Taking the Copy Out of Copyright

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Abstract. Under current U.S. law and common understanding, the fundamental right granted by copyright is the right of reproduction – of making copies. Indeed, the very word "copyright" appears to signify that the right to control copying must be a fundamental part of any system of copyright. Nonetheless, we claim that this assumption is incorrect. The advent of digital documents has illuminated this issue: In the digital realm, copying is not a good predictor of intent to infringe; moreover, copying of digital works is necessary for normal use of those works. We argue that the right to control copying should be eliminated as an organizing principle of copyright law. In its place, we propose as an organizing principle the right to control public distribution of the copyrighted work.

Copyright is Not About Copying

Under current U.S. law and common understanding, the fundamental right granted by copyright is the right of reproduction – of making copies. Certainly, the first "exclusive right" granted to the owner of a copyright under Section 106 of the Copyright Act [1] is the right to reproduce the copyrighted work "in copies or phonorecords" or to authorize such reproduction. Indeed, the very word "copyright" appears to signify that the right to make copies must be a fundamental part of any system of copyright. Nevertheless, we believe that the primacy given to the right of copying, while seemingly intuitive, is both illogical and counterproductive, particularly when one considers its application to digital documents. We base our analysis on both the nature and characteristics of the digital realm and on a historical and instrumental understanding of the law of copyright.

Our examination of whether reproduction should play a central role in copyright law is motivated in part by the question of security in digital rights management (DRM). Many designers of DRM technology seek to enforce copyright by controlling copying. Consequently, there is careful attention paid in the security and cryptology literature to the question of whether such control is technologically

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[1] 17 U.S.C. §106.

feasible and, if so, at what cost to our computing and networking environments. Experience to date with fielded DRM systems is limited, but it seems to indicate that copy control is at best quite difficult in a world of networked general-purpose PCs. We believe that it would be far more productive to organize copyright law around something other than the right to control copying than it would be to change the fundamental designs of PCs and networks.

The purpose of copyright is instrumental. In the United States, copyright is not a right of the author by reason of his creation. Copyright is not a Lockean "natural right" but is a limited right granted to authors in order to further the public interest. This principle is explicitly expressed in the U.S. Constitution, which grants the power to create a system of copyright to Congress in order to further the public interest in "promoting progress in science and the useful arts."[2] This point cannot be overemphasized: Copyright has a purpose – to further the public good by promoting the creation and dissemination of knowledge. Thus, copyright is structured to create incentives for authors to create and publishers to distribute new works – that authors and publishers benefit from these rights is the means and not the end of copyright.

By granting certain exclusive rights to authors, copyright seeks to ensure that authors will be able to recoup the costs associated with their ingenuity and publishers the costs of distribution. The paradigmatic example of this is the book publishing industry, where an author grants a publisher the right to print and vend a work in return for payment. The payment from publisher to author is recompense for the author's creativity. The publisher then sells instances of the work instantiated in a physical medium (copies) to recoup not only the author's payment but manufacturing and distribution costs (plus profit). Obviously, if a pirate press is able to publish its own edition of the work with impunity, the (legitimate) publisher will suffer economically, and authors will not be properly compensated for their creativity. Thus, as the conventional history would have it, was born the right of reproduction.

Unfortunately for the conventional history, in the Copyright Act of 1790, reproduction was not one of the rights granted to the author. This first federal copyright statute did not mention copying at all. Instead, the statute spoke of "publishing, printing, and vending." All three of these terms mean something other than the simple reproduction of a work – they imply distribution.[3] After all, it is the *distribution of copies to the public* that cause the publisher to suffer economically. The publisher cannot be harmed by copies that are never distributed and, for example, sit moldering in a warehouse.[4] Conversely, one cannot distribute what one does not have. Distribution to the public is the necessary condition for harm to the publishers'

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[2] U.S.C.A. Const. Art. 1, § 8, cl. 8.

[3] While it may seem that "printing" does not necessarily entail distribution, the "right to print" was subordinate to the right to publish. Although the right to print might be held by a party other than the one that held the right to publish, the right to print did not exist without a corresponding right to publish.

