

MAKING ROOM FOR CONSUMERS UNDER THE DMCA

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I. INTRODUCTION

This Article seeks to articulate the interests of information consumers in the era of Digital Rights Management Systems (DRMs). The impetus for this inquiry is the growing threat to the interests of information consumers in the digital age. Recent years have seen a growing number of instances where DRMs are used in ways that threaten consumer rights, such as invading consumer privacy, disabling interoperability, causing security breaches, and limiting the ability of users to annotate their copies or to use them in the time and space of their choice.¹ The use of DRMs turns infor-

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1. Concerns were raised by several NGOs. *See* ELECTRONIC FRONTIER FOUNDATION, UNINTENDED CONSEQUENCES: SEVEN YEARS UNDER THE DMCA (2006), http://www.eff.org/IP/DMCA/DMCA_unintended_v4.pdf [hereinafter UNINTENDED CONSEQUENCES]. Digital Consumer organizations are focusing on different consumer concerns, such as the ability to time-shift and space-shift and to create copies of purchased media.

mation, once a non-excludable public good, into an excludable commodity. Rightholders can monitor the use of their respective works and collect information on the number of copies, the frequency of use, or the context in which the work was played. DRMs dramatically reduce the cost of long-term inspection of copies and therefore strengthen the hold of rightholders over private use.² In fact, digital copies protected by DRMs enable rightholders to exercise unprecedented control over the use of copies after purchase by consumers.³

While many concerns raised by the use of DRMs—such as price and consumer friendliness—are relevant to all types of commodities, other concerns are closely connected to information policy. These new mechanisms for physical control over the use of copyrighted works may threaten intellectual freedom and fundamental liberties. It is precisely this dimension, of consuming cultural goods, on which this Article focuses.

A growing body of literature seeks to articulate the rights of *recipients* of copyrighted works: users of embedded software, music fans who purchase songs on iTunes, viewers of downloaded movies, purchasers of ringtones for mobile phones, and subscribers of online journals. As the digital environment enhances the consumers' capacity to actively engage in creative processes, legal scholars have paid growing attention to the rights of *users* of copyrighted materials.⁴ However, scholars have only recently be-

See, e.g., DigitalConsumer.org, Overview, <http://www.digitalconsumer.org/overview.html> (last visited July 7, 2007).

2. In the past, the high cost of monitoring private copying made enforcement impractical. Consequently, copyright law focused on public exploitation, prohibiting unauthorized public performance and public distribution. Copyright enforcement further focused on intermediaries such as publishers and printers.

3. Consider, for instance, the Adobe Acrobat eBook platform. This system enables originators of content to distribute text in a digital form, but at the same time to restrict certain operations related to the files, such as editing, copying, printing, or annotating. As explained in the Adobe Acrobat eBook:

To protect copyrights, publishers establish their own guidelines for how much of their eBooks can be printed or copied. This means that these permissions will differ from book to book. For example, some of the free books from the Adobe Bookstore have no restrictions on copying and printing. Or, a publisher might give users the ability to print several pages of a cookbook within a set period of time.

Adobe.com, Adobe Acrobat eBook Reader Frequently Asked Questions, <http://www.adobe.com/support/ebookrdrfaq.html> (last visited July 7, 2007) [hereinafter Adobe eBook FAQ].

4. Patterson & Lindberg explicitly addressed users' rights in their seminal book. L. RAY PATTERSON & STANLEY W. LINDBERG, *THE NATURE OF COPYRIGHT: A LAW OF US-*

gun to focus their attention on consumers, acknowledging the significance of consumers for free speech purposes and for advancing the fundamental goals of copyright law.⁵ Conceptualizing the interests of information consumers is crucial for setting limits on the use of DRMs by rightholders, as information consumption becomes central to our everyday lives and post-purchase control of cultural goods becomes more profound.

I offer a view of information consumers that is based on the theoretical framework of copyright law. This perspective situates the interests of information consumers within the general context of information policy. I argue that consumer protection laws cannot fully address the emerging threats to the interests of information consumers.⁶ The consumer protection perspective focuses primarily on the economic aspects of consumerism, aiming to resolve some of the primary market failures associated with it. DRMs, however, not only limit certain rights of consumers, but also affect the symbolic meaning of copyrighted works. They shape our practices of consumption and the meaning of cultural artifacts. Such threats to the rights of information consumers often fall outside the radar screen of consumer protection laws. Thus, the use of DRMs may invoke more general considerations arising from information policy. This gap suggests a need to articulate the unique interests of information consumers and to provide a conceptual framework for defining the scope of those interests.

Exploring the interests of information consumers from the perspective of information policy reveals the multi-dimensional relationship between consumers and cultural artifacts. This inquiry may disclose an important dimension of information consumption that, so far, the DMCA and consumer protection laws have failed to address. While some aspects of experiencing informational works relate to the communicative and symbolic

ERS' RIGHTS (1991). See also Niva Elkin-Koren, *Cyberlaw and Social Change: A Democratic Approach to Copyright in Cyberspace*, 14 CARDOZO ARTS & ENT. L. J. 215, 216 (1996); Niva Elkin-Koren, *It's All About Control: Rethinking Copyright in the New Information Landscape*, in THE COMMODIFICATION OF INFORMATION 79, 79 (Niva Elkin-Koren & Neil W. Netanel eds., 2002); Yochai Benkler, *From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access*, 52 FED. COMM. L. J. 561 (2000).

5. See Joseph P. Liu, *Copyright Law's Theory of the Consumer*, 44 B.C. L. REV. 397 (2003); Rebecca Tushnet, *Copy This Essay: How Fair Use Doctrine Harms Free Speech and How Copying Serves It*, 114 YALE L.J. 535 (2004); Julie E. Cohen, *The Place of the User in Copyright Law*, 74 FORDHAM L. REV. 347 (2005); Malla Pollack, *A Listener's Free Speech, A Reader's Copyright*, 36 HOFSTRA L. REV. (forthcoming 2007); Alan L. Durham, *Consumer Modification of Copyrighted Works*, 81 IND. L. J. 851 (2006); Jessica Litman, *Lawful Personal Use*, 85 TEX. L. REV. 1871 (2007).

6. See *infra* notes 33-37 and accompanying text.

values of such works and call upon the recipients as users and speakers, other aspects invoke the nature of informational works as commodities. Identifying and connecting these different dimensions may help us to better understand the process of consuming information and the special needs of information consumers. Furthermore, identifying the interests of information consumers may introduce a new dimension to standard copyright analysis, which often favors copyright owners, by incorporating a legitimate interest in *access* so as to balance the scope of rights shaped by the DRM/DMCA regime.

The inspiration for incorporating consumer discourse within copyright analysis originates from two U.S. decisions, *Lexmark*⁷ and *Chamberlain*.⁸ These cases demonstrate how the DRM/DMCA regime can be abused to leverage market power and limit consumer choice. *Chamberlain* involved Garage Door Openers (GDOs) and an attempt to stop the distribution of universal transmitters.⁹ The Federal Circuit held that consumers have a legal right to use the embedded software they have purchased, in conjunction with competing products. Taking a similar “consumer-friendly” approach, the court in *Lexmark* denied Lexmark’s claim under the DMCA, where it sought to prevent an aftermarket for printer cartridges by using an authentication sequence.¹⁰

Lexmark and *Chamberlain* addressed the interests of consumers in tangible articles of commerce—a printer cartridge in *Lexmark* and a GDO in *Chamberlain*. However, in cases involving the use of DRMs to protect informational works, courts have failed to apply a similar approach.¹¹ This failure seems puzzling: why would courts opt to protect the interests of consumers in rather mundane commodities but fail to do the same for cultural artifacts? Moreover, cultural artifacts seem to invoke a wide range of

7. *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2003).

8. *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004).

9. The universal transmitters distributed by the defendant enabled users to operate Chamberlain GDOs. They simulated the rolling codes, which plaintiff argued were technological measures that control access to copyrighted software incorporated in the openers and transmitters.

10. Lexmark sought to prevent an aftermarket for printer cartridges by using an authentication sequence in the Printer Engine Program, which enabled loading of authenticated toner cartridges only. The court denied Lexmark’s claim under the DMCA. *Lexmark*, 387 F.3d at 550-51.

11. *Universal City Studios v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000); *RealNetworks, Inc. v. Streambox, Inc.*, 2000 U.S. Dist. LEXIS 1889 (W.D. Wash. Jan. 18, 2000); *Davidson & Assocs. v. Jung*, 422 F.3d 630 (8th Cir. 2005).

consumer vulnerabilities that may deserve more careful attention. In addition to being useful commodities with an entertainment value that could be priced, cultural artifacts also possess communicative value and symbolic significance. They engage our minds in a more direct and intimate way than do tangible goods.

If consumers of GDOs are free to use their copies as they choose, why don't we let consumers of songs purchased from iTunes play their music on a platform of their choice?¹² Could it be that we conceive of the freedom of consumers who purchase ink cartridges as greater than the freedom of home viewers to convert their movies to be watched on their cell phones, or even to create a family-friendly version so that they can share them with their kids?

I argue that the same rationale that convinced the courts to limit the scope of anti-circumvention rules in *Lexmark* and *Chamberlain* should be applied in other contexts involving copies of more conventional copyrighted works such as video games, music, video clips, and artistic images. I further argue that the interests of information consumers should not be conceived as simply an external consideration that might limit the scope of copyright in appropriate cases. This approach was taken by the *Chamberlain* court. The court concluded that consumers' rights call for a narrow construction of the DMCA that would be consistent with antitrust laws. I argue that the interests of information consumers should also be considered an integral part of copyright analysis, deriving from its fundamental tenets. This requires, however, an understanding of the interests of information consumers.

Part II discusses DRMs and the legal regime that governs their use. Section A briefly introduces the DRM and anti-circumvention regime, arguing that post-purchase control enabled by DRMs may affect consumer welfare. Section B explores the limits of consumer protection laws for securing the interests of information consumers. Consumer protection laws, I argue, cannot sufficiently address these interests because consumer protection doctrine does not fully capture the threats to the interests of information consumers and because consumer rights may be easily overridden. Section C revisits copyright cases concerning the rights of consumers and

12. See, e.g., Brian Deagon, *EU Lodges Complaint Against Apple's iTunes; Alleges Restrictive Practices; Record Labels Also Named, in a Case Made Complex by Europe's Many Regulations*, INVESTOR'S BUS. DAILY, Apr. 4, 2007, at A05; Dan Carlin, *Europe vs. Apple: Facing the Music*, BUS. WEEK ONLINE, Jan. 31, 2007, http://www.businessweek.com/globalbiz/content/jan2007/gb20070131_492654.htm; Ryan Katz, *Apple 10-Q: Thirteen New Lawsuits, Nine Settled*, THINK SECRET, Jan. 2, 2007, <http://www.thinksecret.com/news/0612sec10q.html>.

suggests that the courts were attentive to the interests of consumers only when mundane commodities were at stake.

