offer the world a revised version in multiple copies. As public activities, these actions affect “the work”—an abstraction still owned by the author even after the conveyance of one of many copies in which it is embodied. Actions conducted in the privacy of the home, and that affect only a single copy lawfully possessed, do not threaten the integrity of “the work.” Our hypothetical consumer might consider this a fair place to draw the line, and a fair expression of his bargain with the copyright owner. At this point we are putting thoughts in the mind of consumers, but they are plausible thoughts and parallel some of the principles already codified in the Copyright Act. Those principles include the distinction between ownership of a copyright and ownership of a tangible object in which the copyrighted work is embodied, the purchaser's right to dispose of that tangible object, the

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410. In *Midway Manufacturing Co. v. Strohon*, 564 F. Supp. 741, 744–45 (N.D. Ill. 1983), the court rejected the analogy. Although cases like *Wilbur-Ellis* support the right of consumers to modify a patented machine after its first sale, the court held that the Copyright Act more specifically defines consumers' rights. Adaptations to make a computer program compatible with particular hardware are sanctioned by § 117 and cannot be transferred without the copyright owner's consent. *Strohon*, 564 F. Supp. at 745 n.2. Section 109, which describes consumers' rights after the first sale of a copyrighted work, includes no right of reproduction or adaptation. *Id. at 745*. Finally, the court stated that the Seventh Circuit, by holding in *Midway Manufacturing Co. v. Artic International, Inc.*, 704 F.2d 1009, 1013–14 (7th Cir. 1983), that an accelerated version of a video game would be an infringing derivative work, had dealt the argument by analogy a “final death blow.” *Strohon*, 564 F. Supp. at 745–46.


412. *See id. § 109.*
distinction between public and private performances, and the copyright owner's limited right to control public display. In some respects, speculating about consumers' expectations may be futile. Consumers' expectations can be changed, depending upon how copyright law develops. If consumers are surprised to hear that they cannot modify the copyrighted works they have purchased, and feel that they did not get the benefit of their bargain, at least consumers can be educated so that future surprises are avoided and future bargaining is better informed. Moreover, even if copyright law did recognize an implied consumer right to modify, the parallel to patent law would suggest that the right could be withheld by express restrictions. Express restrictions are commonplace in connection with copyrighted works, and as easy to implement as the FBI warning that precedes a film on DVD, or the announcer's admonition that certain uses of a baseball telecast require the permission of the Commissioner. One can foresee that if consumers are found to have an implied right to modify, and copyright owners perceive a threat to their interests, express restrictions on modification will become a matter of routine.

C. Integrity, Privacy, and Autonomy

Economic considerations may be central to copyright's instrumentalist goals, but they can be overshadowed by arguments with more emotional resonance. In the recent dispute over the modification of copyrighted films, one side marched under the banner of artistic integrity, while the other relied upon ideals of liberty, privacy, and family. I consider how these values bear on the question of consumer modification in general.

The framers of the Constitution undoubtedly placed a high value on authorship; they were willing to overcome their general resistance toward monopolies in order to encourage authors to write, and by extension, as the copyright laws developed, to encourage painters to paint, musicians to compose, architects to design, and so forth. If the product of an author's labor is worthy of such special encouragement, then perhaps it is also worthy of measures to protect it from distortion or mutilation. Furthermore, it cannot be doubted that many authors have an emotional attachment to their work. Expression can be a very personal thing, intimately revealing of the mind that produced it, and many authors are known to the public primarily through their works. It is no wonder that the comedians of Monty Python were appalled to see their sketches presented in a way that distorted their message. Although one can argue about the economic consequences of the injury to their reputation, most likely they perceived their injury in terms more personal than financial.