[4] This is not to say that an individual found with hundreds of unauthorized copies of Microsoft Windows XP in a warehouse should be free of liability. Certainly, the creation of such a large number of copies of a commercially valuable copyrighted work would be a strong indication of *intent* to distribute. Harm to Microsoft, however, would not occur until the copies actually were distributed.

economic interests.[5] Distribution, in the broad sense, can occur with or without copying. Thus, it is not surprising that the original Copyright Act failed to mentioning "copying" *per se* as an exclusive right.

Furthermore, since the purpose of copyright is to provide the opportunity for exploitation as an incentive to innovation, presumably the rights in copyright should be capable of exploitation independently. This is not the case for reproduction, which cannot be exploited independently of the right to distribute. What value does the right of reproduction have absent the right of distribution?[6]

Historically, the fundamental object of copyright law was not a copy or copies of a work but rather publication of the work. The meaning of "copy," as used in the word copyright, was a reference to the manuscript. The "copyright" was certain exclusive rights with regard to the manuscript, in particular the right to publish – not an exclusive right of reproduction. The etymology of the term "copy" (from the Oxford English Dictionary) as used within the copyright is clear:

> IV. That which is copied
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> 8. a. The original writing, work of art, etc. from which a copy is made.
>
> …
>
> 9. a. *Printing*. Manuscript (or printed) matter prepared for printing. (Now always without *a* and *pl.*)
>
> Formerly used in a sense nearer to 8: a MS. [Manuscript] or other exemplar which is printed from, or serves as 'copy', though not specially prepared for that purpose.
>
> b. Property in 'copy'; = COPYRIGHT. *Obs.*
>
> In its beginnings, only contextually differing from 9: the registration and licensing of the 'copy' or 'copies' proposed to be printed, conferred the 'right'.[7]

Copyright is not about the right of reproduction *per se* but rather the licensing and registration of the "*copy,*" in other words, the work (or, as the U.S. Constitution refers to it, "writings") for publication. Indeed, it is unlikely that the idea of an independent right of reproduction would have been conceivable when the term copyright was developed. Although early copyright did distinguish between the right "to publish" and the right "to print," printing was clearly subordinate to the publishing right, which was the right to have the copy reproduced for distribution to the public. The idea of a

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[5] Comm. on Intellectual Property Rights and the Emerging Information Infrastructure, National Research Council, *The Digital Dilemma: Intellectual Property in the Information Age* 141 (National Academy Press 2000) [hereinafter *The Digital Dilemma*].

[6] Of course, one might claim that the right of reproduction governs the making of copies for personal use (where there is no distribution) and that personal uses may thus be economically exploited. For example, a publisher might charge a higher price for an e-book from which text could be cut-and-pasted than an e-book from which text could only be manually copied. This, however, would turn copyright into a mandatory licensing scheme. Either a right would be explicitly granted or it would only exist within the vagaries of implied license or fair use. Such a result is unsatisfactory for reasons explained below.

[7] Oxford English Dictionary (2nd ed. 1989) (italics in original)

right to print without an associated right to publish would have been inconceivable at the time.

As a matter of fact, the term "copying" did not enter the copyright statutes until the Copyright Act of 1909. The term was used as a generic addition to the original "publishing, printing, and vending" in order to take into account the various new forms of mechanical reproduction that were proliferating at the turn of the century. After all, it does not necessarily seem appropriate to speak of "printing" or "publishing" statuary. The addition of the term "copying," then, was not the creation of a new right but an extension of the existing regime to ensure coverage of the new technologies of the era.

Once the term "copying" entered the statute, it is easy to see how it could eventually come to be interpreted as granting a right to reproduction. In the first decades of the twentieth century, this was actually sensible. After all, prior to the advent of electronics, making copies of a work was difficult and rather expensive. It is not simple to set hot lead for a printing press or to transfer a motion picture to negative in order to develop new positives. Accordingly, reproduction was a good predictor of an intention to distribute as well. There are few legitimate reasons, for example, to set lead type in order to make one or two copies of a book for personal use.[8] In a world in which works are embodied in difficult-to-reproduce physical objects, it is reasonable to assume that, if someone goes to the trouble of making multiple copies, he intends to distribute them.

