Vanderbilt Journal of Entertainment & Technology Law

Volume 6 Issue 1 *Issue 1 - Fall 2003*

Article 14

2003

The New Software Jurisprudence and the Faltering First Amendment

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Liam S. O'Melinn, The New Software Jurisprudence and the Faltering First Amendment, 6 *Vanderbilt Journal of Entertainment and Technology Law* 310 (2020) Available at: https://scholarship.law.vanderbilt.edu/jetlaw/vol6/iss1/14

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The New Software Jurisprudence And The

Faltering

First Amendment

- By Liam Séamus O'Melinn*

ourts have recently begun to respond to the call to provide First Amendment protection for software, with mixed and ominous results. A debate has raged over the past several years over whether or not computer code should be considered "speech" and therefore be entitled to the full protection of the First Amendment. ¹ An examination of important decisions in recent cases attempting to settle this debate may require a revision of the basic assumption that the First Amendment will offer effective protection to programs, their authors, and their users. The expectation itself is reasonable, for the Constitution is supposed to safeguard even offensive and dangerous speech, except in dire circumstances, such as times of national emergency. Given that courts reviewing restrictions on the development and distribution of software are increasingly invoking the First Amendment, it should follow that software will receive strong protection. Yet, while there have been judicial decisions which lend credence to the view that the Constitution can be invoked to protect software,² subsequent developments in this area, which I term "the new software jurisprudence," cast severe doubt on the

ability of the courts to apply the First Amendment so as to shield software effectively. These developments include the faults of previous strains of First Amendment analysis and then add more, with the ironic result that the First Amendment may now be used to *justify* the suppression of expression rather than to prohibit such suppression.³ This article analyzes two cases important to the development of this new jurisprudence, *DVD CCA v. Bunner*⁴ and *Universal v. Corley*,⁵ both of which provide reason to believe that the First Amendment will not be up to the task of providing the protection which computer code deserves.

This article first shows how the application of a peculiar brand of equity in both cases resulted in the subordination of the First Amendment to the law of intellectual property, with the effect of shifting subtle but important burdens from the plaintiffs to the defendants. As a consequence of the role played by equity, the defendants were treated as pirates rather than as speakers, with predictable results. The article next shows a comparable shift resulting from the courts' First Amendment analyses, a shift which effectively relieved both private plaintiffs and the

310

government of the burden of justifying the restrictions on expression which were at issue. In the wake of *Corley* and *Bunner*, the First Amendment defense—much like the "fair use" defense in copyright—threatens to become a burden to be borne by the defendant, rather than a considerable hurdle to be cleared by the regulator of speech.⁶

I. DeCSS and the Law: Universal v. Corley and DVDCAA v. Bunner

The series of events which would hail Eric Corley and Andrew Bunner into court began in 1999, when a Norwegian fifteen year-old named Jon Johansen posted a program called "DeCSS"⁷ on his website.⁸ DeCSS was developed by a group calling

itself MoRE (Masters of Reverse Engineering), of which Johansen was a member, which dedicated itself to reverse engineering in order to make computer programs usable on Linux-based⁹ operating systems.¹⁰ The dedication to interoperability can easily be mistaken for piracy by those who are unfamiliar with the free

DeCSS permits the decryption of CSS, the "Content Scramble System" which moviemakers use to encrypt DVDs. The true purpose of CSS is itself the subject of disagreement. The movie studios contend that they use CSS to prevent DVDs from being copied and distributed over the Internet without authorization,¹³ while the proponents of DeCSS maintain that the licensing scheme which accompanies CSS intends to dictate what hardware may be used to view rightfully owned DVDs.14 Functionally, CSS-encrypted DVDs can be played only on CSS-licensed players. DeCSS allows a DVD to be input through a DVD player to a computer using a Windows operating system, and then copies the decrypted files to the hard drive. According to Johansen, this was the first step toward developing a means to play CSS-encrypted DVDs on Linux-based operating systems because the Linux systems at that time could not read the filesystem used by DVDs.¹⁵

The dedication to interoperability can easily be mistaken for piracy by those who are infamiliar with the free software movement and its commitment to making source code freely available to all users.

software movement and its commitment to making source code freely available to all users; this lack of familiarity quickly led the opponents of DeCSS to view it as a means to enable online piracy of DVDs, while its proponents viewed it as a means of allowing people to make full use of their computers.¹¹ Johansen's treatment in subsequent months by Norwegian authorities demonstrates the radicallyopposed views taken by the friends and enemies of DeCSS: In January 2000, as he explained while appearing as a defense witness in the Corley trial, he was being prosecuted by the government of Norway (at the insistence of the Motion Picture Association of America ("MPAA")) for the development of DeCSS, and in the following month he received a Norwegian national student award, also for his role in DeCSS.¹²

Johansen has always insisted that he intended DeCSS to allow rightful purchasers of DVDs to view them on the hardware which they happened to own, so as to render them less dependent on CSS-licensed players.¹⁶ He claims that he was maintaining a Windows-based computer solely for the purpose of playing DVDs, and that he considered it wasteful to dedicate a computer to this single purpose.¹⁷ Johansen was acquitted on Norwegian criminal charges in January 2002,18 and the judgment was affirmed in the government's appeal in December 2003.¹⁹ The appellate court agreed with the lower court's holding that he was entitled to develop DeCSS to play DVDs which he owned.²⁰ The courts refused to hold Johansen responsible for the illegal use of DeCSS by others because they concluded that his own use was lawful.

A. Universal v. Corley

Eric Corley²¹ publishes a hardcopy journal entitled "2600: The Hacker Quarterly," as well as an online version of the journal at www.2600.com. In November 1999, Corley wrote an article about DeCSS, which he placed on the 2600 website.²² Within the article, he also posted DeCSS in the form of object code,²³ and posted links to other websites which made DeCSS available.24 In January 2000 eight movie studios filed suit against Corley²⁵ and two other defendants²⁶ under the anti-trafficking provisions of the Digital Millennium Copyright Act (DMCA).27 On January 20, 2000, Judge Lewis Kaplan of the United States District Court for the Southern District of New York issued a preliminary injunction enjoining the posting of DeCSS by the defendants, and, after a trial, ludge Kaplan issued a permanent injunction prohibiting the defendants both from posting DeCSS and from linking to websites which posted DeCSS.28 The District Court adapted its prohibition against linking in accord with First Amendment evidentiary standards by requiring clear and convincing evidence that a defendant "(a) know at the relevant time that the offending material is on the linked-to site, (b) know that it is circumvention technology that may not lawfully be offered, and (c) create or maintain the link for the purpose of disseminating that technology."29