Is protecting the author's message, as well as the author's feelings, sufficient for a broad rule against consumer modification? Not necessarily. Consumer modifications usually affect no more than a single copy of the work. If the same work is available to

413. See id. § 106(4) (conferring exclusive rights to perform certain copyrighted works "publicly"); id. § 101 (defining the term "publicly").
414. See id. § 109(c).
415. See, e.g., Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 250 (1903) ("Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man's alone.").
416. See supra Part I.C.
the public in multiple, unmodified copies, it is difficult to perceive substantial injury either to "the work" or to the author. For works that are unique, such as one-of-a-kind oil paintings, it may be otherwise; as previously discussed, protections against mutilation of such limited-edition works have already been put in place through § 106A of the Copyright Act. Injury to an author's reputation is also less likely when the modifications are performed by consumers. Such modifications have less public exposure; in fact, they are most likely to be experienced by the modifiers themselves, who both prefer the modification and know who is responsible for it. Some modified versions may be sold or given away to persons who are not aware of the provenance, but the impact of such isolated incidents may be too small to justify a general prohibition. Indeed, one of the best arguments against a broad prohibition, at least if justified by protection of the author's "moral rights," is that it would nullify the carefully-defined limitations of § 106A via the complex definition of "work of visual art" in § 101. Section 106A, for example, explicitly does not apply to motion pictures.

At the same time, a number of appealing arguments can be advanced in favor of consumer modification, not the least of which is that it makes available versions of copyrighted works specifically tailored to the needs of consumers—perhaps more narrowly made-to-order than any author could be expected to provide. What the consumer experiences may not be what the author intended, but perhaps the author's preferences should not automatically be judged superior to the consumer's—artistically or otherwise. In addition, a consumer who can modify a copyrighted work is a consumer who is more engaged—more actively involved, intellectually, in the experience of the work—than a consumer who must passively accept whatever the author chooses to provide. The consumer who exercises choice is more free, more human, more thoughtful; he is living the "good life" of William Fisher's utopian ideal. Consumer privacy is also a consideration. Imagine a consumer who prefers to experience a film without crude sexual innuendos that embarrass her and her family. Even if the filmmaker could provide a tamer version in stores, and was willing to do so, the consumer might feel uncomfortable expressing a preference for the alternative, fearing that she would seem prudish or unsophisticated. If she modifies the film herself, her preferences stay within the family. Similarly, the consumer who modifies her own films experiences a sense of autonomy—a sense of control over her own physical possessions, her own experiences, and her own family. Even if she could pay the copyright owner for a license to modify, the very fact of having to receive permission could produce a sense of intrusion or powerlessness. One could argue that the choice of a consumer who fears for her privacy or her autonomy is simply to forego the film altogether if she is not satisfied with the way it is. No copyright owner forces a consumer to experience his work. On the other hand, copyrighted expression is such an important part of our culture, and so much of what creates a sense of community, that avoidance may be too high a price to ask consumers to pay. This is particularly true if the marketplace cannot support alternatives, such as family-friendly films that appeal only to a minority of consumers.

417. See supra text accompanying notes 97–102.
Considerations of privacy, autonomy, and dominion over physical property may seem out of place in discussing copyright policy. Perhaps the only relevant considerations are those that bear on the ultimate policy objective of copyright law—to promote the progress of knowledge and culture. In the *Sony* case,\(^{419}\) the justices were divided on the importance of whether the challenged use was "productive."\(^{420}\) A productive use, in the fair use context, might be one that produces new expression (e.g., use in a critical essay or a parody) or one that furthers the dissemination of knowledge (e.g., uses in education). Such uses may contribute to the progress of knowledge in a way that makes up for any injury to the author's incentives. Other unauthorized uses of copyrighted works may be *positive*, in the sense of furthering some desirable goal, without being *productive*. Playing music quietly to help patients sleep in a hospital, or playing it loudly to scare birds from a cornfield, might fall in that category; both uses accomplish something, but neither furthers the policy objectives of copyright.

Nevertheless, these consumer interests should not be disregarded. Copyright law has often been used to protect the interests of authors in privacy and autonomy. For example, authors may use copyright in unpublished works to avoid intrusions into their personal affairs.\(^{421}\) Although an unpublished work is subject to fair use,\(^{422}\) the private nature of the writing still weighs heavily against the defendant in a fair use inquiry.\(^{423}\) Section 106A protects the integrity of an author's work, potentially at the expense of a "productive" distortion. Weighing such values in an author's favor is actually much harder to justify than *limiting* the copyright monopoly for similar reasons. As Lloyd Weinreb points out, Congress's power to set aside a copyright monopoly must be consistent with the constitutional goal of promoting the progress of knowledge; but nothing in the Constitution *requires* Congress to grant a copyright monopoly, much less ignore any good reason for limiting its scope.\(^{424}\) In short, our concern for protecting the interests of authors, financial and otherwise, should be balanced against the equally legitimate interests of consumers who wish to modify a copyrighted work. In Part V, I discuss where reasonable lines might be drawn.