Indeed, under current law, the fixation requirement for copying requires that a "copy" be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."[9] One of the reasons for the fixation requirement is that transitory "copies" will not last long enough to be distributed, certainly not long enough to be distributed to the public in such a way as to undermine the incentive structure of copyright. If copying alone were harm to the incentive structure of copyright, it would be hard to justify the fixation requirement. The fear, then, is not of reproduction itself, but of subsequent distribution of the resulting copies. Undeniably, the statutory exceptions to the right of reproduction are numerous (making of ephemeral copies,[10] backups and runtime copies of computer software,[11] and some digital sound recordings[12]). One has to wonder when the exceptions are so numerous whether the underlying rule is the appropriate one.

However, in the networked, general-purpose computer world, digital documents are not hard to copy at all, whether fixed or transitory. Reproduction, then, is not a good predictor of whether there will be distribution to the public in the digital world. For example, web pages are copied into temporary caches so that browsers can display them quickly, programs are copied from hard drive to RAM so that they can be run, and entire file systems are copied onto back-up stores to ensure that they are protected from user errors, software bugs, and malicious intruders. Digital music may

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[8] We cannot think of any plausible reasons for such an action.
[9] 17 U.S.C. § 101
[10] 17 U.S.C. § 112
[11] 17 U.S.C. § 117
[12] 17 U.S.C. § 1008

be among the most versatile media. Music on CD is copied from disk to hard drive in order to be used by jukebox software, transported to school or office via laptop, or copied into an MP3 player to listen to while jogging. In these and numerous other ordinary circumstances, digital files are "copied" in the literal sense, but in none of them is there an intention to distribute to the public that would undercut the publisher's ability to benefit from the work.

The point is that, in computers and networks, copies are made *constantly*, often without explicit instruction by or even knowledge of a particular user. Surely there is a better conceptual starting point for the development of copyright law than to define each of the copies as presumptively infringing.

More important is the fact that copies are not only frequently and continuously made in the computer world but moreover are *necessary* in order to make use of a work -- any use. This is something entirely new in the realm of copyright. Reproduction is not necessary to access a work embodied in a physical artifact. No copying is required to read a book or watch a movie. However, copying is necessary in order to read an e-book or watch a DVD. In the digital world, the right to control copying becomes tantamount to a right to control *access* to a work for purposes of normal use, such as reading, viewing, and listening.[13] In the digital world, the right to control copying means that actually reading an e-book is presumptively a violation of the copyright owner's rights.

Of course, it is very unlikely that a court would decide that reading was not a right granted by purchase of a digital book. However, the decision in such a case would have to rest on some other aspect of copyright law, such as fair use or implied license. Such reliance on alternative doctrines is less than satisfactory. For example, it would be strange indeed for a court to conclude that reading an e-book is only justified by the affirmative defense of fair use or that reading is permissible as an implied license and thus occurs at the sufferance of the copyright owner, who may disavow such a use.

Our proposed approach to this problem of the right to reproduce in the digital age is a radical one: Eliminate the right to control copying as a fundamental aspect of copyright and as an organizing principle of intellectual-property law. We believe that efforts to accommodate the right of reproduction in copyright of digital works will fail. For example, attempts to distinguish between "permanent" and "transient" copies will fail because of the truly vast number of circumstances in which computers and networks makes copies. Attempting to make such fine technological distinctions would cause the resulting law to be far too complex, even by the Byzantine standards of copyright law. Furthermore, the rapidity of technological evolution would seem to counsel strongly against adopting a decision-making process so dependent upon technologically specific circumstances.[14]

Our solution lies in a return to the original understanding of and principles behind copyright, principles that are more appropriate in the digital realm than the "copy-centric" view of current copyright law. In our view, copyright should return to its focus on *distribution to the public*. The rights of distribution, public performance,

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[13] *The Digital Dilemma*, 141-4.

[14] For example, in the case of "permanent" and "transient" copies, how would law adapt to a major shift in technology, for example, from volatile to non-volatile RAM?

and display are all examples of distribution (broadly defined) to the public and reflect early copyright law's focus on publishing, printing, and vending. We do not address the issue of derivative works. Copying, absent distribution to the public, should not be considered a violation of copyright at all.[15]

We now analyze two key doctrines of copyright law in light of our position.