Part III articulates the unique interests of information consumers. Section A identifies the impediments to conceptualizing consumer interests under copyright law and suggests a way to make room for consumers under the copyright regime by re-conceptualizing the notion of “information consumer.” It introduces two perceptions of consumers under copyright law (i.e., *consumer-as-shopper* and *consumer-as-author*) and proposes a new one: “*consumer-as-participant*.” Section B emphasizes the different dimensions of information consumption, arguing that the perception of *consumer-as-participant* adds a new dimension to standard copyright analysis, which is particularly significant in the environment of user-generated content. Developing a notion of consumer protection of informational products requires expanding the focus on economic consumers (*consumers-as-shoppers*) to incorporate an understanding of consumers as citizens and participants in “meaning-making” processes. Section C demonstrates how consumer interests could be incorporated into copyright analysis.

Part IV identifies some of the advantages arising from incorporating a *consumer-as-participant* perspective into copyright analysis. One advantage is that this perspective may add legitimacy to consumers’ claims against restrictions on access to copyrighted materials. Another advantage is that copyright theory provides a conceptual framework for articulating the legitimate interests of consumers. This is particularly crucial in the digital environment, as consumers of informational works perform multiple roles simultaneously, functioning as producers, distributors, and recipients of content. Third, a consumer perspective highlights strategic uses of DRMs for anticompetitive purposes. Fourth, the consumer perspective provides an organizational structure for political action. Finally, expanding copyright analysis to account for the interests of consumers could set limits on the use of the DRM/DMCA regime for post-purchase control.

II. DRM/DMCA AND POST-PURCHASE CONTROL

Many of the latest conflicts and challenges involving copyright law leave us with the feeling that copyright discourse is rather limited and that it does not capture the complexity of emerging information markets and new technologies. The advent of a new copyright regime based on DRMs and anti-circumvention is one example. The use of DRMs enables physical control over the use of cultural artifacts long after purchase by consumers. This shift in the nature of informational works affects the relation-

ship between rightholders and recipients of copyrighted materials. It enables a long-term relationship between suppliers and recipients of copyrighted works. Copyright discourse that focuses on authors often overlooks the consequences for recipients of copyrighted materials. To appreciate this we need to first understand how DRMs affect consumer welfare as well as how the anti-circumvention regime facilitates this influence. We will then examine the legal strategies that could address consumer interest: the consumer protection approach and the copyright approach.

A. Consumer Interests in the Digital Environment

Digital networks, which make it extremely easy to copy and mass distribute copyrighted materials, also enable technological protection of such works. DRMs are technological measures that rightholders increasingly employ to control the use of copyrighted materials distributed in digital format. For instance, DRMs might provide limited access to works for paying users only, limit some functions of digital files (e.g., the number of backup copies), or even prevent certain uses altogether (e.g., saving, printing, or annotating a particular copy).

DRMs allow vendors to exercise control over the use of works, even after they have been purchased by consumers. Such post-purchase control over the use of works was not available to copyright owners in the past and is hardly available to suppliers of other commodities. For instance, region coding prevents the use of a purchased DVD outside the region, so that the owner of a DVD purchased in the US cannot play the movie on a computer that is set for Europe.¹³ Similarly, music encoded by a particular DRM could be limited to play on only one music player.¹⁴ In recent years, DRMs were used to prevent gamers from playing legally purchased copies of games on different game consoles,¹⁵ to prevent purchasers of video

13. DVDDemystified.com, DVD Frequently Asked Questions (and Answers), <http://www.dvddemystified.com/dvdfaq.html> (last visited July 9, 2007). Post-purchase control could be implemented in several ways. One way to implement it is through the copies themselves. Adobe PDF, for instance, allows the distributor of the file to prevent certain uses of the file, such as saving and printing. Adobe.com, Create Adobe PDF Online, http://createpdf.adobe.com/cgi-feeder.pl/help_security (last visited July 9, 2007). Adobe's eBook platform facilitates control of access restrictions which allows access to stored information for a limited time, after which the file would "expire." Adobe eBook FAQ, *supra* note 3.

14. A consumer that purchases music on iTunes and wishes to switch to a different format is restricted from doing so. *iTunes user sues Apple over iPod*, BBC News, Jan. 6, 2005, <http://news.bbc.co.uk/1/hi/technology/4151009.stm> (last visited July 9, 2007).

15. See, e.g., UNINTENDED CONSEQUENCES, *supra* note 1, at 10 (Sony sues Bleem and Connectix, claiming that PlayStation emulators for Macintosh computers and for Windows PCs constitute circumvention and violate the DMCA).

games from playing their games over the internet,¹⁶ and to prevent the owners of music files purchased on iTunes from transferring their songs to devices other than the iPod.¹⁷ Consumers are therefore often locked into a specific hardware device and might find it cost-prohibitive to switch to a different device, fearing they will lose their sunken investment in their current collection.

Furthermore, DRMs regularly prevent copying, modification, and re-distribution of music files, software, images, or textbooks, thereby limiting the ability of consumers to freely experience the copies purchased. E-books, for instance, such as Adobe's Acrobat eBook platform, use encryption to limit the number of copies or prevent any modification of the text.¹⁸

DRMs may affect consumer welfare indirectly when employed to protect dominance in the market for platforms and applications.¹⁹ For instance, Apple used its DRM to prevent RealNetworks' digital download store from using Harmony, a DRM designed to be compatible with Apple's FairPlay DRM and iPods.²⁰ iPod, the most popular digital music player, reads only Apple's FairPlay. Incompatibility with formats used by other music distributors makes it difficult for competitors, such as RealNetworks, to compete with Apple. Apple is currently facing a lawsuit in the U.S. over tying the iTunes store to the iPod.²¹ Reducing competition

16. *Davidson & Assocs.*, 422 F.3d at 635.

17. Songs purchased from iTunes, which is the leading online music store service run by Apple, are formatted with FairPlay, which prevents consumers from playing songs on other devices (and also limits the number of copies and uses of the download songs). RoughlyDrafted.com, *How FairPlay Works: Apple's iTunes DRM Dilemma*, Feb. 6, 2007, <http://www.roughlydrafted.com/RD/RDM.Tech.Q1.07/2A351C60-A4E5-4764-A083-FF8610E66A46.html>. Songs (music files) sold on CONNECT, Sony's online music store, are downloadable in ATRAC3 format, which is a proprietary format that can only be played on Sony players. Sandy McMurray, *Corante, Connect - Sony's music store*, Apr. 19, 2004, http://apple.corante.com/archives/2004/04/19/connect_sonys_music_store.php.

18. Adobe eBook FAQ, *supra* note 3.

19. Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L.J. 1575, 1629 (2002).

20. Apple threatened legal action under the DMCA, forcing RealNetworks to give up its initiative. See John Borland, *Apple Fights RealNetworks' 'hacker tactics'*, CNET NEWS.COM, Dec. 14, 2004, http://news.com.com/Apple+fighters+RealNetworks+hacker+tactics/2100-1027_3-5490604.html?tag=item; Matt Hines, *'Stunned' Apple Rails Against Real's iPod Move*, CNET NEWS.COM, Jul. 29, 2004, http://news.com.com/Stunned+Apple+rails+against+Reals+iPod+move/2100-1041_3-5288378.html.

21. This suit, filed in July 2006 by user Melanie Tucker in the U.S. District Court for the Northern District of California, was revealed by Apple in a filing with the Securities and Exchange Commission. Tucker, who is seeking class-action status, argues

may lead to an increase in price, rendering access to music more expensive.

However, DRMs do not in and of themselves pose a threat to consumer interests. The fact that a product's design limits some of its functions does not automatically imply that consumer interests have been compromised. By definition, the design of a product always restricts what we can do with it. Yet, we are usually free to adapt our purchased commodities to serve our preferences and needs. This is particularly true in the case of digital content, which can be easily shaped by end users.

Restrictive measures have always been employed by rightholders to strengthen their control over creative works. What actually disables consumer choice is the anti-circumvention regime under the Digital Millennium Copyright Act (DMCA).²² Under the DMCA, DRMs are immune from technical challenges and equipped with powerful legal sanctions against hacking. The purpose of the DMCA was to tackle piracy and to strengthen the effectiveness of DRMs.²³ It was presumed that technological measures employed by rightholders could only be effective when it is possible to efficiently prevent their circumvention. Once a digital lock has been hacked, the creative work becomes, once again, vulnerable to copying and unlicensed distribution.²⁴ The DMCA outlaws the circumvention of protective measures²⁵ at three levels: banning access to a work by cir-

that Apple failed to give consumers notice that music purchased from the iTunes Store is incompatible with music and playing devices offered by other vendors. The suit further alleges that Apple violates antitrust laws by the exclusive tie-in between iTunes and the iPod. Apple's motion to dismiss was denied by the court in December 2006. *Tucker v. Apple Computer, Inc.*, 2006 U.S. Dist. LEXIS 96343 (N.D. Cal. Dec. 20, 2006). *See also* Randall Stross, *Want an iPhone? Beware the iHandcuffs*, N.Y. TIMES, Jan. 14, 2007, at § 3, at 3.

22. Digital Millennium Copyright Act, Pub. L. No. 105-304 (1998) (codified in scattered sections of 17 U.S.C.).

23. Zohar Efroni, *Towards a Doctrine of 'Fair Access' in Copyright: The Federal Circuit's Accord*, 46 IDEA 99, 101 (2005).

24. *See* Jane C. Ginsburg, *The Pros and Cons of Strengthening Intellectual Property Protection: Technological Protection Measures and Section 1201 of the U.S. Copyright Act* 17 (Columbia Law Sch. Pub. Law & Legal Theory Working Paper Group, Paper No. 07-137, 2007), available at <http://ssrn.com/abstract=960724> (assessment of the judicial and administrative construction of Chapter 12 of the 1998 Digital Millennium Copyright Act).

25. Circumvention of a technological protection measure is defined as an act to "avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner." 17 U.S.C. § 1201(a)(3) (2000).

cumvention,²⁶ banning trafficking in devices that circumvent measures protecting copyrights,²⁷ and banning the manufacturing and distribution of devices designed to circumvent access controls.²⁸ Thus, the anti-circumvention regulation resulted in a third layer of protection for copyright materials, which enabled excessive control by rightholders over the use of works purchased by consumers.