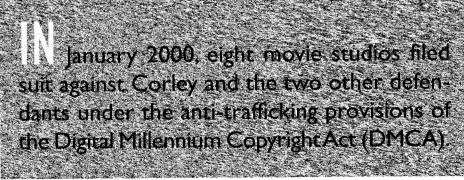
On appeal, a panel of the Second Circuit affirmed the District Court's decision, rejecting Corley's claims that the DMCA did not apply to his and that the injunction thus properly prohibited both posting and linking to DeCSS,³⁰ that the DMCA did not violate his rights under the First Amendment because it was aimed at the functional rather than the speech component of DeCSS,³¹ and that the copyright clause argument had to be rejected both because it was raised prematurely and because it was presented only in a footnote.³² The court declined to rule on the standard which the District Court employed in its application of the linking prohibition.³³

B. DVD CAA v. Bunner

Andrew Bunner, like Eric Corley, also posted DeCSS on a website late in 1999.34 On December 29, 1999, the DVD Copy Control Association (DVD CCA), an association created by the motion picture industry to administer CSS licensing, sought an injunction in Superior Court under the California Uniform Trade Secrets Act (UTSA)³⁵ against Bunner and numerous other website operators who provided access to DeCSS.³⁶ According to the DVD CCA, CSS contained trade secrets whose disclosure was restricted by licensing agreements.³⁷ Based upon this claim, the DVD CCA then alleged that DeCSS was the result of unlawful reverse engineering.38 According to the DVD CCA, the UTSA prohibits the use of trade secrets by those who know or should know that they are "misusing proprietary confidential information gained through improper means,"39 and according to the DVD CCA, Bunner knew or should have known that DeCSS had been

gained through improper means.⁴⁰ On January 21,

2000, the trial court issued a preliminary injunction enjoining Bunner and the other defendants from "[p]osting, or otherwise disclosing or distributing, on their web sites or elsewhere, the DeCSS program, the master



posting and linking to DeCSS, that the DMCA violated his First Amendment rights, and that the DMCA oversteps limits placed on the permissible length of copyright protection under the Copyright Clause. The court reasoned that Corley's interpretation of the DMCA was unjustifiably narrow keys or algorithms of the Content Scrambling System ('CSS'), or any other information derived from this proprietary information."⁴¹ The trial court, however, refused to enjoin linking to websites which posted DeCSS and stated that "[n]othing in this Order shall prohibit discussion, comment, or criticism, so long

In remanding the case, the *Bunner* court noted that First Amendment doctrine required constitutional fact review, i.e., that appellate courts were required to undertake independent review of the factual findings made by the trial court.

as the proprietary information identified above is not disclosed or distributed."⁴²

The intermediate appellate court reversed the trial court's injunction on First Amendment grounds. ⁴³ Holding that Bunner's "republication" of DeCSS was "pure speech" entitled to full First Amendment protection, the court invalidated the trial court's preliminary injunction as a prior restraint.⁴⁴ Prior restraints, observed the court, can be upheld only when the interest they serve—such as national security—is "more fundamental than the First Amendment itself."⁴⁵ The statutory right to protect trade secrets did not rise to this level, the court concluded, and thus it struck down the injunction.⁴⁶

The California Supreme Court, in turn, reversed the Court of Appeal, concluding that the preliminary injunction did not violate either the First Amendment of the United States Constitution or its California counterpart, Article I, Section 2, Subdivision (a) of the California Constitution.⁴⁷ The Court then remanded the case to the Court of Appeal to determine whether the trial court had properly issued the injunction under California's trade secret law.⁴⁸ In remanding the case the *Bunner* court noted that First Amendment doctrine required constitutional fact review, i.e., that appellate courts were required to undertake independent review of the factual findings made by the trial court.

On February 27, 2004, the appellate court reversed the order granting the preliminary injunction.⁴⁹ Noting its obligation to engage in an independent review of the record, the court ruled essentially that the evidence indicates that by the time the DVD CCA sought the injunction, "DeCSS had been so widely distributed that the CSS technology may have lost its trade secret status."50 Thus, the injunction burdened more speech than necessary to protect DVD CCA's property rights and served as an unlawful prior restraint on Bunner's free speech rights."51 As the court noted, "[A] preliminary injunction cannot be used to protect a secret if there is no secret left

to protect."⁵² In one important respect, then, the First Amendment did lead to a victory for Bunner, for although the basis for the court's reversal was statutory, the inquiry was conducted in accord with the requirements of constitutional fact review.⁵³

II. Equity: The Engine of Free Expression and Affixing the Pirate's Black Eyepatch

Bunner and Corley give the initial impression of a solid grounding in law, but their underlying approach is actually rooted in equity, and the determination that the defendants have "unclean hands" ultimately dooms their legal arguments. In Corley, the Second Circuit asserted that the DMCA was intended to stop "pirates" even before they could do their dirty work,54 and the court quoted with approval the District Court's use of "the strong right arm of equity" and the effect it would have on those who failed to understand "that taking what is not yours and not freely offered to you is stealing."55 The California Supreme Court took a similar stance in Bunner when it assumed that the trial court had correctly found that "the creator of DeCSS acquired these trade secrets by improper means" and that "Bunner knew or had reason to know that DeCSS disclosed trade secrets acquired by improper means."56 The court appeared to accept quite readily that Bunner was out to reap "the harvest of those who have sown."57 Likewise, in each case the court's reluctance to give serious consideration to the claim that the distribution of DeCSS has true public significance signals a belief in the moral probity of the plaintiffs' cases but not the defendants.⁵⁸ This kind of judgment will come as no surprise to those familiar with copyright and related areas such as trade secret, trademark, and patent, in which the defendant's character is often dispositive.

A. The Strange Role of Equity in the Law of Intellectual

Property

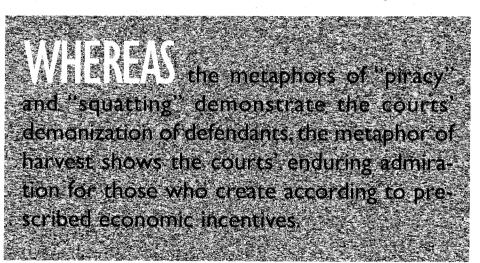
An early instance of the language of harvest appears in the famous case *International News Service v.Associated Press*,⁵⁹ and its use is premised on the belief that copyright and trade secret law represent a supremely sociable and commercial means of harmonizing social interests. Dissenters, in this view, are antisocial pirates who would *wrongfully* interfere with the "harvest" of knowledge, by reaping what they have not sown, and hence disturb the incentives credited with bringing that harvest about. According to those who hold this view, the pirates can make no claim to authorship of the speech at issue, and hence they are not typically allowed to cloak their predatory behavior behind the First Amendment.