First Sale Doctrine – Physical Property Only

The history of the first sale doctrine is coterminous with the history of copyright itself and developed as case law[16] prior to statutory codification. Formalized by legislation in 1976 as Section 109 of the Copyright Act, the doctrine is framed as a limitation on the copyright owner's exclusive right to distribute works; it entitles the owner of *a particular copy* of a work to "sell or otherwise dispose of" that particular copy *without the permission of the copyright holder*. The first sale doctrine does not restrict the copyright owner's exclusive right to *make* copies or to authorize the making of copies. The first sale doctrine also incorporates certain other restrictions; for example, it only applies to lawfully made (authorized) copies and only to the "owner" of such copies. In other words, one cannot sell or loan what one does not own. It is this doctrine that enables the existence of libraries, used book stores, and video rental stores.[17]

With regard to works in digital format, the first sale doctrine is an anachronism; it is essentially concerned with copyrighted works embodied in physical objects. Indeed, the doctrine is actually an element of property law that prevents copyright from running roughshod over other areas of law. Without the first sale doctrine, a copyright owner might claim, for example, that you were not permitted to resell a book for less than its original value or could not throw it away without the publisher's permission. If this "right" were accepted, imagine the consequences that would result if all items of manufacture had copyrighted material embodied in them, such as a haiku poem stamped on the bottom of a lamp. Suddenly, questions of personal property and normal trade would become questions of copyright.[18] Such control

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[15] Others have also advocated jettisoning the focus on the right of reproduction. See Jessica Litman, *Digital Copyright* 177-80 (Prometheus Books, 2001) [hereinafter, *Digital Copyright*]. Litman has offered, as an alternative organizing and fundamental principle, the right of the copyright owner to prevent others from commercially exploiting the work. Our alternative organizing principle is simply to emphasize the right of public distribution.

[16] Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 350-51 (1908).

[17] Note, however, that lending, leasing, and rental have certain limitations with regard to phonorecords (or sound recordings) and computer software in the statute.

[18] Nimmer on Copyright. Sec. 8.l2[A] (p. 8-150.4): [T]he right to prevent unauthorized distribution at that point [after first sale] (although no doubt still desired by the copyright owner) is no longer a necessary supplement [to fully protect the owner]. In such circumstances, continued control over the distribution of copies is not so much a supplement to the intangible copyright, but is rather a device for controlling the disposition of the tangible personal property that embodies the copyrighted work. Therefore, at this point, the policy favoring a copyright

would be at variance with common law, which disfavors restrictions on the free alienation of property.

Similar reasoning appears to apply to other areas of copyright law. For example, owners of a copy of a protected work are permitted "to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located."[19] Thus, for example, one may place lawfully purchased statuary (such as a garden gnome) on the front lawn where it will be displayed to the public. However, one may not broadcast the image of the gnome via television. Again, the focus seems to be on permitting an owner of physical goods to dispose of the physical property as desired without overly many restrictions.

Of course, while the first sale doctrine expresses elements of property law, it does point out some fundamental characteristics of copyright law. First, it shows that maximizing the return to authors and publishers is not, in fact, the ultimate aim of copyright. Through the first sale doctrine, among other things, individuals can gain access to copyrighted works through a number of means, many of which create no direct financial benefit for the copyright owner. After all, if you borrow a book from a friend, you are potentially depriving the publisher of a sale. Second, it shows that copyright owners do not have the right to regulate use (other than uses explicitly governed by copyright law itself) once the work is released into public channels. Once a member of the public acquires a particular copy of a work, he can use it in any legal manner he desires. If a reader desires to read the last chapter of the mystery novel first, he can do it, regardless of the copyright owner's desires. This shows that, traditionally, use-control has not been an exclusive right of the copyright owner.

The first sale doctrine applies to *particular copies* embodied in physical objects. Books, CDs, and videotapes are all examples of such physical embodiment. Such copies can only be possessed by one individual at a time, and transferring such an instance of the work does not involve reproduction. These characteristics are not shared by digital works on a computer or network. In the digital realm, there is no technologically sensible way to give a buyer of a particular instance of a digital work the right to redistribute that instance but withhold from him the right to copy it.

Our conclusion then is a radical one. The first sale doctrine simply does not apply in the realm of digital objects, though it remains applicable with regard to free alienation of physical copies. The values of more open access embodied in the rule are attainable but only by avoiding the copy-centrism of current law. In our argument, a violation occurs only if there is public distribution of a work not granted by the copyright owner.