The DMCA, which was originally enacted to confront piracy, has turned DRMs into an effective means of governing the use of copyrighted works in digital format. Consumers cannot legally hack technical measures that limit their ability to use copies they have legally purchased. The law also makes it illegal to provide circumvention means, thus further limiting the opportunities for consumers to remove technical measures which restrict the functionality of their purchased copies. Indeed, since the enactment of the DMCA, DRMs have been employed to compromise consumer rights in a growing number of cases.²⁹

B. The Consumer Protection Approach

The question now becomes, what is the best way to limit post-purchase control facilitated by the DRM/DMCA regime? It has been suggested that DRMs that contradict consumer expectations should be treated as a matter of consumer protection law: a consumer purchasing a copy has some legitimate expectations regarding the use of her copy. For instance, she may expect to use her copy in conjunction with other products. A consumer may also expect to make a backup copy for her personal use, so she can watch it on her personal computer, or listen to it on her portable player.³⁰ Courts have generally been responsive to consumer interests in cases that

26. 17 U.S.C. § 1201(a)(1) (2000) makes it illegal to “circumvent a technological measure that effectively controls access to a work.”

27. 17 U.S.C. § 1201(b)(1) (2000).

28. *Id.* § 1201(a)(2). See generally Ginsburg, *supra* note 24.

29. *Universal City Studios v. Reimerdes*, 82 F. Supp. 2d 211 (S.D.N.Y. 2000); *RealNetworks, Inc. v. Streambox, Inc.*, 2000 U.S. Dist. LEXIS 1889 (W.D. Wash. Jan. 18, 2000); *Davidson & Assocs. v. Jung*, 422 F.3d 630 (8th Cir. 2005), *Sony Computer Entm't Am., Inc. v. Gamemasters*, 87 F. Supp. 2d 976 (N.D. Cal. 1999).

30. The INDICARE report concludes that the legal position of consumers under copyright law is weak, and therefore there is a need to treat DRMs not only as a matter of copyright law but also as a matter of general consumer protection law. Natali Helberger, *It's Not a Right, Silly! The Private Copying Exception in Practice*, 1 INDICARE MONITOR 107, 107-09 (2004), available at http://www.indicare.org/tiki-download_file.php?fileId=105.

invoke a traditional consumer claim, such as a lack of notice.³¹ Consumer rights claims could be equally effective when DRMs create a security risk for consumers' computers, such as in *Sony BMG*, a consolidated lawsuit in which a DRM was secretly installed on music CDs.³²

While consumer protection doctrine is often useful for addressing consumer concerns regarding DRMs, it also suffers from several hindrances. These limitations arise first from the nature of claims invoked by consumer protection laws and second from the type of remedies tailored to address those claims. Claims invoked by consumer protection laws are confined by the limited scope of consumer protection doctrine. This results in a rather limited framework for conceptualizing the harm created by DRMs to information consumers and for defining the scope of their rights vis-à-vis copyright owners. The threat to consumer interests posed by DRMs could be easily trivialized, and the banality of mass consumption makes it difficult to understand what issues are at stake. Why should

31. For instance, in a recent French decision, the court ruled in favor of consumer groups in France who filed a suit against Sony France and Sony UK. The court found that Sony did not provide sufficient notice and failed to clearly inform the consumers that these files could not be played on other players. The court ruled that a manufacturer's omission from the label of the fact that a CD is incompatible with a few devices, like a car stereo, misleads the consumer. See *SA EMI Music France v. Association CLCV*, Cour d'Appel [CA] [regional court of appeal] Versailles, 1e ch. 1e sec., Sept. 30, 2004 (Fr.), available at <http://www.juriscom.net/jpt/visu.php?ID=579>. The court further held that Sony France did not provide clear information to the consumers of Sony players and failed to disclose that these players are not compatible with other files. The court found Sony's "tying practice" to be contrary to the Code de la Consommation [Consumer Code], art. L122-1 (Fr.). Sony's practice, the court held, compelled consumers who downloaded music files from Connect to buy a Sony player if they wanted to play them. See Delphine Strauss, *French court rules against Sony*, FIN. TIMES LTD., Jan. 5, 2007, at 17.

32. The DRM had several functions, which, in addition to limiting the number of copies a user could make, invaded the privacy of users by reporting information to the vendor and further created a serious security risk by installing undisclosed files on users' computers. A number of class action lawsuits were filed against Sony BMG in the United States, the majority of which were consolidated in the United States District Court for the Southern District of New York. See *In re Sony BMG CD Techs. Litig.*, No. 1:05-cv-09575-NRB (S.D.N.Y. Dec. 28, 2005), available at <http://www.girardgibbs.com/sonyconsolidatedamendedcomplaint.pdf>. Consumer protection actions against Sony BMG, which were filed by a number of state Attorneys General, were settled in December of 2006. See Electronic Frontier Foundation, *Sony BMG Litigation*, <http://www.eff.org/IP/DRM/Sony-BMG/#docs> (last visited July 7, 2007). For further discussion of the Sony BMG incident, see generally Deirdre K. Mulligan and Aaron K. Perzanowski, *The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident*, 22 BERKELEY TECH. L. J. 1157 (2007).

we care whether the users of iTunes can play their music on another music player?

The consumer protection perspective requires a baseline definition of consumer expectations. It is difficult to define the scope of “legitimate” consumer expectations deserving guardianship by law. Arguments regarding legitimate expectations of consumers in digital media often rely on their comparable ability to use materials in analog format. For instance, record purchasers were able to repeatedly play their records, and therefore, in this context, limiting access to music for the duration of a subscription may seem unfair. This argument, however, does not explain why consumers are entitled to exactly the same functionality when they use content in digital format.³³ Litman proposes a substantive test: the rights of readers and listeners to interact with copyrighted works should be adjusted to accommodate parallel uses made possible by new technologies.³⁴ Applying this criterion, however, assumes that consumers are entitled to exercise a particular level of interaction with copyrighted material. The definition of such freedom to interact with copyrighted materials cannot derive from consumer protection principles alone.

Another basis for defining consumer expectations is contractual, and it is based on notice and choice. For instance, if a consumer thinks she can use an MP3 file on any media player, and she finds out only after the purchase is already completed that she cannot, courts are likely to perceive this transaction as a violation of her consumer rights. However, defining legitimate consumer expectations based on contractual warranties alone may prove insufficient. After all, the scope of consumer expectations may

33. The definition of reasonable consumer expectations is often based on an equivalent use in the analog environment. Consider books, for instance. Book publishers used to exercise no control over the reproduction of books and relied exclusively on copyright law to prevent the preparation and distribution of illegal copies. E-books, by contrast, use encryption to limit the number of copies and prevent modification of the text. DRMs, in this case, prevent continued use. This could implicate the rights of libraries and archives that purchased a subscription for a scientific journal. If they do not continue the subscription they may not only lose access to new issues of the journal, but also lose access to previously purchased copies.

34. Litman, *supra* note 5, at 1911. Litman writes:

Just as technology spurs evolution in the creation and marketing of works of authorship, it causes parallel evolution in the modes of interaction with those works. We don't want to limit copyright owners to the traditional marketing outlets of bookstores and sheet music sales. Similarly, it makes no sense to limit readers, listeners and player to piano or analog cassette tape.

be further limited by allowing providers to include disclaimers regarding available uses in the User License Agreement (ULA).³⁵

Secondly, consumer protection laws offer a relatively limited set of remedies to consumers of information goods. Consumer protection laws seek to remedy deficiencies in informed consent and therefore consumer interests are often reduced to questions of notice. Consumer protection laws presume that there is an imbalance of power between consumers and suppliers that derives primarily from disparities in information. Suppliers often enjoy a systematic information advantage over consumers, since they are presumably more familiar with the products and services they supply, the markets for these commodities, and particular terms and conditions that govern the relevant transactions. Consequently, consumer protection laws focus on adequately informing consumers regarding their choices. If consumers receive sufficiently conspicuous notice, it is assumed that consumer interests will be reflected in the market through demand.³⁶ Thus, under the present regime, consumer rights may be easily overridden. To legalize a given restriction under consumer protection laws, it is often sufficient to simply give prior notice.³⁷

While providing prior notice may remedy some market deficiencies, it cannot address the harm caused by DRMs to the interests of information consumers. Informational works raise other concerns that should not be simply overridden by a standard contract. Whereas consumer protection

35. In *Chamberlain*, the Federal Circuit warned that the broad interpretation of the DMCA suggested by plaintiff “would allow any manufacturer of any product to add a single copyrighted sentence or software fragment to its product, wrap the copyrighted material in a trivial ‘encryption’ scheme, and thereby gain the right to restrict consumers’ rights to use its products in conjunction with competing productions.” *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004).

36. Studies show, however, that many online music services do not respect consumer expectations of personal use. See Deirdre K. Mulligan et al., *How DRM-Based Content Delivery Systems Disrupt Expectations of “Personal Use”*, in *PROCEEDINGS OF THE THIRD ACM WORKSHOP ON DIGITAL RIGHTS MANAGEMENT 77*, 77-89 (Moti Yung ed., 2003).

37. In Europe, a French court fined EMI Music France for selling CDs with DRM protection schemes that would not play on car radios and computers. EMI violated consumer protection law because it did not appropriately inform consumers about these restrictions. The court obliged EMI to label its CDs with the text: “Attention—this CD cannot be read by all CD-players or car radios.” Cour d’appel [CA] [regional court of appeal] Versailles, 1e ch., 1 sec., Sept. 30, 2004, RG n° 03/04771, F. Bardy, available at http://www.legalis.net/jurisprudence-decision.php?id_article=1344. See also *French Court Forbids DVD Copy Protection*, EDRI, May 4, 2005, <http://www.edri.org/edriagram/number3.9/DVD> (describing a Paris appeal court case that outlawed the use of DVD copy protection mechanisms).

laws focus primarily on the economic aspects of consumerism, seeking to adjust many of the primary market failures associated with it, informational products require a broader perspective. Informational works are usually not simply useful commodities that may be judged strictly by their utility and price. They engage consumers in ways that may affect their autonomy and freedom of expression.³⁸ Thus, the interests of information consumers should be addressed within a general framework of information policy. Such a shift demands a better understanding of the virtues of information consumption. Developing a notion of consumer protection for informational products requires adjustment of consumer protection principles by expanding the focus on economic consumers to incorporate an understanding of consumers as citizens.