V. SEEKING BOUNDARIES

Analogies play an important role in legal analysis, and defenders of consumer modification have many to choose from. Editing offensive materials from a copyrighted motion picture, they might argue, is like using the mute or fast-forward buttons on a VCR remote control, or skipping frightening passages in a book while

\(^{419}\) See supra Part II.B.

\(^{420}\) Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 455 n.40 (1984); id. at 478–79 (Blackmun, J., dissenting).


\(^{422}\) See 17 U.S.C. § 107(4) (2000) ("The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all of the . . . factors [set forth in § 107].").


\(^{424}\) Weinreb, supra note 158, at 1141 ("Congress is not required to grant copyright to the full extent that it is empowered to do so and may, consistently with the Constitution, withhold copyright if it conflicts with any other proper purpose.").
reading to a child, or covering one's ears before a loud noise in a play. Yet it is not precisely like any of those things. Using the mute button makes no permanent change; some of the editing schemes do. No business earns a profit by covering playgoers' ears; ClearPlay and others charge a fee. The situation is not simple enough to resolve just by finding the right analogy. Instead, one must examine the consequences, to authors and consumers, of a variety of potential approaches to consumer modification.

One could add adaptation to the rights transferred by the "first sale"; then anyone who had purchased a copy of a copyrighted work would have an unlimited right to modify and resell it. This might not be disastrous for copyright owners, as long as the right of duplication remained undisturbed so that each sale of a modified work required purchase of an unmodified work from the copyright owner. On the other hand, this is clearly not the intention of the "first sale" provision as currently written, and copyright owners could be frustrated in their attempts to exploit derivative markets. For example, the producers of a previously successful video game—let us call it Doom Raider I—would have less incentive to develop the sequel Doom Raider II if the market could be flooded with other adaptations of Doom Raider I sold by anyone who had bought up surplus copies of the no-longer-fashionable game. In addition, the authors would lose control of their work, possibly to the injury of their "brand name" and reputation. Such dramatic inroads on the right of adaptation might not be desirable and, realistically, cannot be expected. Nor is it likely that courts will discover an implied right of modification similar to what we find in patent law. The language of the Copyright Act, and even the nature of a copyrighted work, makes a broad right of adaptation a less plausible expectation in the context of a purchase, and any implied right discovered by the court would likely be of short duration, nullified as copyright owners attach explicit restrictions to their works.

At the other extreme, one could argue that no one, including a consumer, has any right whatsoever to modify a copyrighted work. On its face, and leaving aside vague defenses such as fair use, this is what the Copyright Act seems to provide. The problem is that this position is difficult to take seriously. Consumers modify copyrighted works every day in small ways—adding notes to a book, fast-forwarding through portions of a video tape, and so forth. One could preserve the general prohibition of unauthorized adaptation without prohibiting such mundane activities by relying on the de minimis defense.425 But as previously discussed,426 as new technologies come into play to permit consumer modification, it becomes more difficult to overlook individual instances of modification as economically insignificant. Businesses that supply the technology for innumerable modifications, and certainly businesses that perform modifications on consumers' behalf, cannot defend their actions as trivial. Hence, if the de minimis doctrine defines the limits of consumer modification, it is likely that the opportunities offered by new technologies will not be realized unless copyright owners give widespread permission. Perhaps in some cases they will find it in their interests to do so, particularly if efficient mechanisms can be found for charging royalties, but the battles already fought suggest that there would be much resistance.

425. See supra Part I.E.  
426. See id.
Some who favor an intermediate solution may rely on the position that an infringing
derivative work must be "fixed." This would exempt from charges of infringement
many casual adaptations that consumers routinely enjoy, such as skipping commercials
accompanying recorded television programs or omitting passages in a book read aloud
to a child. The line of fixation has at least one thing to recommend it: because it is
impermanent, an unfixed adaptation is less likely to injure the author's reputation. On
the other hand, it is not clear that Congress intended to make fixation a requirement of
an infringing adaptation, even if that would be the most sensible policy. The only
explicit statement in the legislative history states the contrary. The Register of
Copyrights, Marybeth Peters, commenting on the Family Movie Act of 2004, offered
an ingenious argument relying on the language in the Copyright Act stating that a
"work is 'created' when it is fixed in a copy." A "derivative work" is a type of work,
and it cannot logically exist until it is "created"—that is, fixed. It is a clever approach,
but the congressmen who said explicitly that an infringing derivative work need not be
"fixed" almost certainly contemplated a different conclusion. Moreover, the argument
relies on the definition of "created," whereas the exclusive right is to "prepare"
derivative works.