This was the taken view most famously, perhaps, by the United States Supreme Court in Harper & Row v. Nation Enterprises.⁶⁰ In Harper, The Nation Magazine obtained an unpublished manuscript of former President Ford's memoirs.⁶¹ Time Magazine had agreed to purchase from Harper & Row the rights to publish excerpts from the memoirs before their

publication in book form, but in the wake of the article in *The Nation*, *Time* withdrew from the agreement.⁶² Harper & Row claimed that *The Nation* had infringed its copyright, and *The Nation* insisted that its article constituted fair use of copyrighted material.⁶³

The Court rejected the fair use defense, and in the process it made two points which are very significant to cases involving the intersection of copyright and the First Amendment.⁶⁴ The first statement stresses the importance of copyright in securing freedom of expression via economic incentives: "In our haste to disseminate news, it should not be forgotten that *the Framers intended copyright itself to be the engine of free expression*. By establishing a marketable right to the use of one's expression, copyright supplies the economic incentive to create and disseminate ideas."⁶⁵ The second important point made by the court in *Harper* is seen in its emphasis on the importance of rewarding those who contribute to the store of knowledge in accord with the incentives of the Copyright Act, those who "provide the seed and substance" of "the harvest of knowledge."⁶⁶

This desire to protect true contributors is consonant with a real suspicion of those who appear to be stealing from others. Thus, in *Harper*, the Court's early use of the phrase "purloined manuscript"⁶⁷ gives an extremely strong indication of the outcome of the case. In a similar vein, both *Bunner* and *Corley* rely on the view in which copyright (and trade secret law) are the true engines of First Amendment expression, and in each case the assessment of the equities provides an unmistakable signal that the First Amendment defense will be unavailing. Whereas the

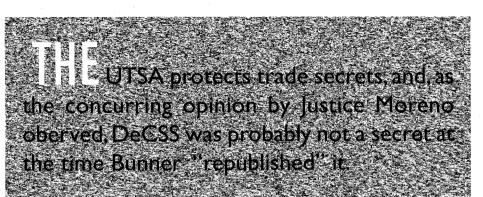


metaphors of "piracy" and "squatting" demonstrate the courts' demonization of defendants, the metaphor of harvest shows the courts' enduring admiration for those who create according to prescribed economic incentives.⁶⁸

B. The Application of Equity in the DeCSS Case

The importance of the equitable determination handicaps the defendant, for while equity has a "strong right arm," it does not seem to have a left arm. Put differently, the inquiry seems

decidedly one-way; in neither *Bunner* nor *Corley* does the court inquire into the probity of character of the plaintiff, perhaps because the right-holder is presumed to be on the side of the true engine of First Amendment expression.⁶⁹ In *Bunner*, in fact, the court neatly joins its denial of the public character of Bunner's actions with a discussion of his supposedly predatory behavior, while simultaneously reverting to the language of harvest seen in the earlier cases.⁷⁰ According to the court, Bunner's republication and was thus not capable of protection under the UTSA.⁷⁵ The trial court, Justice Moreno observed, had focused solely on DVD CCA's expeditious efforts to protect its members' trade secrets, but under California law the nature of the plaintiffs' efforts and the question of whether the alleged trade information was actually secret are two separate elements of the UTSA.⁷⁶ In the view of Justice Moreno, both must be satisfied for there to be a violation.⁷⁷ Yet the court, if it believed him to be



expressive purpose "does not give [him] a First Amendment right to appropriat[e] to [himself] the harvest of those who have sown."⁷¹ Such a one-sided approach seems in some respect commanded by the law of copyright and other areas in intellectual property, in which injunctions are freely available and harm easily presumed,⁷² and it helps to explain the burdens borne by defendants when the First Amendment would command that they be placed on plaintiffs.

The assessment of the defendants' characters also helps to explain the comparatively small attention paid to the statutes at issue in the two cases. The Bunner court assumed that the trial court had properly issued its injunction under California law, even though it arguably had not, based upon the provisions of the UTSA.73 The UTSA protects trade secrets, and, as the concurring opinion by Justice Moreno observed, DeCSS was probably not a secret at the time Bunner "republished" it, Bunner was not alleged to be the original misappropriator or to be in privity with any original misappropriator, and within two months of Bunner's first posting, "at least 118 Web sites had been identified that either contained proprietary information related to CSS or provided links to other Web sites with such information."74 The information, in other words, was already public when Bunner first received it and continued to be so after wide incorrect on this point, did not explain its position beyond indicating that "because of the unusual posture of this case, we follow the lead of the Court of Appeal and assume as true the trial court findings in support of the preliminary injunction."⁷⁸ In *Corley*, the

Second Circuit showed a comparable lack of interest in the DMCA, first presenting defendants' arguments regarding the application of the statute and then rejecting them summarily.⁷⁹ These defenses included a statutory fair use defense,⁸⁰ a defense based on the DMCA provision that "[n]othing in this section shall enlarge or diminish any rights of free speech or the press for activities using consumer electronics, telecommunications, or computing products,"⁸¹ and a defense based on the claim that owners of DVDs enjoyed the "authority of the copyright owner" to use DeCSS to decrypt DVDs.⁸² The court disposed of the first argument in four sentences, of the second in one, and of the third in three.⁸³

The *Corley* opinion shows little evidence that the court considered the application of the DMCA to DeCSS very carefully. It shows ample signs, however, that "the strong right arm of equity" made such an investigation unnecessary. In areas such as copyright and trademark, it is tempting to ask why the First Amendment defense does not work, but the appearance of the First Amendment issue in these settings suggests that the better question is, "Does the defendant work? Or does she seek to acquire free what it cost the plaintiffs time and money to produce?" The First Amendment defense, in other words, may actually be counterproductive in that it offers the courts another opportunity to assess the character of the defendant unfavorably. This appears

The New Software Jurisprudence and the Faltering First Amendment

to be true in both of the DeCSS cases, as the courts conducted a rather forgiving First Amendment analysis, from the plaintiffs' point of view, while making clear that the law disapproves of the so-called illegitimate activities of the defendants.

III. Content and the Vagaries of First Amendment Analysis

The opinions in both *Bunner* and *Corley* devote a great deal of attention to the First Amendment, particularly in comparison to the small amount which they pay to the statutory issues. Yet the First Amendment analysis in both cases appears to reflect the courts' views of the defendants' suspect purposes, and thus to restate the equitable reasoning.

for the highest level of scrutiny—strict scrutiny which is a very hard standard for the government to meet. If a measure is deemed not to be content based, then the restriction will usually be adjudicated under a lower and less exacting level of scrutiny typically the intermediate level of scrutiny⁸⁴. In other words, a court's decision simply to apply the First Amendment says little about the level of scrutiny to be applied, and hence provides little indication as to whether a restriction on expression will be upheld. The level of scrutiny selected by the court gives a far better indication of the outcome of the case, and thus the question of whether a measure is content based is critical to the First Amendment analysis to be applied by the court.

What does it mean to say that a restriction on expression is content based? Unfortunately, while

With the exception of the Bunner court's instruction to conduct constitutional fact review on remand, it is not clear that there is a separate inquiry conducted under the First Amendment, or that the First Amendment makes any difference to the courts' reasoning. In addition, although both courts claim to apply a multi-step test to determine whether the restrictions on

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expression are constitutional, in each case the very first step is obviously decisive. The result is an extremely unsatisfying brand of First Amendment jurisprudence designed for software, one which gives the appearance of providing real scrutiny but which in fact insulates software-related legislation from any real constitutional scrutiny.