C. Consumers under the DMCA: *Lexmark* and *Chamberlain*

An initial question is whether the interests of information consumers could be addressed under current copyright law. Indeed, copyright law facilitates post-purchase control, allowing copyright owners to restrict the use by purchasers of copies (i.e., the preparation of copies of a book or the public performance of a DVD). However, copyright law does not permit absolute restrictions. It incorporates checks and balances by recognizing instances in which copying may be permitted. It allows post-purchase restrictions within the limits of the delicate balance between exclusivity and access that defines the scope of copyright.

The cases of *Chamberlain*³⁹ and *Lexmark*⁴⁰ provided an exceptional opportunity to incorporate consumer protection considerations into copyright analysis. The two cases addressed circumstances that were not originally intended by the DMCA. In both cases, DRMs were used to restrict consumer choice in articles of commerce, and the protection of copyright was only secondary. *Lexmark* and *Chamberlain* were dream cases for those of us who had warned against the danger of anti-circumvention legislation back in the 1990's.⁴¹ These cases demonstrated how suppliers

38. See *infra* notes 79-89 and accompanying text.

39. *Chamberlain*, 381 F.3d at 1193-94. *Chamberlain* was reaffirmed in *Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc.*, 421 F.3d 1307, 1318 (Fed. Cir. 2005).

40. *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2003).

41. Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519, 557 (1999); David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 739-42 (2000); John A. Rothchild, *Economic Analysis of Technologi-*

could use the anti-circumvention regime to leverage their market power and compromise consumer welfare. The significance of the *Chamberlain* and *Lexmark* decisions, however, goes beyond the particular circumstances decided in those cases. The decisions expose the vulnerability of information consumers under the DMCA and uncover the threats posed by the anti-circumvention regime to information markets. The decisions further reveal the dual nature of information consumption, involving a material dimension of owning a commodity and controlling an object, and an intangible dimension of using the information, which often entails a symbolic activity of creating and communicating meaning.

In *Chamberlain*, the Federal Circuit addressed the use of Garage Door Openers (GDOs).⁴² Defendant Skylink sold universal transmitters that allowed users to operate Chamberlain Security+ GDOs by simulating the rolling code system. (The rolling code is a computer program that constantly changes the transmitter signal needed to open the garage door in order to prevent code grabbing.) Plaintiff Chamberlain alleged that the rolling code was a technological measure that controlled access to its GDO copyrighted software and that Skylink violated the anti-circumvention provisions by interfering with its access control measure. The Federal Circuit dismissed the suit, holding that consumers have a legal right to use the embedded software they have purchased in conjunction with competing products.

The explicit recognition of consumer rights under the DMCA by the *Chamberlain* court is particularly apparent in light of the total absence of such recognition from the copyright discourse in other instances concerning DRMs.⁴³ In somewhat similar circumstances involving online games, DVDs, and music players, the picture was quite different.

Compare *Chamberlain* to *Universal City Studios v. Reimerdes*,⁴⁴ one of the first lawsuits to be decided under the DMCA, which involved the circumvention of DVD encryption. The defendant distributed a program,

cal Protection Measures, 84 OR. L. REV. 489, 500-515 (2005); Niva Elkin-Koren, *The Privatization of Information Policy*, 2 ETHICS & INFO. TECH. 201 (2000).

42. See *infra* Section III.C (discussing *Chamberlain*).

43. In several instances unrelated to DRMs, courts have recognized the interests of consumers. See, e.g., *Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc.*, 780 F. Supp. 1283, 1291 (N.D. Cal. 1991), *aff'd* 964 F.2d 965 (9th Cir. 1992) ("Once having purchased, for example, a copyrighted board game, a consumer is free to take the board home and modify the game in any way the consumer chooses, whether or not the method used comports with the copyright holder's intent.").

44. *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000).

DeCSS,⁴⁵ which enabled users to decrypt DVDs encrypted by rightholders using the Content Scrambling System (CSS).⁴⁶ Once a DVD was decrypted, users were able to make an unlimited number of copies of the recorded film. The court held that CSS is a technological measure that effectively controls access to copyrighted materials, and that DeCSS is, therefore, a circumventing device within the meaning of the DMCA.⁴⁷ The claim that DeCSS may be used legitimately for decrypting legally purchased DVDs when users wish to play the movie using alternative devices (such as the Linux operating system) was dismissed.⁴⁸

In *Chamberlain*, the court sought to distinguish *Reimerdes*, suggesting that the circumvention in *Reimerdes* enabled the copying of copyrighted works, while Skylink's transmitters "enable only legitimate uses of copyrighted software."⁴⁹ In other words, when access also involves a copyright infringement—namely, a violation of protected rights—liability under the DMCA will apply. The end result in *Reimerdes*, however, is that rightholders maintain a right not only to limit copying but also to exercise control over the devices by which their works may be accessed and distributed.⁵⁰ Rightholders may control the format in which their work is distributed and the hardware with which it may be played. They are therefore

45. DeCSS is a computer program that emulates the CSS algorithm, which operates the "key" and thus enables users to play a DVD even in the absence of the CSS algorithm. In fact, it allows a non-CSS-compliant DVD player to play copies with DVD content. *Id.* at 314-15.

46. The CSS is an encryption-based security system that requires the use of specific hardware (DVD player or computer DVD drive) to decrypt, unscramble, and play back copies of the motion picture on DVDs. The key that is installed on the DVD becomes operative if it is accessed by an algorithm licensed by the DVD Copy Control Association (CCA) and installed in DVD players or in various programs available for PCs. *Id.* at 309-10.

47. *Id.* at 317-19.

48. *Id.* at 319 (The court held that even if this claim were true, which in the court's opinion was questionable, *see id.* at 311 n.79, defendant may still be liable under the DMCA.)

49. *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1198 (Fed. Cir. 2004).

50. This end result is particularly troubling when compared to the pre-DMCA regime. In *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 454-55 (1984), for instance, the Supreme Court identified a legitimate use for the VCR, namely copying by television viewers for time shifting. Such use, the Court held, constitutes fair use, and therefore Sony could not be liable for contributory infringement merely by making VCRs available to the public. In *Reimerdes*, the court refused to consider the fair use of DeCSS, holding that fair use is not available under the DMCA. The DMCA, as interpreted by the court in *Reimerdes*, not only provides new powerful rights, but also lacks the checks and balances of copyright law. *See Reimerdes*, 111 F. Supp. 2d at 322.

able to control how the work is being used outside the relatively narrow scope of exclusive rights granted to them under copyright law.

Other courts followed *Reimerdes*. In *RealNetworks*,⁵¹ the court accepted RealNetworks' claim that Streambox's media player, which enabled end users to download copies of audio and video files streamed by RealNetworks' application, violated the DMCA.⁵² In *GameMasters*,⁵³ the court held that a device that allows playing legitimately purchased copies of video games on a platform other than originally intended by the vendor violated the DMCA.⁵⁴ The court found that a Game Enhancer allowing players to use imported games originally intended for Japanese or European PlayStation consoles violated the anti-circumvention ban.⁵⁵ The DMCA was therefore employed to prevent consumers from using their legitimate copies with competing devices, or to confine their use to a par-

51. *RealNetworks, Inc. v. Streambox, Inc.*, 2000 U.S. Dist. LEXIS 1889 (W.D. Wash. Jan. 18, 2000).

52. Ironically, Apple used DRMs to stop the RealNetworks digital download store from using Harmony, a DRM that was designed to be compatible with Apple's FairPlay DRM so that music purchased on RealNetworks could be played on iPods. See Borland, *supra* note 20; Hines, *supra* note 20.

53. *Sony Computer Entm't Am., Inc. v. Gamemasters*, 87 F. Supp. 2d 976, 987 (N.D. Cal. 1999).

54. The court held that the device "circumvents the mechanism on the PlayStation console that ensures the console operates only when encrypted data is read from an authorized CD-ROM." *Id.*

55. Sony, like many other vendors of DVDs and videogames, such as Nintendo and Microsoft, uses a region code to restrict use in certain authorized areas. Ginsburg, *supra* note 24, at 8. The platform is designed to comply with a certain region code, and consumers in one region can only play content that is authorized for that region. In the case of PCs, definitions are incorporated into the operating system. GWEN HINZE, ELECTRONIC FRONTIER FOUNDATION, IN RE EXEMPTION TO PROHIBITION ON CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS CONTROL TECHNOLOGIES: POST-HEARING COMMENTS OF THE ELECTRONIC FRONTIER FOUNDATION (2003), available at <http://www.copyright.gov/1201/2003/post-hearing/post10.pdf>. The stability of this business model therefore depends on the ability to prevent the manufacturing and distribution of software and devices that allow users to bypass the region code and play a DVD or a video game outside the region. Robert Silva, DVD Region Codes - What You Need To Know, <http://hometheater.about.com/cs/dvdlaserdisc/a/aaregioncodesa.htm> (last visited July 9, 2007). Recently, Sony brought a suit in Australia against the manufacturers of "mod chips" which allow users of Sony PlayStations to play games purchased in different regions. The Australia High Court distinguished between pirating a game and playing with legitimate copies using a mod chip: while making a pirated copy of a game is illegal, playing a game using a mod chip is not. The High Court held that regional coding intentionally reduces global market competition and limits consumers' rights. See *Stevens v. Kabushiki Kaisha Sony Computer Entm't* [2005] H.C.A. 58, 2005 WL 2450272, paras. 101-104 (Austl.).

ticular platform, allowing vendors to leverage their market power and compromise consumers' freedom.

Now, we return to this rather puzzling paradox: why would courts protect the interests of consumers in rather mundane commodities, and yet fail to do the same for cultural artifacts? If consumers of GDOs have a legitimate interest in using their products in conjunction with competing products, why don't the consumers of Sony PlayStation possess a similar legitimate interest? Why is it considered undesirable for a company to be able to "leverage its sales into aftermarket monopolies—a practice that both the antitrust laws and the doctrine of copyright misuse normally prohibit"⁵⁶ when it relates to GDOs, and yet the same practice is acceptable in the market for video games? If intellectual property rights do not confer the right to violate consumer rights and antitrust laws, why don't they apply equally to all works protected by copyright laws?