Another objection to relying on the fixation requirement is that it may not
accomplish as much as its proponents desire. Is it so clear, for example, that the film
modifications performed by businesses like ClearPlay, the subject of Ms. Peters' defense, are not fixed? It is true that the consumer's DVD is not physically altered by
the ClearPlay technology, but the modified experience is "fixed" in the sense that it is
predetermined, and repeated each time one of ClearPlay's many customers chooses
to use the ClearPlay filter. The Copyright Act states that a "work is 'fixed' in a tangible
medium of expression when its embodiment in a copy or phonorecord . . . is
sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise
communicated for a period of more than transitory duration." "Copies" are defined as "material objects . . . in which a work is fixed by any method now known or later
developed, and from which the work can be perceived, reproduced, or otherwise
communicated, either directly or with the aid of a machine or device." Even if
neither the time codes of the ClearPlay filter nor the original DVD are, by themselves,
"copies" of the modified film, together they are certainly capable of producing, with
the aid of machines and for more than a transitory duration, a consistent, modified
experience. It is therefore arguable, and consistent with the general concepts of "copy"
and "fixed," that the combination qualifies as a fixed copy of the modified film.

In fact, one could argue that the filter itself is a fixed "copy" of the modified film, perceptible with the aid of a machine—a DVD player loaded with the unmodified film.

427. See supra notes 56–58 and accompanying text.
428. See supra note 56 and accompanying text.
431. The system allows some variation depending on which types of material the consumer
chooses to filter out, but the filter, at most, offers a small set of predetermined edits.
432. 17 U.S.C. § 101. The elided portion reads "by or under the authority of the author," serving as additional evidence that "fixed" is a term to be applied to a copyrighted work rather than to an infringing work.
433. Id.
If that seems implausible, consider the following sentence: 20 67 94 182 248 323 329 367 465. Each number corresponds to a word in the preceding two paragraphs, numbered 1 through 469. The numbers are meaningless without those two paragraphs, just as the time codes are meaningless without the unmodified film, but could anyone argue that the sentence is "unfixed" because it has to be decoded? It is as "permanent and stable" as any other sentence in this article, although it requires extra effort to be understood. Also note that the sentence is decoded by skipping large portions of the preceding two paragraphs.\footnote{434}{An alternative, and equally "fixed" encoding of the same sentence could read: SKIP WORDS 1–19, 21–66, 68–93, 95–181, 183–247, 249–322, 324–28, 330–66, 368–464, 466–69.}

It is not my intention to resolve here any metaphysical questions about text and meaning, but the exercise should demonstrate that the fixation distinction raises serious difficulties. Finally, if fixation exempted certain consumer modifications from charges of infringement, it would leave many others vulnerable, such as common modifications that consumers perform on printed materials. A consumer who clipped favorite articles from a magazine and kept them in a loose-leaf binder could not rely on a fixation defense.

For a comprehensive approach to the problem, the best available tool for addressing consumer modification is fair use. As discussed in Part I.D., the fair use defense is notoriously unpredictable. For that reason, I would suggest a rather modest safe harbor of consumer activities that should be considered fair use in all cases. Specifically, I propose that any modification of a copyrighted work by a consumer, that affects no more than a single copy of the copyrighted work legitimately possessed by that consumer, should be considered a fair use of the copyrighted work whenever the work is available in a significant number of copies.

The safe harbor I have described would be narrow. It would not apply to works that exist only as single copies or in limited editions, avoiding any conflict with VARA.\footnote{435}{See supra note 100 and accompanying text.}

It would extend to unfixed modifications, such as fast-forwarding through portions of a videotape, and fixed modifications, such as marking a book or customizing the appearance of a software interface. It would not, however, cover consistent modifications made to multiple copies. The most important limitation is that the safe harbor would protect only modifications performed by consumers. It would not cover modifications performed by others on behalf of consumers, such as videotapes edited to alter content before they are sold to consumers.