A. Content Based, Content Neutral, and Viewpoint Based Restrictions

This first step in the courts' First Amendment analysis involves a determination by the court of whether the restriction on expression is content based. This determination is rather complex and so merits some introductory points. A restriction which is based on the content of the message calls the answer can be stated simply and intelligibly in a general way, in practice, a satisfactory answer often proves more troublesome. In both *Bunner* and *Corley*, the courts came up with very unsatisfactory answers, and in both cases the content determination effectively ended the analysis. By virtue of ruling that neither restriction at issue⁸⁵ is content based, both courts effectively relieved the government of any burden in sustaining the statutes and turned intermediate scrutiny into something more like rational basis scrutiny, the lowest level and the easiest for the government to meet.⁸⁶

The confusing nature of the inquiry as to whether a measure is content based is highlighted by the *Bunner* court's assertion that "[t]he fact that the preliminary injunction *identifies the prohibited speech by its content does not make it content based*."⁸⁷

This view reflects a confusion between measures which are based on the *content* of expression and measures based on the *viewpoint* expressed,⁸⁸ and this confusion allows courts to think that a measure is not content based simply because it does not discriminate against a particular viewpoint.

Content based restrictions prohibit expression on the basis of subject matter, and at their broadest they prohibit discussion of an issue altogether.⁸⁹ Content based restrictions are presumptively unconstitutional and are adjudicated under strict scrutiny. Viewpoint based restrictions, while also based on content, are narrower and more invidious in the sense that they prohibit the expression of one viewpoint on a subject while allowing another. They, too, are subject to strict scrutiny and are treated even more sternly than mere content based restrictions. The difference between a content based and a viewpoint based restriction is a rather fine distinction, so an example might be helpful on this point. A classic example of a content based restriction is provided by a measure which prohibited the solicitation of votes and the distribution of campaign literature within 100 feet of a polling place.⁹⁰ This measure was invalidated under the First Amendment, not because the

restriction favored one viewpoint on the election over another, but because the ban was targeted at the content of the speech in its "prohibition of public discussion of an entire topic."91 (If the measure banned support for a challenger while allowing support for an incumbent, the restriction would be based on viewpoint, and would be even more strongly disfavored.)

the highest levels, for although the United States Supreme Court distinguishes between content and viewpoint based restrictions, it has also endorsed the notion that content based regulation signals the government's disapproval of a particular viewpoint: "The principal inquiry in determining content neutrality, in speech cases generally and in time, place, or manner cases in particular, is whether the government has adopted a regulation of speech because of disagreement with the message it conveys. The government's purpose is the controlling consideration."92 Additionally, First Amendment jurisprudence uses the phrases "content based" and "content neutral" as if they represented opposing outcomes of the same inquiry: that is, the law deems that if a restriction is aimed at suppressing expression on the basis of its content, it is content based, and if not, it is content neutral. 93 This use of the phrase "content neutral," however, implies that suppression of a message is acceptable as long as the government suppresses in a neutral rather than discriminatory fashion, and misleadingly suggests that the only question in the content inquiry is whether government is suppressing expression because it disagrees with the expression. To view the inquiry in this light is to forget to ask-in addition-whether

D' virtue of ruling that neither restriction at issue is context based, both courts effectively relieved the government of any burden in sustaining the statutes and turned intermediate scrutiny into something more like rational basis scrutiny, the lowest and the easiest for the government to meet.

If viewpoint discrimination and content regulation are both subject to strict scrutiny, with the small difference that viewpoint based regulation is more strongly disfavored, what difference does confusion between them make? The answer is that in failing to observe a distinction, courts may conclude that if a measure is not viewpoint based, neither is it content based. This mistake is made at the government's measure prohibits expression on the basis of subject matter, even though it does not discriminate among viewpoints. If the answer to *either* question is yes, then the restriction at issue is content based.

In both *Corley* and *Bunner*, and particularly in *Bunner*, the courts accepted the invitation to ask only the viewpoint question, concluding that because

The New Software Jurisprudence and the Faltering First Amendment

legislative restrictions on DeCSS do not favor one viewpoint over another, they are content neutral. The District Court in *Corley* thus asked (and answered) only one of the two necessary questions.

The court should have asked whether the DMCA was content based, but instead asked only whether the DMCA was viewpoint based: "That substantial interest fof the government in passing the DMCA], moreover, is unrelated to the suppression of particular views expressed in means of gaining access to

utral. refused to look at the nature of what was being (and suppressed by the UTSA, and in the name of ions. protecting property rights adopted intermediate

regulation was nevertheless content based. It simply

Bunner, the California Supreme Court, after claiming to extend First Amendment protection to computer code, appears to have asked simply whether the government was engaged in viewpoint based regulation.

protected copyrighted works."⁹⁴ The court should also have asked whether the government has chosen to advance its purpose by prohibiting a category of speech altogether, for such a prohibition would ban all discussion within the category, even though it did not seek "the suppression of particular views." If the answer to the question is yes, then the measure must be evaluated under strict scrutiny.

B. Bunner: Content, Property, and Intermediate Scrutiny

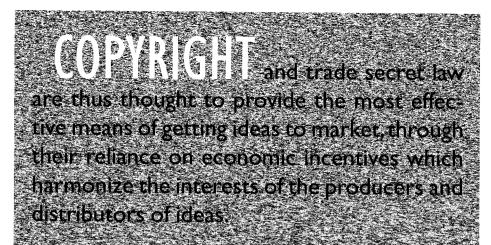
When copyright and trade secret collide with the First Amendment, of course, it is not typically because government disapproves of a speaker's message, but because government wishes to protect that message against misappropriation. Thus, the restrictions at issue in such cases are unlikely to be based on viewpoint. They are, however, based on content.95 Yet, given its misguided belief that a content based restriction can result only from government's disagreement with a speaker's message and a desire to suppress her viewpoint, it is hardly surprising that the Bunner court could conclude that only "injunctions 'that by their terms distinguish favored speech from disfavored speech on the basis of the ideas or views expressed are content based.""96 In Bunner, the California Supreme Court, after claiming to extend First Amendment protection to computer code, appears to have asked simply whether the government was engaged in viewpoint based regulation. Once it concluded that the answer was no, that the measure was not viewpoint based, the court showed no concern with whether the

level scrutiny while actually applying an even less exacting test than intermediate level—something on the order of rational basis scrutiny, in which any burden on the government is slight indeed.97

The Bunner court quotes the United States Supreme Court for the proposition that "[t]rade secret law promotes the sharing of knowledge"98 The Bunner court goes on to say that the reason that trade secret law is held to advance the sharing of knowledge is that it allows individual inventors to contract with companies large enough to develop the inventors' ideas.⁹⁹ This belief is analogous to the view that copyright is "the engine of free expression."100 Copyright and trade secret law are thus thought to provide the most effective means of getting ideas to market, through their reliance on economic incentives which harmonize the interests of the producers and distributors of ideas. This belief that trade secret law promotes the sharing of knowledge is key to understanding the outcome of the Bunner case, for it explains the importance which the court attaches to the allocation of an exclusive property right under trade secret law. And the importance of property to the outcome of the case can hardly be overstated, for although the court appears to apply a multi-step test in its First Amendment analysis, the desire to protect property satisfies each part of the test.