Alternative proposals with regard to the first sale doctrine are even more radical. Some copyright absolutists argue that, because no one but the copyright owner has the right to make copies under existing law, no one but the copyright owner should be permitted to lend, trade, or sell digital objects at all, because doing so always entails making copies. Since, in the future, many forms of information will be available only in digital form, the alternate means of access to works that the first sale doctrine enabled would be virtually eliminated. Others propose systems that would force

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monopoly for authors gives way to the policy opposing restraint of trade and restraints on alienation.

[19] 17 U.S.C. § 109(c)

digital objects to behave like physical objects. One example of this "trusted-systems" vision is described in *The Digital Dilemma*:

> In these systems, when a merchant sells a digital object, the bits encoding the object would be deposited on the buyer's computer and erased from the merchant's computer. If the purchaser subsequently "loaned" this digital object, the access control and rights management systems on the lender's computer would temporarily disable the object's use on that computer while enabling use on the borrower's computer. These changes would be reversed when the object is returned by the borrower to the lender. [20]

We share the skepticism of the authors of *The Digital Dilemma* that such systems will enjoy successful technical development and market adoption in the near future.[21] Moreover, we reject the trusted-systems vision on the grounds that it vitiates the nature of digital documents. Transformative social benefits of the switch from analog to digital publication, if they are to occur at all, will derive in part from the fact that digital documents have fundamentally different characteristics from analog physical documents. If we were to try to ensure that digital documents behave like physical ones, we would eliminate the incentive to innovate. Finally, it is unlikely that such trusted systems would be acceptable to copyright holders themselves. If such a trusted system were both effective and economical, it would likely have devastating consequences for copyright owners, because lending of digital objects would become extremely efficient. In this scenario, large groups of like-minded individuals, neighborhoods, entire dorms, or apartment complexes would be able to share one digital object, such as a song, because all they would need to do in order to be in compliance with the law is use the trust-systems technology to ensure that no two people use the object at exactly the same time.

Fair Use

Prior to its codification in the Copyright Act of 1976, fair use was a judicially created doctrine governing the use of one work in the work of another.[22] It was analogous to fair competition law. There were fair uses (uses by one author, such as a reviewer, of another author's work, the subject of the review), and there were unfair uses, such as out-and-out plagiarism. But there was another category of use, use that was not competitive at all and thus not subject to fair use analysis. This might be called "normal use," use by the consumer.

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[20] *The Digital Dilemma*, 167-8.

[21] However, we do agree that such a system, if effective, should protect its users under both current law and our proposal from conviction for copyright infringement.

[22] Sony Computer Entertainment America, Inc. v. Bleem, LLC, 214 F.3d 1022, 1025-26 (9th Cir. 2000).

This makes sense. When a consumer obtains access to a copy of a work, *i.e.*, a copy embodied in a physical medium such as a book or CD, the consumer is actually obtaining the ability to make use of the work (an intangible object). The physical medium itself is largely irrelevant.[23] This ability to make use of the work accrues simply through gaining access to the work. It is not an implied license from the publisher. For example, if one borrows a book from a library, one has the ability to read the work regardless of the desires of the publisher (who may be opposed to the loss of a potential sale). What the individual obtains is the ability to use the intangible work itself. Thus, when an individual accesses (by whatever means) the work by making personal use of it, no issue of competition is raised.

The very concept underlying fair use, the rules governing the use of one work in the work of another, does not apply to personal uses. After all, if an individual merely transfers a work to which she already has legitimate access from one physical medium to another physical medium, in what way is that using one work in the work of another? By photocopying a page from a book, does one suddenly become the author of a new work – one which incorporates the work of another? Mere copying for personal use should not raise a question of either fair or unfair use. Moreover, one of the early tests of fair use was whether the questionable use supplanted the market for the original. Personal uses do not supplant the market for the original. After all, if a user already has legitimately obtained a copy of the work, how can any copying supplant that copy absent distribution? The user may have altered the physical characteristics of the particular embodiment, but that has not supplanted the user's need for access to the work in the first place.