There are good reasons to draw these distinctions. First, modifications performed by consumers are likely to be so specifically tailored that equivalent premodified versions could not be efficiently provided by the copyright owner.\footnote{436}{This problem could, however, be overcome if the copyright owner sold consumers permission to modify the work in any way they desired.} For example, a company that edits a motion picture to remove profanity is doing nothing more than the film studio could do itself; on the other hand, no studio could provide alternative versions of its films to match the specific judgment of each consumer as to which material is too adult for her children to experience. Second, permitting consumers to modify their experience in a way that is entirely ephemeral, or that only affects the copy of the work they happen to possess, preserves a realm of consumer privacy and respects consumers' legitimate expectation of dominion over their physical possessions. Modifications that affect multiple copies, or that are offered for sale in quantity, cross
the intuitive boundary between the physical object and "the work" protected by copyright. In a practical sense, they are also more likely to affect the author's reputation than isolated instances of modification performed by consumers. Finally, exempting consumer modifications would support and encourage the active consumption of copyrighted works that William Fisher persuasively associates with the "good life."

Left out of the safe harbor would be the kind of packaged modifications offered by ClearPlay, because they are performed for consumers, not by consumers. From an economic perspective, such modifications are more likely to substitute for products that the copyright owner could offer in the marketplace. If copyright owners do not enjoy an exclusive right to sell such modifications, the incentive to produce copyrighted works may be reduced or the direction of investments distorted. When consumers involve third party businesses in performing modifications for them, their privacy interests are less compelling. It is intrusive to look over the shoulder, metaphorically, of a consumer deciding privately how to experience a copyrighted work, but a consumer who turns over to a business the task of editing or modifying is operating in a less personal environment. Also, when businesses modify a copyrighted work in a consistent fashion for multiple customers, their actions are a more direct assault on the integrity of "the work." Finally, the consumer who leaves modification to others is not the active, decision-making, taste-refining consumer of culture that William Fisher had in mind. This is not to say that modification performed by others for consumers should categorically be denied fair use status, only that they should be subject to a more traditional, and fairly demanding, fair use analysis, concentrating on the purpose of the modification and its effect on the copyright owner's market.

Admittedly, even this modest safe harbor would produce its own fact-specific gray area. Because consumer modifications of the kind I have described would not be infringing, neither would businesses providing consumers the tools to perform such modifications be vicariously liable. It would be permissible, for example, to sell editing software enabling consumer modifications. On the other hand, selling consumers the edited finished product would not be within the safe harbor. The potential ambiguity is in the difference between an editing tool and an edit. Even the ClearPlay technology gives consumers some flexibility by allowing them to select the kind of material they wish to skip. Nevertheless, choosing among a very limited number of options, where much of the editorial discretion has been exercised by ClearPlay, would suggest that the business, rather than the consumer, is primarily responsible for the modification.

CONCLUSION

Copyright law is no longer a matter of immediate concern only to authors, publishers, and the architects of legal policy. Through advances in technology, consumers are obtaining the necessary tools to reproduce and manipulate copyrighted works in their homes, on a scale to attract the attention of those who own, and who are used to controlling, copyrighted content. As those technologies continue to evolve, consumer interests will clash as never before with the interests of authors and publishers. The desire of copyright owners to control how their works are experienced will confront the equally entrenched, and perhaps even more viscerally felt, need of consumers to take charge of their physical possessions, their private experiences, and their family environment.
Consumers are unlikely to accept gross intrusions into their perceived domain of private affairs and personal possessions. If they have the technology to customize their private use of the goods they own, they will feel entitled to use it. Copyright owners, on the other hand, will vigorously resist any substantial inroads on their exclusive right to create derivative works. Some form of compromise seems inevitable. I have tried to suggest a compromise that would minimize the negative effects of modification on the instrumentalist goals of copyright policy, while giving consumer autonomy the respect it is due. If modifications are permitted when performed for consumers by consumers, many of the promises of advancing technology can be fulfilled, consumers can enjoy a more involved intellectual experience, and few obstacles will be placed in the way of copyright owners reaping the rewards of their creative effort. Such a compromise might take us that much closer to the "good life."