Presumably, attempts to stop unauthorized copying of DVD and computer games are justified by the need to secure incentives to invest in future creation. The consequential decline in competition is considered part of the package designed by intellectual property laws and is therefore justifiable under its premises. However, this justification did not equally apply to Lexmark's attempt to use DRMs for dominating the market for toner cartridges, or to Chamberlain's use of DRMs to impede competition in GDO apparatuses. Competition policy would render these attempts undesirable. What's more, since markets for content are based on intellectual property monopolies, the risk to competition and to consumer welfare in such markets is even greater. Whereas many markets for consumer devices are presumably competitive, markets for copyrighted materials are governed by owner exclusivity, and therefore the risks to competition associated with legally immune DRMs are even larger.

It seems that consumer interests in cultural artifacts might actually deserve more attention than the interests of consumers of mundane commodities. Cultural artifacts are not simply useful commodities. While they often have an entertainment value that could be quantified, they also possess a *communicative value* and a *symbolic significance*.⁵⁷ They engage our minds in a more direct and intimate way than do mundane commodi-

56. Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1201 (Fed. Cir. 2004).

57. Cohen, *supra* note 5, at 370 (the situated user appropriates cultural goods found within her immediate environment for four primary purposes: consumption, communication, self-development, and creative play); Elkin-Koren, *It's All About Control*, *supra* note 4, at 80; Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 5, 46 (2004).

ties and, therefore, expose consumers to a higher risk of deeper and more intrusive restrictions of freedom. This particular vulnerability of information consumers is often overlooked.

Addressing consumer interests under copyright law raises several difficulties, the first of which is that consumers are almost entirely absent from copyright discourse.⁵⁸ A few exceptions include the first-sale doctrine, which allows the owner of a copy to resell or otherwise dispose of it;⁵⁹ the rights of owners of copies of software to make backup copies or adapt them where adaptation “is an essential step in” using the program;⁶⁰ and some fair use exemptions developed by courts, such as the *Sony* time-shifting exemption.⁶¹

The second reason for the difficulty in addressing the interests of consumers under standard copyright law is conceptual—the terms “consumer” and “consumption” do not fit informational works. We do not “consume” a book in the same way we “consume” chocolate. Both reading a book and eating a piece of chocolate may involve pleasure, but the novel—the copyrighted informational work that is embodied in a book—is never consumed. It can never be used up like all other tangible goods.⁶² Consumption of informational works does not exhaust the resource. Moreover, consumption is itself productive. As will be explained further below, readers and viewers always benefit by experiencing the work in a way that contributes to social dialogue. Consumption of informational works is therefore nurturing an essential mechanism in the production of new content—human capital.

Thus, incorporating a consumer’s perspective into copyright analysis requires taking a closer look at copyright laws and the multiple meanings assigned to the recipients of copyrighted materials.

58. See Liu, *supra* note 5, at 431.

59. 17 U.S.C. § 109(a) (2000).

60. *Id.* § 117(a). Similarly, a building owner has the right under section 120(b) of the Copyright Act to make “alterations to such building, and destroy or authorize the destruction of such building” notwithstanding the exclusive right of adaptation of the copyright owner in the architectural work. *Id.* § 120(b).

61. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429, 454-55 (1984). Note, however, that the Supreme Court in *Sony* failed to recognize a general right of private copying. See Jessica Litman, *The Sony Paradox*, 55 CASE W. RES. L. REV. 917, 957, 960-61 (2005). A privilege codified in the Audio Home Recording Act authorizes consumers to record music for personal noncommercial use. Audio Home Recording Act, 17 U.S.C. §§ 1001-1010 (2000).

62. Tushnet argues that “the greatest trick the content industry ever pulled was getting people to believe that readers and listeners are ‘consumers,’ as if they swallowed speech like candy.” Tushnet, *supra* note 5, at 566.

III. THE INTERESTS OF INFORMATION CONSUMERS

A. Consumers Under Copyright Law: Three Conceptual Frameworks

Traditional conceptions of copyright deal with two aspects of consumers of copyrighted works: the *consumer-shopper* and the *consumer-author*. The *consumer-shopper* is a passive consumer, in the pure economic sense—a person who purchases commodities based on price and utility. As such, the consumer-shopper is generally absent from the copyright discourse. In contrast, the *consumer-author* creates new works by building on preexisting works. The consumer-author plays a central role in copyright discourse due to the significance of productivity and creativity in copyright ethos. A third aspect of copyright consumer, the aspect developed in this Article, is that of the *consumer-participant*, who helps position copyrighted works in a larger cultural framework.

The consumer-shopper lies outside the productive ethos of copyright law, which aims at promoting creativity.⁶³ Consumers have no role under copyright law and cannot aid in achieving its goals except by creating the ultimate market for informational goods and selfishly consuming the outcome of the creativity that was generated by others.⁶⁴ Consumers and consumerism have negative connotations associated with passive behavior. Consumption itself is often perceived as a problem and is sometimes despised for being unproductive. This might render consumers' complaints "illegitimate." To the extent that consumers are present under a traditional copyright framework, they are treated as purchasers of copies who, by paying for access to copyrighted materials, provide just compensation and secure incentives to authors so that authors will invest in further creation.

Copyright law does include, however, a broad notion of consumers-as-authors.⁶⁵ Creation is presumed to be incremental—new works are built upon previous works—and the rights of current authors are balanced against those of subsequent authors. Balance is implemented by various doctrines, such as the *idea/expression* dichotomy and *fair use* doctrine. Consumers-as-authors transform preexisting works. They contribute to the

63. The theoretical foundation of copyright emphasizes productive use. From a utilitarian perspective copyright law is a legal mechanism for promoting creativity in the arts and science. It presumes that informational works require expensive investment that could be easily taken by free-riders. Therefore the law seeks to secure continuous incentives to create by granting to authors a set of exclusive rights over their works of authorship.

64. Liu, *supra* note 5, at 402.

65. *Id.* at 405.

productive endeavor by adding something original to preexisting materials.⁶⁶ Over the past decade, many commentators have argued that consumers of cultural goods are actually productive users, who are entitled to certain privileges under copyright law.⁶⁷ Recently it has been suggested that this category of users should be further expanded to cover instances where a use does not amount to original authorship—what Joseph Liu calls “mini-authorship”⁶⁸ or even simply non-transformative copying.⁶⁹

But the *consumer-as-author* perspective has only limited significance for advancing consumer rights because it only covers consumers who make a productive contribution. We ask consumers of informational works to *earn* their entitlement for certain freedoms by proving that their use is productive and adds something new for the benefit of all.⁷⁰ Missing from this analysis are all those instances in which consumers make use of works for self-consumption—in other words, for their personal benefit alone.

Therefore, there is room to introduce a third concept of consumers-as-participants who take part in creative processes (“meaning-making” processes).⁷¹ From this perspective, both authors and consumers of information actively participate in advancing the ultimate goal of copyright law, which is promoting progress.

This view is based on the following premises. First, the purpose of copyright law, as defined by the U.S. Constitution, is to “promote the Pro-

66. See generally Pamela Samuelson, *Challenges in Mapping the Public Domain*, in *THE FUTURE OF THE PUBLIC DOMAIN* 7, 7 (P. Bernt Hugenholtz & Lucie Guibault eds., 2006).

67. See Benkler, *supra* note 4, at 568-72; Elkin-Koren, *It's All About Control*, *supra* note 4, at 102.

68. Liu, *supra* note 5, at 415.

69. Litman proposes “to look at the place of readers, listeners, viewers and the general public in copyright through the lens of personal use.” Litman, *supra* note 5, at 1878. Cohen proposes the notion of a *situated user*, who “engages cultural goods and artifacts found within the context of her culture through a variety of activities ranging from consumption to creative play.” The situated user, she argues, appropriates cultural goods for four primary purposes: *consumption*, *communication*, *self-development*, and *creative play*. Cohen, *supra* note 5, at 370; see also Tushnet, *supra* note 5, at 556 (“nontransformative uses” could be a form of self-expression, persuasion, participation and affirmation).

70. See Litman, *supra* note 5, at 1919; Liu, *supra* note 5, at 420-21. Tushnet argues that the focus on transformation has left out of the copyright debate important non-transformative copying activities which are also instances of free speech. Tushnet, *supra* note 5, at 555-56.

71. Elkin-Koren, *It's All About Control*, *supra* note 4, at 102; Balkin, *supra* note 57; PAUL DU GAY ET AL., *DOING CULTURAL STUDIES: THE STORY OF THE SONY WALKMAN* 84-85 (Sage Publications 1997).

gress of Science and the useful Arts”⁷² The Constitution mandates an instrumentalist approach that authorizes the grant of rights to authors only to the extent that it promotes public welfare. *Progress* is served by providing authors with sufficient incentives to invest in producing new works. *Progress* further requires, however, that the public gain access to these works and be able to extract their value.⁷³ As Jessica Litman reminds us, “copyright law encourages authorship at least as much for the benefit of the people who will read, view, listen to, and experience the works that authors create, as for the advantage of those authors and their distributors.”⁷⁴

Copyright law does not simply provide incentives to maximize the number of works produced. In fact, it promotes independent creation. One of the main differences between patent law and copyright law is that while an independent discovery may infringe a patent, an independent creation does not infringe copyright. Copyright law expressly qualifies the rights granted to copyright owners—owners can only protect their works against copying. If a similar or even an identical work is independently created, it does not constitute copyright infringement.⁷⁵ An independent creative action, even if it resulted in a work identical to another one that already exists, would merit protection. This suggests that copyright law encourages engagement in the creative process rather than focusing on encouraging the creation of new works.

Second, the creative process involves two means of production: preexisting works and human capital. Human capital is not simply a natural resource of inborn intelligence and creative minds; rather, it requires nurturing in order to flourish. Nurturing is achieved by engagement with existing works—reading books, listening to music, watching a film, or working with computer programs. Consumption, in this sense, cultivates the work-

72. U.S. CONST. art. I, § 8, cl. 8.

73. Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93, 98-101 (1997); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326-27 (1989); Julie Cohen, *Copyright and the Perfect Curve*, 53 VAND. L. REV. 1799 (2000).

74. Litman, *supra* note 5, at 1882.

75. *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 54 (2d Cir. 1936), *aff'd*, 309 U.S. 390 (1940); Richard A. Posner, *Intellectual Property: The Law and Economics Approach*, J. ECON. PERSP., Summer 2005, at 57 (2005).

force for further creation: it educates; it stimulates our minds; it expands our understanding of the world around us; it provides inspiration.⁷⁶

Therefore, to promote creativity it is insufficient to provide incentives to authors by empowering them to exclude second-comers. It is also inappropriate to exempt only transformative uses of copyrighted materials. Promoting creativity requires expanding *access* to creative works. Copyright law must therefore expand the balance it strikes between authors and users to cover not only subsequent authors but also simply consumers of cultural goods who might become authors in the future.