Unfortunately, the law of copyright has been transformed so that normal use by the consumer is not always permissible; rather, the permissibility of any use that incorporates copying must be decided on a case-by-case basis, usually under the rubric of fair use. While it is unlikely that a court would hold a single personal-use copy of a work to be infringing (even granting a plaintiff would bring such a case), the court would still have to apply fair use analysis to the copy, because fair use is an affirmative defense. Under current law, every copy is presumptively infringing, and copying may only be justified under the fair use doctrine. This is the case even when the original question underlying fair use analysis, whether or not the use is one that competes with the copyright owner, is not relevant.

This is important, because, in the transition to the digital world, copying has become much easier. When copying is difficult, it is likely that only commercial entities and those similarly situated would be making copies. Thus, copying *per se* could be enough to trigger a fair use analysis, because the relevant presumption was that copying would only take place in a commercial context with intent to distribute the work publicly. However, in the digital world, copying becomes necessary to make normal use of works. In order to watch a (lawfully-acquired) *Shrek* DVD on the video equivalent of an MP3 player, the movie must be copied from the DVD.

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[23] It is possible for a publisher to create physical obstacles to certain uses – but that does not mitigate this right. For example, a publisher might print a book on paper that disintegrates in sunlight, hoping to prevent individuals from reading outside for some unfathomable reason. However, while the right of distribution allows the publisher to make such choices of printing materials, it would not prevent a clever reader from circumventing such limitations.

This act of copying should not require, should the consumer be challenged, the mounting of an affirmative defense of fair use in which the copying is presumptively unfair. This act of copying should not be actionable at all.

Of course, the current state of affairs is that any copying is presumptively illicit. This being the case, it is lawful for copyright owners to inhibit all copying of their works. Unfortunately, because it is necessary to copy a digital work in order to make use of it, the prohibition against copying means that the copyright owner may determine which uses are permissible and which are not. The doctrine of fair use, as it is now codified, completely undermines its own purpose in the context of digital works.

The Right of Public Distribution

To this point, we have been making the case that the idea that the right of reproduction as an exclusive right granted to the copyright owner is illogical and improper as applied to digital works. What, then, should the alternative principle be? We argue that the alternative principle is already part of existing law; it is *public distribution of instantiations of a work* that is the key right granted to a copyright holder. As we stated above, what harm to the copyright holder can come from copies that sit moldering in a warehouse? Harm can only occur if there is distribution to the public.

Indeed, Section 106 of the Copyright Act already limits the exclusive right of distribution to distributions made "to the public."[24] The right to make *private* distributions is not an exclusive right of the copyright owner. Furthermore, the concept of a public/private distinction is reinforced by the fact that it is only *public* performance and display of works that is a right of the copyright owner. In our analysis, both performance and display are forms of instantiation of a work. Performance is an instantiation of the work in action, and display is an exhibition of a physical instantiation of a work. Thus, performance and display imply forms of distribution. If it is *public distribution* that is the exclusive right, then performance, which is a form of distribution, only infringes when the performance is to the public. Both the rights of performance and display are unlike the right of reproduction, which, although an instantiation of a work, does not necessarily entail distribution.

This private/public distinction is very familiar in the realm of performance and display. After all, anyone who has ever invited friends over in order to watch a videotape or DVD has engaged in a private performance of a work. Playing a copyrighted song on the piano for friends, if anyone still does that, is also a private performance. An exclusive right to private distribution with regard to performance

[24] Under current law, this right is odd in light of the prior right of reproduction, which makes the right of distribution redundant. After all, how can one distribute works to which this third exclusive right applies without first making copies? If making copies is a violation of the copyright owner's first exclusive right, there is no need for a right of public distribution, because any such distribution presupposes that copies have been made.

would be absurd. It would imply, for example, that it is presumptively infringing for a parent to read a copyrighted book to a child.

Some have argued that the right distinction in such cases is not private vs. public distribution but rather distribution that has limited effects on the commercial market (which would not be infringing) vs. distribution that has major effects on the commercial market (which would be infringing).[25] Indeed, it is argued that this distinction would be useful even in situations in which one person's acting on his own did not have major commercial effects, but the widespread and similar activities of others would have commercially devastating effects.[26] In other words, posting a copyrighted song to a website would be permissible, as long as there were not too many downloads. According to this theory, there would be no problem if the practice was widespread, as long as each individual site did not have too many downloads. Such a result seems odd. Yet it is required unless one accepts the alternative economic test that certain forms of distribution are permissible unless the widespread practice of such forms of distribution would be commercially significant. This, of course, would be no test at all, because nearly every type of distribution would have commercially significant effects if practiced widely enough.