If the focus is on permission to share knowledge, is a regulation which prohibits the sharing of knowledge not a clear content based restriction? In answer to this question, it appears that the California Supreme Court has decided that no

restriction on expression which is intended to protect property can be content based. The injunction which the trial court ordered, in the view of the Bunner court, was not content based because "the governmental purpose behind protecting trade secrets like the CSS technology through injunctive relief is wholly



unrelated to their content."¹⁰¹ Again we see a confusion between content based and viewpoint based discrimination, since the court focuses on the questions of favoritism and censorship: "Because the preliminary injunction at issue here does 'not involve government censorship of subject matter or governmental favoritism among different viewpoints,' it is content neutral and not subject to strict scrutiny."¹⁰²

In addressing the issue in *Bunner*, the court claims to apply a three-part analysis: first determining if the regulation at issue is content based, then determining if the injunction serves a significant governmental interest, and finally determining if the injunction burdens no more speech than is necessary.¹⁰³ However, as will be seen, once the first question is answered in the negative, the court seems to lose its vigor in applying the rest of this threepart test.

In its content analysis, the court considered the preliminary injunction issued by the trial court in light of the general purposes of trade secret law. As the court notes, the injunction "identifies the prohibited speech by its content."¹⁰⁴ Why does the injunction's direct and necessary reference to the content of speech not, in the eyes of the court, make the injunction a content based restriction? The answer involves two stages. First, the court makes the seemingly inconsistent statement that "the injunction does not purport to restrict DVD CCA's trade secrets based on their expressive content."105 By this, the court appears to mean that, although the injunction refers to the content of the speech to be suppressed, its purpose is not to suppress the expression of opinions, but to protect a property right. The court says, "[T]he trial court issued the injunction to protect DVD CCA's statutorily created property interest in information—and not to suppress the content of Bunner's communications."¹⁰⁶

The second stage in the determination as to whether the injunction is content based is to assess the secondary effects of the law—which the court refers to as the law's "primary purpose" while ignoring the law's primary effect of suppressing expression. The court asserts that "the injunction's restrictions on Bunner's speech 'properly are characterized as incidental to the primary' purpose of California's trade secret law—which is to promote and reward innovation and technological development and maintain commercial ethics."¹⁰⁷ In other words, although the immediate purpose of the injunction is to suppress speech on the basis of content, it is not content based because its ultimate purpose is to protect a property right in CSS.¹⁰⁸

Having determined that the injunction is content neutral, the court then proceeds to the next two steps of the constitutional inquiry: determining whether the injunction serves a significant governmental interest and whether it burdens no more speech than necessary.¹⁰⁹ However, as noted above, the determination that the UTSA and the supporting injunction were not content based effectively ends the inquiry in Bunner. While tacitly adopting an intermediate level of scrutiny to review a regulation of pure speech,¹¹⁰ the court's application of the test consists in the main of reassertions of the importance of securing property rights. Thus, the test devised by the Bunner court is notable in part because it appears to allow the plaintiff to satisfy three requirements-that the measure is not based on content, that the governmental interest is

significant, and that the burden on expression is necessary—simply by showing that the protection of property is the goal of trade secret law.

According to the court, the government's interests here are undoubtedly significant because trade secret law protects investment, allows "the trade secret owner to reap the fruits of its labor,"¹¹¹ and "protects the owner's 'moral entitlement to' these fruits."¹¹² The trouble with this assertion lies in its redundant justification based on property. The *Bunner* court held that the UTSA and the supporting injunction were not content based because their ultimate purpose was to secure property rights in information. Now the second part of the test, the assessment of the importance of the government's interest, is satisfied on the same ground. This

repetitive use of the property justification must lead to the suspicion that the supposedly multifaceted test is actually a repetition of the single assertion that the government is entitled to protect property.

The final prong of the court's three-part analysis, determining whether or not the measure "burden[s] no more speech than necessary to serve these

significant government interests,"¹¹³ is satisfied in a similar fashion. The injunction passes this test as well, but not after any searching analysis of either the injunction or the UTSA. Once again, the court asserts that the burden on Bunner's speech is incidental, that the injunction "upholds the standard of commercial ethics maintained by trade secret law," and that the injunction "merely applies this venerable standard of commercial ethics to a constitutionally recognized property interest in information."¹¹⁴

"Bunner proffers, and we can think of, no less restrictive way of protecting an owner's constitutionally recognized property interest in its trade secrets."¹¹⁵Thus ends the inquiry in the oddest of manners, with the defendant expected to shoulder a burden of demonstrating the absence of a less restrictive mode of regulation, a burden that would ordinarily be imposed on the *government* under either

intermediate or strict scrutiny.¹¹⁶ It is interesting that the government appeared only as an amicus in Bunner;¹¹⁷ the fact that the government did not appear as a party points to the private nature of the plaintiffs' actual interests, and it suggests that the government was not going to be forced to defend the constitutionality of the statute with any real rigor. Indeed, Attorney General Lockyer faced only two questions and responded with general assertions connecting DeCSS with piracy.¹¹⁸ Moreover, the court did not actually subject the California UTSA to any scrutiny -- its analysis of the purpose of trade secret law is limited to citations to United States Supreme Court opinions and to law review articles.¹¹⁹ The outcome of this inquiry is a somewhat conclusory assertion that the government has adopted the only

THUS ends the inquiry in the oddest of manners, with the defendant expected to shoulder a burden of demonstrating the absence of a less restrictive mode of regulation, a burden that would ordinarily be imposed on the government under either intermediate or strict scrutiny.

means of preserving the property interest in trade secrets. There is, the court appears to have reasoned, no less restrictive means of suppressing speech than suppressing speech.¹²⁰

What is the virtually certain result of this burden-shifting? A precedent which appears to ensure that so long as a government justifies a restriction on speech by relating it to the protection of property, the measure will be invulnerable to First Amendment challenge even if it has the primary purpose and effect of suppressing pure speech. Not only does such a result pose a direct challenge to the purpose of the First Amendment itself, it also threatens to turn the First Amendment into a device to justify the suppression of expression.

C. Corley, Content Based Regulations, and Functionality

What property is to the *Bunner* court, functionality is to the *Corley* court: a factor used to satisfy every step of the First Amendment inquiry. The opinion includes a promising declaration that computer code clearly merits First Amendment protection,¹²¹ but the promise is belied by the caveat that functionality deprives software of its quality as speech: "The DMCA and the posting provision are applied to DeCSS solely because of its capacity to instruct a computer to decrypt CSS. *That functional capability is not speech within the meaning of the First Amendment*."¹²² Functionality serves as the principal justification of the determination that the challenged anti-trafficking provisions and the related antiFirst Amendment analysis indicates that the court was transfixed by the specter of piracy.