Another virtue of consumption of informational works is the creation of a *common cultural language*. Novels, poems, and songs have no meaning outside their interaction with readers and listeners. The *sociology of knowledge* teaches us that cultural artifacts are conditioned by the society in which they are experienced.⁷⁷ What we call “consumption” of informational works is never a passive behavior—it is a conversation, or a social activity of interaction. When a reader engages with an artistic expression, she contributes to its meaning. Thus, consumption of informational works, even for one’s sole benefit, promotes copyright goals. Consumers are no less a means of production than authors.⁷⁸

This reality of exchange and interaction suggests that in order to promote creativity it is insufficient to simply provide incentives to authors to produce. It is also necessary to expand access to creative works. Access, in this sense, becomes a central means for promoting production, creation, and progress.

B. Consumers-as-Participants

What are the legitimate expectations of consumers-as-participants? What kinds of access to informational works must the law secure in order to facilitate consumer rights? Certainly information consumers should at least enjoy the rights of consumers of GDOs and printer cartridges: the

76. Similarly, Tushnet focuses on the free speech value of pure copying, arguing that “ordinary copying serves multiple speech values, from simple access to self-expression to political persuasion . . .” Tushnet, *supra* note 5, at 546.

77. See PIERRE BOURDIEU, *DISTINCTION 2* (Routledge, 1984) (“A work of art has a meaning and interest only for someone who possesses the cultural competence, that is, the code, into which it is encoded.”).

78. See Elkin-Koren, *It’s All About Control*, *supra* note 4, at 102. See also Tushnet, *supra* note 5, at 566 (“We tend to divide people into ‘producers’ and ‘consumers’ of copyrighted works and to devalue the act of consumption. Yet what consumption means in this context is reading, watching, listening, and talking about copyrighted works—all valuable expressive activities that can be extremely important to people, both as individuals and as part of a community.”)

freedom to use a copy of the work that they have purchased in conjunction with competing products. However, informational works may raise additional concerns.⁷⁹ While the *consumer-as-shopper* perspective emphasizes individualism and instrumentalism consistent with the principles of economic theory, *consumer-as-participant* (the citizen-consumer) explores the ramifications of consumption for citizenship and examines issues such as autonomy, participation, and self-determination.

As pointed out by scholars of cultural studies, the production of culture involves the construction of meaning. The meaning of a cultural artifact is not inherent in the work itself, but arises from the way it is represented through our language and practices.⁸⁰ Consumption itself produces meaning. Consumers creatively express themselves through the choices they make on what to consume and how to use their cultural goods.⁸¹ As noted by Paul du Gay, “meanings are not just ‘sent’ by producers and ‘received,’ passively, by consumers; rather meanings are actively made in consumption, through the use to which people put these products in their everyday lives.”⁸²

Participation in the production of culture—the meaning-making process—is a significant political action. It allows self-expression of the citizen-consumer and therefore engages consumers in public discourse. Participation may take the form of actively communicating one’s positions, preferences, taste, values, and ideas. It may also involve, however, viewing, reading, listening, absorbing, and making use of content that reflects one’s ideas, or those with which an individual identifies.⁸³ Meaning emerges through a process that involves an interaction with cultural ingredients: watching a film, reading a book, or playing a song. The process is discursive. Not everything that is read or watched is automatically internalized. The way in which cultural artifacts affect meaning is far more

79. As Joseph Liu argues, consumers of informational works have interests in autonomy, communication with others, and self-expression that cannot be captured by seeing them either as passive or as new authors. Liu, *supra* note 5 at 399.

80. While the Frankfurt school perceived consumers of cultural goods as passive victims of homogenized mass culture (e.g., THEODORE W. ADORNO, *THE CULTURE INDUSTRY: SELECTED ESSAYS ON MASS CULTURE* (Routledge, 1991)), others emphasized the role of consumers in the production of meaning, by selection, appropriation, and re-contextualization (e.g., JOHN FISKE, *UNDERSTANDING POPULAR CULTURE* 24 (Routledge, 1991)).

81. For theorists like Mackay the act of consumption is not merely absorption of predetermined symbols, but rather an active process of creative expression. HUGH MAC-KAY, *CONSUMPTION AND EVERYDAY LIFE* 9 (The Open University, 1997).

82. du Gay, *supra* note 71, at 5.

83. Elkin-Koren, *It’s All About Control*, *supra* note 4, at 103.

complicated and dynamic. When we are reading a book or watching a film, we reinterpret the themes within our own cognitive framework and our own narratives. The meaning of cultural texts is therefore interactive and depends on the social context in which consumers have acquired the text and integrated it into their lives. Participation by consumers, in these senses, requires a minimal level of freedom in forming one's own reading of the artifact and communicating one's independent voice. From this perspective, DRMs could affect intellectual liberties and freedom.

Consumers of cultural artifacts may need some breathing space to secure their intellectual freedoms. They need space to formulate their own independent reading of, for example, a news report. Consumers must be able to experience the work on their own or share it with others in order to form independent views and identify their own voice.

This breathing space may include the freedom to choose the work one wishes to consume or any part of it (and, likewise, the freedom to ignore or refuse other parts); the freedom to choose where to experience the work and how; the freedom to experience the work in privacy without the fear of surveillance; and the freedom to make one's own reading of the work, to experiment with it, and to share that reading.

Viewed from this perspective, DRMs might have the effect of weakening the role of consumer-as-participant in several ways. DRMs regulate the behavior of consumers, physically preventing consumers from carrying out certain unauthorized actions. Therefore they restrain the freedom of consumers to integrate the cultural artifacts they have purchased into their lives.

DRMs redefine the relationship between consumers and rightholders. The power to determine the terms of use resides entirely in the design of the DRM, which is governed by rightholders. Consumers may not even be aware of some restrictions that apply to them. Some uses will simply not be available. Other functions, such as monitoring, might not be transparent. This may weaken consumer sovereignty and freedom of choice.

DRMs further compromise intellectual freedom. DRMs allow rightholders to govern the format of the work, thereby enabling them to exercise more control over what individuals may do with cultural texts. For instance, DRMs can limit the ability to make changes to and adapt works to reflect consumers' own agendas.⁸⁴ They may also prevent consumers from annotating or editing a work for personal use or from making any

84. Compare to practices used by ClearPlay (not involving DRMs) in *Clean Flicks of Colo., LLC v. Soderbergh*, 433 F. Supp. 2d 1236 (D. Colo. 2006), where the court found that editing films for private viewing violated the copyright of film producers.

other form of transformative use to adapt the work to reflect their private taste or self-expression. Additionally, monitoring access and compromising consumer privacy may further threaten consumer autonomy, creating a chilling effect on the use of informational works.⁸⁵

DRMs can also prevent consumers from making copies for private use, such as for backup purposes or for later consumption. They may additionally limit the ability to copy works for which copyright has expired or the ability of consumers to make copies for the purpose of quoting a work in the course of preparing a new work. Restriction on the use of copies actually turns the transactions of supplying information goods from sales into services that increase the consumer's dependency on vendors and require an ongoing consumer-vendor relationship.⁸⁶ Post-purchase control may be ongoing and dynamic and may last long after the content is purchased or even transferred to third parties.⁸⁷ To achieve this dependency, all a vendor has to do is make changes in the platform or facilitating codes.

DRMs may further affect the freedom of users to use a work in conjunction with other cultural artifacts or on different platforms. One such restriction relates to the portability of artifacts—the ability to select how a work will be experienced and whether it may be played or delivered on a certain device. Another limitation on user freedom results from restrictions on space-shifting by regional codes, which protect regional market segmentation, embedded in DVD and DVD players. When individuals can

85. Julie E. Cohen warns that the anti-circumvention regime established by the DMCA compromises the “breathing space for thought, exploration, and personal growth.” Julie E. Cohen, *DRM and Privacy*, 18 BERKELEY TECH. L.J. 575, 577-78 (2003). See also Julie E. Cohen, *A Right to Read Anonymously: A Closer Look at Copyright Management in Cyberspace*, 28 CONN. L. REV. 981 (1996). As demonstrated by the Sony BMG case, DRMs could directly threaten consumer privacy by enabling the monitoring of every use of the copyrighted material in real time. A consumer may legitimately expect to use her copy, legally purchased, without any monitoring, as she is free to use any other type of property.

86. Napster's online music store offers its users music “any way you want it,” as long as the users keep paying for it over and over again. For a monthly subscription fee, the Napster Unlimited music rental service offers the users the ability to stream and download as much as they like from its entire catalog. However, if the users decide to stop their subscription, Napster's DRM renders the downloaded music unplayable. See generally Electronic Frontier Foundation, *The Customer is Always Wrong: A User's Guide to DRM in Online Music*, <http://www.eff.org/IP/DRM/guide/> (last visited on July 9, 2007) (outlining the usage restrictions of various digital music services).

87. For instance, Apple reserves the right to change at any time what users are able to do with the music they purchase at the iTunes Music Store. In addition, in order to enjoy the privilege accorded to the user under the first sale doctrine, a user must give the buyer her username and password.

use an artistic work in a context of their choice and adapt it to reflect their own agenda, they are able to contest the original meanings attached to it. Copies detached from their original context could be freely experienced (heard, read, watched) in a variety of ways that would allow individuals to attach new meanings.⁸⁸ Information represented digitally—that is, disentangled from physical formats—could be adapted to its surroundings and facilitate a plurality of voices.

The ability to communicate the informational work is another interest of consumers that might be compromised by DRMs. DRMs can limit the resale and distribution of copies, or any form of sharing. Restrictions on sharing with others, excerpting, lending, or reselling could interfere with the ability of consumers to make use of the work's communicative value. This constraint may also reduce the economic value of the work if it cannot be resold as used.

DRMs should not be viewed, however, as simply limiting certain functions and therefore compromising consumer expectations. They also shape our practices by guiding our overall consumer experience with informational works and thereby defining a normative framework.⁸⁹ In a DRM/DMCA regime, consumers have no rights in a cultural artifact except as permitted by the DRM. Consumers internalize a variety of practices through the consumption of content controlled by DRMs that might affect their views and values. The way DRMs are designed shapes the consumption of cultural artifacts and affects our attitudes toward informational works and our relationship with them. The more restricted the use is, the less we think of informational works as self-expression, as a form of speech or conversation. We learn to view them as any other commodities. We learn that even though we hold a copy, the work is owned by someone else who exercises absolute control over its use. And we learn to normalize and legitimize these restrictions.