Moreover, the distinction between public and private fits very well with what is actually enforceable. After all, one of the major elements of private distribution is that it is *private*; it takes place where copyright owners will not be able to police it. Public distribution, on the other hand, takes place in *public*, where copyright owners will be able to monitor and patrol. For example, if a teenaged girl emails an MP3 to her father, this is a private distribution and one that the recording industry will likely never find about. The law might give the recording industry the right to prohibit this, but this law would be essentially unenforceable. However, if the teenage girl posts the MP3 on a website, it is possible for the recording industry to take appropriate action either against the girl or, ultimately, her ISP. There are any number of technical options to track, subvert, or otherwise interfere with public distributions of copyrighted works.

Fundamentally, it is extremely difficult for copyright owners to determine when the right of reproduction has been violated, unlike theft of physical property. Furthermore, the fact that the right of reproduction is very difficult to enforce is likely to lead to disrespect for the law. Of course, no law is perfectly enforced, but a law that can almost never be enforced independently is of questionable benefit.

Finally, reliance on public distribution will not substantially change the existing balance of economic incentives. To the extent that the right of reproduction is essentially unenforceable, copyright owners will be able to achieve the same amount of economic incentive through enforcement of the distribution right – which is essentially the status quo.

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[25] *Digital Copyright* 180.
[26] *Id.*, nn. 32.

Conclusion

Today, it is commonly assumed that the right of reproduction, the right to control copying, is and always has been a fundamental element of copyright law. However, that assumption is incorrect.

Historically, the right of reproduction is of relatively recent provenance. Prior to the Copyright Act of 1909, there was no exclusive right to control copying. Indeed, even in the Copyright Act of 1909, which first mentioned the word "copy," it is more than arguable whether there was any intention to create a right of reproduction, rather than merely to extend existing rights of distribution to new subject matter.

Logically and theoretically, the right of reproduction is not fundamentally required to be part of a system of copyright. After all, copies *per se* do not harm any of the interests that copyright is intended to support. The fact that the right to make copies is considered to be an essential element of copyright is the result of both misinterpretation of the origin of the word "copyright" and the fact that, for many years, the making of copies was a good predictor of intent to infringe.

However, digital technology has illuminated the issue and demonstrated that the traditional assumptions about the right of reproduction are false. In the digital age, copying is not a good predictor of intent to infringe. Moreover, copying is necessary for normal use of a work. Allowing normal use is a principle that copyright is supposed to support. To that extent, digital technology has revealed the illogic and inconsistency of the traditional view of the right of reproduction.

Of course, it is possible to attempt to write and interpret laws that uphold two inherently contradictory principles at once. Unfortunately, the results will be confusing and incoherent. The Digital Millennium Copyright Act is a good example of this. The DMCA purports to support the right of reproduction while maintaining existing rights of fair use. First, the concept of fair use codified in the Copyright Act of 1976 is itself incoherent as shown above. Second, the DMCA as interpreted by the courts does not protect fair use at all, except for those with a high level of technical skills. Third, the DMCA is confusing even by the standards of previous copyright laws.

Because the DMCA attempts to uphold two contradictory interests at once, it has numerous exceptions and exceptions to the exceptions.[27] Such messiness will always be necessary in order to harmonize, at least partially, two fundamentally opposed principles. This is not unlike the case of Ptolemaic cosmology, in which Ptolemy attempted to reconcile two opposing principles: the assumption that planets moved in perfect circles and the observed motion of the planets. Current copyright law, with its exceptions and exceptions to exceptions, is not very different from Ptolemy's epicycles and epicycles within epicycles.

In order for progress to occur, Copernicus abandoned the principle of circular motion in favor of observed motion – despite the widely and strongly held assumption

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[27] For example, a library may circumvent digital-rights-management software (which is otherwise prohibited) in order to determine whether to purchase access to a work, but not if an identical copy of the work is available in another format. 17 U.S.C. §1201.

that celestial motion must be “perfect.” Just so, copy-centrism should be abandoned in favor of the right of public distribution.