I. Applying the First Amendment

In conducting the constitutional analysis, the *Corley* court first "concluded that computer code conveying information is 'speech' within the meaning of the First Amendment."¹²⁶ However, the opinion signals that it is not going to think seriously about the nature of DeCSS itself in its cryptic statement that DeCSS *might* convey information so as to qualify for this kind of protection:"Neither the DMCA nor the posting prohibition is concerned with whatever capacity DeCSS might have for conveying information to a human being, and that capacity, as previously explained, is what arguably creates a speech

circumvention provisions of the DMCA are not content based, and sets the level of scrutiny at the intermediate rather than the strict level.¹²³ Then it goes on to satisfy each element of the test which the statute must meet in order to pass constitutional muster---the question of whether government's the

the economics of scale reaped by a remarkable consolidation of station powership and recent figures showing steadily increasing revenue, it appears that the radio industry is poised for a healthy future.

interest in the restriction is substantial and the question of whether the measure is narrowly tailored. As in *Bunner*, the result is that the level of scrutiny which is actually applied is very low and defendants are forced to shoulder a burden which should be borne by the government.

Of course, it should be remembered that the court's dim view of the defendants' activities constitutes an important element in the court's reasoning. As noted above, neither the District Court nor the Court of Appeals found it difficult to see the antisocial forces of piracy at work in the creation and distribution of DeCSS.¹²⁴ This attitude calls into question the express goal of the court, which is to take an "evolutionary' approach to the task of tailoring familiar constitutional rules to novel circumstances," so as to favor "'narrow' holdings that would permit the law to mature on a 'case-by-case' basis."¹²⁵ It is not clear that the court was focused on the issues presented in *this* case, and the peculiar component of the decryption code."¹²⁷ Next the court considers the scope of protection to be afforded by determining first whether the restriction (without actually referring to the DMCA) was "imposed because of the content of the speech."¹²⁸

In conducting the inquiry into whether the challenged portions of the DMCA are content based or content neutral,¹²⁹ the court asks "whether the regulation is 'justified without reference to the content of the regulated speech."¹³⁰ This question is to be answered, according to the court, by assessing the government's purpose.¹³¹ Given its insistence that the guiding factor in the content inquiry is the *government's purpose*, it is strange that the court examines neither the language nor the legislative history of the DMCA in this section of its opinion.¹³² Instead, it conducts an inquiry into the nature of computer code.¹³³ As noted above, the result belies the tone of the introduction, which strongly implies that computer code is about to be extended very

strong First Amendment protection against the DMCA's anti-circumvention¹³⁴ and anti-trafficking¹³⁵ provisions.¹³⁶ In the view of the court, the critical question is whether code, in addition to having a speech element, is also functional.¹³⁷ The court's answer to this is yes, because "computer code can instantly cause a computer to accomplish tasks and instantly render the results of those tasks available throughout the world via the Internet."¹³⁸

As far as the court is concerned, the functionality of code effectively answers the question of whether the DMCA is content based. The DMCA should be upheld as applied to code because it aims at the functional capacity of code rather than its speech elements.¹³⁹ "These realities of what code is and what its normal functions are require a First Amendment analysis that treats code as combining non-speech and speech elements, i.e., functional and expressive elements."¹⁴⁰

Given the supposed importance of the government's purpose in the test adopted by the *Corley* court, it is odd that there is little attention paid to that purpose beyond a conclusory assertion that neither the DMCA nor the injunction "is concerned with whatever capacity DeCSS might have for conveying information to a human being."¹⁴¹ Instead, the court focuses almost exclusively on the supposed simplicity of operation of computer programs.¹⁴² The emphasis is on the potentially vast effects attributable to a "single click of a mouse," effects which lead the court to endorse the view expressed by the district court that "functionality is really 'a proxy for effects or harm."¹⁴³

The combination of the speech and the nonspeech components in computer code, and the attendant conclusion that neither the DMCA nor the District Court injunction is content based, lead

opinion.

the court to adopt an intermediate level of scrutiny rather than strict scrutiny.¹⁴⁴ It does so tacitly when it announces the test to be applied:

> As a content-neutral regulation with an incidental effect on a speech component, the regulation must serve a substantial governmental interest, the interest must be unrelated to the suppression of free expression, and the incidental restriction on speech must not burden substantially more speech than is necessary to further that interest.¹⁴⁵

This is the language of intermediate scrutiny, and it is much milder and much less demanding of the government than the language of strict scrutiny, which requires the government to establish that it has a compelling interest in the restriction and that it has adopted means narrowly tailored to meet that object. The intermediate test is far easier for the government to satisfy, and the adoption of this level of scrutiny would make it difficult for defendants to prevail.

Yet the result of the court's analysis in *Corley* is a test which is not even intermediate scrutiny, but a far more forgiving level of scrutiny from the government's point of view. As with the test used by the court in *Bunner*, once a regulation is deemed content neutral, the test has effectively been completed. The *Corley* opinion appears to require very little justification from the government—much less than intermediate scrutiny commands. The opinion does not show signs of any real burdens imposed on the government, and while the government appeared as a party, it did not do so until it intervened at the appellate level; ¹⁴⁶ it was

its insistence that the guiding factor in the content inquiry is the *government's purpose*, it is strange that the court examines neither the language nor the legislative history of the DMCA in this section of its absent from the trial proceedings and yet managed to satisfy the District Court of the constitutionality of the DMCA.This lack of rigor is exemplified by the court's acceptance of the government's position in every regard without question. For example, the court's inquiry into whether the government's interest is

substantial boils down to the blunt assertion that "[t]he Government's interest in preventing unauthorized access to encrypted material *is unquestionably substantial*."¹⁴⁷

Heightened levels of scrutiny command something more than unquestioning affirmation of the government's position, and, although the stated aim of the court is to devise a standard appropriate to the technology at issue, it is difficult to see how this can be achieved by accepting the government's arguments without also scrutinizing them carefully.148 Indeed, while the Corley court claimed to be following the test first set out in United States v. O'Brien, 149 it is clear that it applied nothing like the scrutiny commanded by O'Brien.As Justice Kennedy explained in Turner Broadcasting System v. F.C.C., 150 even after a measure is determined not to be content based, under O'Brien the burden remains on the government to show that the challenged restrictive measure-in that case "must-carry" provisions for seeks to "justify," both the application of the DMCA and the posting prohibition to the Appellants solely on the basis of the functional capability of DeCSS to instruct a computer to decrypt CSS, i.e., "without reference to the content of the regulated speech." This type of regulation is therefore contentneutral, just as would be a restriction on trafficking in skeleton keys identified because of their capacity to unlock jail cells, even though some of the keys happened to bear a slogan or other legend that qualified as a speech component¹⁵⁴