88. This was long recognized by Walter Benjamin in his seminal paper on mechanical reproduction. Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, in ILLUMINATIONS 217, 221 (Hannah Arendt ed. & Harry Zohn trans., 1968). Benjamin clearly describes this liberating potential of mechanical reproduction of works of art ("One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition . . . in permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object reproduced.").

89. Theorists of consumption of the Frankfurt School focus on the forms of knowledge and identity which are produced by consumer practices. From this perspective the question is how our experiences as consumers, the terms which were designed for consuming a particular cultural good, affect our relationships with those informational works and with our self-consciousness. See KEY CONCEPTS IN CULTURE THEORY 80-83 (Andrew Edgar & Peter Sedgwick eds., Routledge 1999).

Thus, DRMs promote homogeneity. Most users do not challenge DRMs and instead conform to the prescribed use. Consumers cannot change and adapt their own consumptive experiences. Consequently, we should expect little diversity in consumer experiences of informational goods and little room for personal manifestation and choice.

C. Incorporating Consumer Perspectives into Copyright Analysis

Expanding copyright analysis to account for the interests of consumers could help us set limits on the use of DRMs for post-purchase control. Such considerations could be incorporated into copyright analysis in several ways. One way is external, balancing the interests of copyright owners with those of consumers, who are often protected by competition law and consumer protection regulation. Another way is internal, making room for consumers by narrowly applying the bans of the DMCA.⁹⁰

The decisions in *Chamberlain* and *Lexmark* demonstrate how consumer considerations could be included in the courts' analysis of the DMCA for limiting the scope of post-purchase control enabled by DRMs. In *Chamberlain*, the court outlined a six-part test to determine whether a particular device violates Section 1201(a)(2):

- (1) ownership of a valid copyright on a work,
- (2) effectively controlled by a technological measure, which has been circumvented,
- (3) that third parties can now access
- (4) without authorization, in a manner that
- (5) infringes or facilitates infringing a right protected by the Copyright Act, because of a product that
- (6) the defendant either (i) designed or produced primarily for circumvention; (ii) made available despite only limited commer-

90. Others believe that users' interests call for a reconsideration of copyright law's fundamental mechanisms. Cohen argues:

Scholars and policy makers should ask how much latitude the situated user needs to perform her functions most effectively, and how the entitlement structure of copyright law might change to accommodate that need. In particular, they should be prepared to ask whether the situated user is well served by the current copyright system of broad rights and narrow, limited exemptions, or whether she would be better served by a system that limits the rights of copyright owners more narrowly in the first instance. This is not, to use Michael Madison's terminology, a choice to emphasize the 'primacy of the actor' over the 'primacy of the pattern.' The choice is *not either/or, but both/and; it is actors within contexts who produce 'progress.'*

Cohen, *supra* note 5, at 374 (emphasis added) (citations omitted).

cial significance other than circumvention; or (iii) marketed for use in circumvention of the controlling technological measure.⁹¹

This test reflects the court's opinion that the anti-circumvention provisions of section 1201 did not establish a new property right, but rather provided copyright owners with "new ways to secure their property."⁹² Therefore, an illegal circumvention must be "reasonably related to protected rights."⁹³ The court found that section 1201 "prohibits only forms of access that bear a reasonable relationship to the protections that the Copyright Act otherwise affords copyright owners."⁹⁴ The central issue in the *Chamberlain* construction of the DMCA is the linkage between *access* and *protection*. Not every access is prohibited, but only that which is illegitimate. Accordingly, to make a successful claim under the DMCA, a plaintiff must prove a reasonable link between access facilitated by the circumvention device and a violation of traditional copyrights.⁹⁵ The court reasoned that: "[w]hile such a rule of reason may create some uncertainty and consume some judicial resources, it is the only meaningful reading of the statute. Congress attempted to balance the legitimate interest of copyright owners with those of consumers of copyrighted products. The courts must adhere to the language that Congress enacted to determine how it attempted to achieve that balance."⁹⁶

The *Chamberlain* decision introduced two key developments regarding consumer protection under the DMCA: recognizing consumer interests and defining the scope of consumer rights. First, the court explicitly recognized that consumers have legitimate expectations in products containing copyrighted works and defined these expectations as an integral part of

91. *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1203 (Fed. Cir. 2004).

92. *Id.* at 1194.

93. *Id.* at 1195. The court emphasized the difference between defendants whose accused products enable illegal copying, and those, like the defendant in the *Chamberlain* case, whose products enable only legitimate uses of copyrighted software. *Id.* at 1198. Thus, the court distinguished other cases previously decided under the DMCA, in which the defendant was found liable, concluding that "the access alleged in all three cases was intertwined with a protected right." *Id.* at 1199.

94. *Id.* at 1202. The Federal Circuit decision was criticized by some commentators for developing an independent doctrine of "fair access" that is not traceable to the statute. *See, e.g.*, Efroni, *supra* note 23, at 136-41. In fact, however, the court's reasoning is well grounded in the legislative history and public policy underlying the DMCA. The court also explained how this holding is consistent with previous case law interpreting the DMCA. *Chamberlain*, 381 F.3d at 1201-02.

95. *Chamberlain*, 381 F.3d at 1195.

96. *Id.* (citation omitted).

the balance reflected by the law. Citing the legislative history,⁹⁷ the court held that “[t]he DMCA balances the legitimate interests of copyright owners with those of consumers of copyrighted products.”⁹⁸ In denying Chamberlain’s claim that the “DMCA overrode all pre-existing consumer expectations about the legitimate uses of products containing copyrighted embedded software,”⁹⁹ the court held that “the DMCA emphatically did not ‘fundamentally alter’ the legal landscape governing the reasonable expectations of consumers or competitors.”¹⁰⁰

Second, the court defined the scope of legitimate consumer expectations, explicitly upholding the rights of consumers who purchased a copy to use that copy. Purchasers of copies are entitled to use them, as long as they do not violate any of the exclusive rights of copyright owners:

Copyright law itself authorizes the public to make certain uses of copyrighted materials. Consumers who purchased a product containing a copy of embedded software have the *inherent legal right to use* that copy of the software. What the law authorizes Chamberlain cannot revoke.¹⁰¹

Furthermore, aware of the ease with which copyright owners could place restrictions by a combination of contractual terms and technological measures, the court held that “[the] DMCA cannot allow Chamberlain to retract the most fundamental right that the Copyright Act grants consumers: the right to use the copy of Chamberlain’s embedded software that they purchased.”¹⁰²

The Federal Circuit further implied that consumers have a legitimate interest in using their products in conjunction with competing products. The court rejected plaintiff’s interpretation of the statute, holding that it leads to absurd results. The plaintiff’s construction which separates *access* from *protection* “would allow any manufacturer of any product to add a single copyrighted sentence or software fragment to its product, wrap the copyrighted material in a trivial ‘encryption’ scheme, and thereby gain the right to restrict consumers’ rights to use its products in conjunction with

97. *Id.* at 1203 (citing H.R. REP. NO. 105-551, at 26 (1998)).

98. *Chamberlain*, 381 F.3d at 1203.

99. *Id.* at 1193-94.

100. *Id.* at 1194.

101. *Id.* at 1202 (emphasis added).

102. *Id.* at 1203.

competing products.”¹⁰³ This outcome, the court held, would be contrary to antitrust laws and the doctrine of copyright misuse.¹⁰⁴

It follows that consumers who own copies of a copyrighted work are entitled to some rights, such as the right to make use of the copies they purchased. It may also follow that circumvention would not be considered a violation of the DMCA if it only enables a legitimate use of a copy, such as using software with a different device or playing music on different platforms.

One should note, at the outset, that copyright law does not grant consumers any rights in copies—at least not explicitly. Section 106 of the Copyright Act defines the set of exclusive rights granted to copyright owners,¹⁰⁵ which cover only the intangible copyrighted work and in most cases do not affect rights in tangible copies.¹⁰⁶ In fact, copyright law distinguishes between the work that is copyrighted and its tangible copies, which are left outside the scope of copyright law.¹⁰⁷ Therefore, when the court refers to the rights granted to consumers under copyright law, it presumes that anything that is not explicitly prohibited by copyright law is something that consumers are free to do.¹⁰⁸ Furthermore, according to the Federal Circuit, a consumer does not need to acquire authorization to do anything that she is already free to do. If consumers are free to use their GDOs with any compatible device, it is the plaintiff’s burden to demonstrate that they have done so without authority.

Taking a similar “consumer-friendly” approach, the court in *Lexmark*¹⁰⁹ denied Lexmark’s claim under the DMCA, where it sought to prevent an aftermarket for printer cartridges by using an authentication sequence. Lexmark embedded an authentication sequence in the Printer En-

103. *Id.* at 1201.

104. *Id.*

105. 17 U.S.C. § 106 (2000).

106. Section 202 provides that “[o]wnership 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.” *Id.* § 202. One major exception is the exclusive right to distribute copies to the public. *Id.* § 106(3). This right is limited by the first sale doctrine, codified in section 109, which provides that notwithstanding section 106(3), “the owner of a particular copy or phonorecord lawfully made under this title . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.” *Id.* § 109(a).

107. *Chamberlain*, 381 F.3d at 1202.

108. In Hohfeldian terminology, this is a right in the sense of privilege, namely the freedom from any limiting duties.

109. *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 550-51 (6th Cir. 2003).

gine Program, which enabled the loading of authenticated toner cartridges only.¹¹⁰ The court denied Lexmark's claim under the DMCA since the sequence that was allegedly circumvented did not "effectively control access" to copyrighted materials.¹¹¹ It only protected the functionality of the program, which was held by the court to be an *unprotected idea*, rather than an expression protected under copyright law.¹¹² Therefore, the court concluded that the defendant was free to circumvent.

The construction of the DMCA in cases such as *Chamberlain* and *Lexmark* establishes the basis for defining consumer liberties under copyright: consumers are free to use a copy of the work in ways that cannot be unilaterally overridden by copyright owners.¹¹³ This reading of the DMCA confines DRMs and the anti-circumvention regime to its appropriate size—DRMs cannot allow owners to protect more than what copyright entitles them to.

IV. WHAT COULD BE GAINED BY THE CONSUMER-AS-PARTICIPANT PERSPECTIVE?

Consumer protection discourse, as distinct from users discourse, could add a new dimension to the copyright analysis. Conceiving of users of copyrighted works as consumers in the same sense as consumers of tangible goods better captures many of the conflicts between copyright owners and the recipients of copyrighted works. In modern times, creation often

110. *Id.* at 530.

111. *Id.* at 546-47.

112. *Id.* at 549. Jane Ginsburg distinguishes between the rationales in these two decisions: "Where the *Lexmark* court focused on the 'work' that is the object of the access control, the court in *Chamberlain v Skylink* addressed the *purpose* of the access that the technological measure controls." Ginsburg, *supra* note 24, at 5.

113. The court held that *Chamberlain* was not entitled to prohibit legitimate purchasers of its embedded software from accessing the software by using it. The court explained:

Such an entitlement, would go far beyond the idea that the DMCA allows copyright owner to prohibit "fair use . . . as well as foul." *Chamberlain's* proposed construction would allow copyright owners to prohibit exclusively fair uses even in the absence of any feared foul use. It would therefore allow any copyright owner, through a combination of contractual terms and technological measures, to repeal the fair use doctrine with respect to an individual copyrighted work Again, this implication contradicts Section 1201(c) (1) directly.

Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1202 (Fed. Cir. 2004) (citation omitted).

involves mass production and distribution of copies embodying the work. Production and distribution is often organized by large corporations. Consumers of copies of mass-produced content (e.g., DVD movies, music, television shows) suffer from the same disparities of power, asymmetric information, and systematic disadvantage experienced by consumers of mass-produced tangible goods.

Moreover, information consumers suffer from further vulnerabilities that require even stronger protection. The intimate tie of informational works to consumers' minds makes disparities of power and control even more crucial. DRMs that monitor the consumption of copyrighted materials may weaken consumer sovereignty, threaten individual autonomy, and chill intellectual freedom. These consequences might compromise the goals of copyright law. As explained above¹¹⁴, traditional copyright analysis often reflects a balance between authors and subsequent authors (i.e. "users"). Within the productive framework of copyright law, consumers who become subsequent authors are considered active contributors to the overall goal of promoting progress. However, this productive framework neglects the interests and contributions of consumers who do not become subsequent authors but, nevertheless, participate in the meaning-making processes. The notion of *consumers-as-participants* highlights the legitimate interests of information consumers, which may deserve protection, and provides a perspective that could help identify additional uses that should be privileged vis-à-vis the claims of copyright owners.

Incorporating a *consumer-as-participant* perspective into copyright analysis has advantages that render it more useful than a legal strategy that relies exclusively on consumer protection laws.¹¹⁵ The first advantage is that the notion of *consumers-as-participants* may add legitimacy to users' demands. The balance between owners and users often tilts toward owners, based upon the notion that authors generate new works out of thin air over which users have no claim. However, when users are cast as consumers of goods mass-produced by a corporation, their demands might enjoy more legitimacy because, under such a paradigm, consumer expectations in purchased copies would be protected to the same extent consumers are protected in other contexts.

114. See *supra* notes 64-68 and accompanying text.

115. One concern, however, is that introducing consumer discourse to informational works would deteriorate the status of consumers of informational works and weaken their rights.

A second advantage of incorporating a consumer perspective into copyright law arises from the need to adjust the tenets of consumer protection to the information age.

On the one hand, introducing consumers into copyright discourse may better capture the reality of modern information markets and protect consumers of mass-produced content from the same disparities of power and asymmetric information suffered by consumers of tangible goods. On the other hand, the premises of consumer protection doctrine, which are rooted in the industrial revolution, may no longer fit the digital environment, as online social networks grow in popularity and scope and as consumers increasingly drive both the production and distribution of new content and applications. The emergence of Web 2.0 and user-generated content causes the roles of consumer and producer to converge. Digital networks facilitate collaborative production of content based on non-hierarchical voluntary participation.¹¹⁶ Users are able to share their own content (i.e., news reports, opinions, pictures, movies, and music) as well as form social networks that collaborate in producing information goods, such as computer programs (i.e., Linux), encyclopedias (i.e. Wikipedia), and other content. Consumers of content also actively participate in making content available to others, thus undertaking the roles of publishers and distributors.¹¹⁷ Consequently, recognizing the virtues of *consumption-as-participation* in this environment is especially important to ensure that consumers can use information products to express themselves by using cultural goods in ways that would reflect their own agendas. The new opportunities for participation make it important to guarantee that creativity can emerge at all levels.

Furthermore, interpreting the constitutional purpose of copyright law in light of these emerging opportunities may entail adjustment of our legal institutions that promote progress. Copyright law ostensibly facilitates a market in copyrighted materials, but user-generated content emerges outside traditional market mechanisms. Thus, promoting *progress* takes on a new meaning in the Web 2.0 environment. The goal of progress is no longer advanced solely by providing incentives to industries that engage in mass production of copies served to consumers. True progress is increasingly achieved by wide participation of individuals and collaborative communities. At the same time, however, there is an increasing danger

116. YOCHAI BENKLER, *THE WEALTH OF NETWORKS* 121 (Yale University Press 2006).

117. Jessica Litman, *Sharing and Stealing*, 37 HASTINGS COMM. & ENT. L.J. 1 (2004).

that the robust protection provided by the DMCA/DRM regime could become widespread and be employed by individual users to enforce restrictions on access to their works. Such widespread use of DRMs may seriously threaten access to content. Consumer protection laws, however, could hardly mediate such restrictive use of DRMs in transactions among consumers. It is therefore necessary to conceptualize consumers' right of access to cultural goods within the conceptual framework of copyright policy. Access rights would be justifiable as long as they are necessary for securing the legitimate interests of *consumers-as-participants*.

Finally, the ascendancy of user-generated content requires re-examining consumer protection doctrine, perhaps to the extent of adjusting fundamental consumer protection principles. With adjustment, the consumer perspective could remain constructive for addressing the rights of information consumers in the online environment. User-generated content is often provided on commercial platforms where users generate and distribute their own content while simultaneously consuming content and services provided by the facility.¹¹⁸ These new methods of experiencing media are coordinated and facilitated by new intermediaries such as search engines (e.g., Google and Yahoo), distribution platforms (e.g., YouTube and Flickr), social networks (e.g., MySpace and Friendster), and virtual worlds (e.g., Second Life).¹¹⁹ To secure the interests of information consumers on these platforms, we need to better understand the parameters that affect access on these platforms as well as the way that access to information on such platforms is designed.

The third advantage of incorporating a *consumer-as-participant* perspective into copyright is its impact on the market dimension and issues of price and competition. Paying attention to consumers may allow courts to adequately address the use of DRMs for anticompetitive strategies. Tying hardware and content together makes it difficult for consumers to switch to a different platform. These barriers to competition may further increase prices and harm consumer welfare.¹²⁰ When viewed as simply a copyright

118. WORKING PARTY ON THE INFORMATION ECONOMY, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, PARTICIPATIVE WEB: USER-CREATED CONTENT (2007), available at <http://www.oecd.org/dataoecd/57/14/38393115.pdf>.

119. *Id.* at 15-20.

120. *See* Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1201 (Fed. Cir. 2004). The court observed:

In a similar vein, Chamberlain's proposed construction would allow any manufacturer of any product to . . . gain the right to restrict consumers' rights to use its products in conjunction with competing products. In other words, Chamberlain's construction of the DMCA would

dispute, claims against anticompetitive practices are more difficult to make because copyright law by definition creates a monopoly and therefore, by its very nature, impedes competition. The consumer discourse highlights the market dimensions of copyright policy and the risks created by copyright abuse.¹²¹

Fourth, incorporating consumer perspectives under copyright may create a political advantage. The interests of recipients of cultural goods often suffer from under-representation in legislative processes. Copyright owners are a small, homogeneous, well-organized, and well-financed group of repeat players, representing the entertainment, software, and publishing industries. Recipients of copyrighted materials, by contrast, are represented by the general public. That is a heterogeneous group, consisting of consumers, nonprofit and for-profit users, subsequent authors, and potential competitors, representing dispersed interests. Therefore, while all major copyright industries have developed effective lobbying arms over the past decades (e.g., RIAA, MPAA), most consumers have not even been aware of the implications of copyright reforms. This basic asymmetry resulted in extensive legislation towards stronger and expanded copyrights.¹²² The consumer perspective could help recipients of cultural goods articulate their interests more effectively.¹²³

allow virtually any company to attempt to leverage its sales into after-market monopolies—a practice that both the antitrust laws, and the doctrine of copyright misuse, normally prohibit.

Id. (citations omitted).

121. Antitrust laws have failed so far to provide a remedy. In Europe, VirginMega, which runs an online music service, argued in a complaint before the French Competition Council that Apple's refusal to allow access to its DRM was an abuse of dominant position. The Competition Council held that an abuse of dominant position occurs only when denying access to an essential facility. The Council held that Apple had no obligation to grant access to its FairPlay DRM solution, since FairPlay is not essential for the development of music download platforms. Among other things, the council noted that songs that are protected by other DRMs could still be played on the iPod if consumers burned it on to a CD and re-encoded it in unprotected MP3 format. Conseil de la Concurrence, *Décision n° 04-D-54 du 9 novembre 2004* [Competition Council, Decision 04-D-54, Nov. 9, 2004], available at <http://www.conseil-concurrence.fr/pdf/avis/04d54.pdf>.

122. For a recent analysis of public choice and intellectual property see WILLIAM M. LANDES & RICHARD A. POSNER, *THE POLITICAL ECONOMY OF INTELLECTUAL PROPERTY LAW* (American Enterprise Institute-Brookings Joint Center for Regulatory Studies, 2004).

123. European consumer protection organizations undertook a leading role in advancing the rights of consumers of copyrighted materials. See *European Consumer Protection Organizations Join Forces Against iTunes*, Jan. 23, 2007, <http://www.heise.de/english/newsticker/news/84138> (last visited Aug. 6, 2007). For a discussion of political action

The consumer protection agenda could help copyright users get organized, taking advantage of existing NGOs and consumer organizations, and relying on international institutions to advance consumer-oriented agendas.

A final reason that the *consumer-as-participant* perspective could be a better strategy for securing consumer interests is that the framework provides a practical strategy for addressing consumer rights under the DMCA. In particular, such a perspective would limit the ban on circumvention to the boundaries of copyrights, leaving consumers with the right to do whatever copyright itself allows them to do. Once we conceptualize consumer interests in terms of copyright goals and public welfare, we can offer consumers a more effective remedy under the DMCA: *self-help*.

Consumers, and others on their behalf, could simply circumvent DRM that violates their freedoms. Or, to rephrase the language of the court in *Chamberlain*: *consumers-as-participants* have rights under copyright law with which DRM cannot interfere, and, to the extent that it does so, they are free to circumvent it.