Apparently determined to prevent the defendants from confusing the public with their "slogan[s]," the court expects the defendants, rather than the government, to show that the government

cable television providers-was passed in response to a dire need,¹⁵¹ and that even after clearing that hurdle "the Government still bears the burden of showing that the remedy it has adopted does not 'burden substantially more speech than is necessary to further the government's legitimate interests."¹⁵² It is evident that the *Corley* opinion fails to make any such

combination of the speech and the nonspeech in computer code, and the attendant conclusion that neither the DMCA or the District Court injunction is content based, lead the court to adopt an intermediate level of scrutiny rather than strict scrutiny.

exacting inquiry of the government.¹⁵³

In fact, the functionality justification leads the court to question the defendants rather than the government; the DMCA's attempt to prohibit tools which permit piracy offers another opportunity to besmirch the defendants' character by tacitly likening DeCSS to a key which opens the doors to prison cells:

> The DMCA and the posting prohibition are applied to DeCSS solely because of its capacity to instruct a computer to decrypt CSS. That functional capability is not speech within the meaning of the FirstAmendment.The Government

can accomplish its aims through less restrictive means.¹⁵⁵ To this end, the court says that even though "the prohibition on posting prevents the Appellants from conveying to others the speech component of DeCSS, *the Appellants have not suggested, much less shown*, any technique for barring them ... that makes a lesser restriction on the code's speech component."¹⁵⁶ Even under an intermediate level of scrutiny, while the government does not have to show the narrow tailoring required under strict scrutiny, it bears the burden of showing that the restriction at issue does not burden substantially more speech than necessary to the attainment of its end. Moreover, the offer to the defendants appears to have been primarily rhetorical, for apart from the impermissibly lax standard which it applies here, the opinion completely ignores the less restrictive measures which the defendants *did* make.¹⁵⁷

The next sign that the *Corley* court is actually applying a very low level of scrutiny is that most of

its reasoning on the nature of code and DeCSS is generic at best, and in many instances purely conjectural, concerning itself with code in general rather than DeCSS in particular. The court places great weight on the supposed ability of DeCSS to facilitate transmission of DVDs over the internet. but little at all to the character of DeCSS itself.¹⁵⁸ Like the District Court, the Court of Appeals justifies its

is what the Second Circuit accomplishes by holding the purveyors of DeCSS in violation of the DMCA on the basis of *hypothetical* infringing uses.

This reversal of the *Sony* presumptions helps to explain the court's lack of interest in DeCSS itself,

The functionality justification leads the court to question the defendants rather than the government; the DCMA's attempt to prohibit tools which permit piracy offers another opportunity to besmirch the defendant's character by tacitly likening DeCSS to a key which opens the doors to a prison cell.

functionality analysis with references to the terrible consequences which code makes possible with the simple click of a button.¹⁵⁹ Yet the evidence presented at trial does not bear out any assertions regarding either the ease of use or the instantaneous results which the court associated with DeCSS.

To begin with, as the defendants noted, the plaintiffs did not point to a single instance of the use of DeCSS to make an unlawful copy of a DVD.¹⁶⁰ They pointed to just one instance of lawful copying which they themselves had commissioned, the results of which show that the emphasis on the instantaneous and easy use of DeCSS for unlawful copying was misplaced.¹⁶¹ As a result of its largely conjectural reasoning on the functionality of DeCSS, the court fails to ask whether DeCSS has substantial non-infringing uses-an inquiry commanded by Sony Corp. v. Universal City Studios, Inc.¹⁶² Indeed, the District Court sought to distance itself from Sony, indicating that the DMCA had overruled Sony on the significance of the substantial non-infringing use.¹⁶³ The Court of Appeals was silent on this question, perhaps fearful that the District Court was incorrect in its assessment of the effect of the DMCA on a longstanding Supreme Court precedent. In any event, whether the DMCA overruled Sony or requires a different construction of the case, there is no justification for turning the case on its head; yet that

and its greater interest in conjectural infringing uses. If this reasoning reflects a correct application of the DMCA, this sharp change in the contours of copyright law would itself call for searching scrutiny of the challenged provisions of the DMCA. Additionally, if we consider the requirements of the First Amendment, the level of scrutiny applied to legislation which changes such presumptions should be set at a very high level, and the test should be applied in a meticulous fashion. The level was not set at the appropriately high level in Corley and the test was applied in a most forgiving fashion, and the reason is that the court focused on the functionality of code only in the abstract. While ruminating about the supposed functions of code in general, the court failed to consider the character of DeCSS in particular.

2. Overbreadth in Reverse -O'Brien or Brandenberg Analysis?

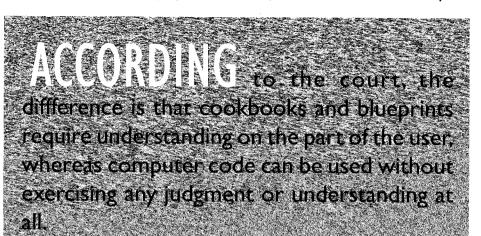
In traditional First Amendment analysis there is a doctrine of overbreadth, according to which the court holds the government accountable not only for the application of a restriction on expression to the defendant, but also to imagined parties whose First Amendment rights might be threatened by the statute. ¹⁶⁴ The result of the application of the

overbreadth doctrine is that, even though the defendant in a particular case might not have a viable First Amendment defense of her own expression, the possible threat to the legitimate First Amendment rights of others will be enough to invalidate the government's restriction.

One of the most troubling features of the reasoning in *Corley*, in keeping with its tacit rejection

repeatedly by both the District Court and the Court of Appeals in *Corley*.

O'Brien burned his draft card in public in 1966 in protest against the Vietnam War.¹⁶⁷ He was arrested for violation of a 1965 amendment to the Secret Service Act which prohibited the destruction of registration certificates-better known as draft cards used in conjunction with the draft.⁶⁸ The



of the rule from Sony, is that it reverses the overbreadth doctrine. The result is that a defendant's expression, although deserving in itself of First Amendment protection, may be suppressed on the basis of conjectural unprotected uses made of her expression by others. In other words, although Corley has himself engaged only in protected expression, according to the court, the First Amendment permits the DMCA to restrict him because of the uses to which others may put his speech. This is what the court is actually saying when it explains that the policy choice which the law now faces is "either [to] tolerate some impairment of communication in order to permit Congress to prohibit decryption that may lawfully be prevented, or [to] tolerate some decryption in order to avoid some impairment of communication."165 While the court in Corley describes resolution of this dilemma as a policy choice to be faced by Congress, it does not explain adequately why communication may be impaired under the First Amendment on the basis of the uses to which it may be put.

The key to understanding the court's reasoning in this regard may be found in comparing its analysis of DeCSS with the analysis in *United States v. O'Brien*, ¹⁶⁶ a case frequently employed in the determination of content neutrality and emphasized

Supreme Court of the United States upheld O'Brien's conviction and enunciated a test which is relevant to Corley because it sanctioned the application of intermediate scrutiny, rather than strict scrutiny, on the basis that the government was not attempting to suppress O'Brien's expression of opinion on the war, but his conduct.¹⁶⁹ This

conduct included the destruction of government property and tended to interfere with the government's ability to conduct the war.¹⁷⁰

The Corley court claims a strong resemblance between O'Brien's conduct and the functionality of code.¹⁷¹ That is why it endorses the District Court's formulation that "functionality is really a proxy for effects or harm."172 It is very clear that in attempting to show that DeCSS has a nonspeech component equivalent to O'Brien's conduct-the act of burning his draft card-the Corley opinion is imputing to the purveyors of DeCSS unlawful acts which might be engaged in by others who receive the code. The possibility of instantaneous online transmission led the court to impose a prophylactic rule-indeed, this was the way the District Court opinion described the DMCA based on the belief that "the only rational assumption is that once a computer program capable of bypassing such an access control system is disseminated, it will be used."173 It may be that the DMCA standing alone intends such a prophylactic effect, but it is clear that the First Amendment is supposed to have a similar effect in favor of expression even when it may lead to undesirable and perhaps unlawful consequences. Indeed, it seems clear that the First Amendment is here being used to justify the imposition of contributory liability on speakers.

The New Software Jurisprudence and the Faitering First Amendment

Despite a resemblance between the situations presented in O'Brien and in the dissemination of DeCSS, the conclusions drawn by the Corley court in this regard are not justifiable. The Supreme Court rejected O'Brien's argument that burning his draft card was fully protected "symbolic speech," but it did so on the basis of his own conduct and the effect it had on government property, as well as on the government's ability to administer the draft. His conviction was not sustained because of the effects which his conduct might have on others. In fact, if the reason for his arrest had actually been the danger that he might persuade others to join him, the restriction on his expression would clearly be content based and the case would call for adjudication under another standard.

That standard was elucidated in 1969, just one year after the O'Brien decision, in Brandenburg v. Ohio.¹⁷⁴ This case supplies the test for advocacy of illegal action, and it allows the suppression of substantial risk of imminent harm."¹⁷⁶ It is also clear that it is the content of the message which threatens the harms, and that restrictions under this line of analysis are content based. This much is clear from the court's unpersuasive attempt to distinguish DeCSS from cookbooks and blueprints—which it concedes merit full First Amendment protection. According to the court, the difference is that cookbooks and blueprints require understanding on the part of the user, whereas computer code can be used without exercising any judgment or understanding at all. The user of software, in the view of the court, can be completely ignorant and accomplish terrible things just by following mindless instructions.¹⁷⁷

To agree with this reasoning requires us to forget that cookbooks do indeed have instructions which can be followed by those who know nothing about cooking, and it may require more expertise to install even an executable program than to follow

advocacy of violent or illegal action only "where advocacy such is directed to inciting or producing imminent lawless action and is likely to incite or produce such action."175 The question of causation in Brandenburg and in Corley is treated in a similar fashion, with both courts asking whether the speech which the legislature seeks to restrict will actually lead to illegal

outcome of an attempt to determine whether a restriction on expression is content based was already an uncertain one to predict, and thus destructive of expression, but now the First Amendment actually threatens freedom of expression in several new ways.

action, will do so imminently, and is intended by the speaker to do so. Regardless of any tendency which the speech may have to bring about the illegal results, all three elements must be satisfied in order for the speech to be prohibited in accord with the First Amendment. The danger is that the message itself will induce and enable its recipients to break the law, and this is the danger to which the *Corley* court repeatedly refers in its passages on the functionality of code.

The Court of Appeals quotes the District Court on the need to link causation to "practical policy judgments," which in this case require recognition that "dissemination itself carries very a recipe. The successful use of DeCSS as even one step in the process of pirating a DVD, as the plaintiffs' own evidence shows, requires much more than the level of sophistication needed to bake a cake. Why are cookbooks and blueprints afforded the full measure of First Amendment protection, while DeCSS is not? The real answer is because their content does not offend.

Indeed, DeCSS might have provided a perfect test case for the proposition regarding the difference between a cookbook and DeCSS: could any of the judges in either *Bunner* or *Corley* actually have installed and used DeCSS to create a copy of a DVD? The suspicion must be raised that the judges would find

that operating the program required more than a "momentary intercession of human action" between receipt of the program and its use, and the results might even have been fairly amusing.

However, we will never know the answer to this question because the *Corley* court accepted the contention that "functionality is really 'a proxy for effects or harm," and it approved imposing liability so as to avoid any actual harm.¹⁷⁸ Looking far afield from Eric Corley and DeCSS itself, the court's ruling was based on the existence of "far too many who . . . will bypass security measures."¹⁷⁹ The distinction pertinent to the Second Circuit's treatment of DeCSS is based rather on the imminence of the illegal action, which is another way of saying it is based on the effectiveness of the speech.¹⁸⁰ All of which suggests that the court goes awry in the inquiry regarding content because it is, in fact, applying an entirely different test.

IV. Conclusion

In the emerging area of software jurisprudence based on the First Amendment, although the idea of First Amendment protection for computer code sounds desirable, in practice it is turning out to be uncertain at best. The decisions in Bunner and Corley serve as evidence that the First Amendment will not prove a reliable protector of code and those who use it. These cases illustrate the deficiencies which already existed in First Amendment jurisprudence and then add to them. The outcome of an attempt to determine whether a restriction on expression is content based was already an uncertain one to predict, and thus destructive of expression, but now the First Amendment threatens freedom of expression in several new ways.

If the reasoning in *Bunner* and *Corley* is widely adopted, a restriction intended to protect property, no matter how directly it targets pure speech, will be rendered virtually immune to First Amendment challenge. In addition, restrictions on speech will be deemed content neutral as long as they target the functionality of speech, no matter how pretextual the targeting. Further, both cases encourage the ostensible use of intermediate scrutiny while engaging in something approaching rational basis scrutiny.

In the end, the Bunner and Corley decisions will have the effect of suppressing both the content and expressive capacity of code, while maintaining the myth that American law will not tolerate the suppression of the content of speech. The First Amendment is supposed to offer protection even to unpopular and dangerous speech, except in very rare circumstances, such as time of war or other national emergency, but the nature of the 'national emergency' which justifies the suppression of DeCSS is quite unclear. The readiness of courts to allow restrictions to be placed on software suggests that the private property interests of copyright and other intellectual property holders have been allowed, as a matter of law, to create a continuing national emergency which may be addressed by any meansincluding the suppression of expression.

It is also evident that the legal revolution which will be required in order to maintain this state of emergency will face the stiffest of challenges from the free software movement. DeCSS represents only the tip of an iceberg which has thus far escaped real notice by the law, but the movement is becoming so important that it will force itself to be recognized.A full investigation of the importance of this phenomenon lies well beyond the scope of this article; for the moment it must suffice to note that the character of open source software and the people who produce it will challenge the legal and economic assumptions at the heart of the area of law now known as intellectual property. Free software is not the product of pirates who steal from others and vend their wares in dark corners. Nor is it brought about by the incentives which, according to conventional thinking, are necessary conditions to creativity. The creation of free software, moreover, is an expressive activity which will make a tremendous impact on the law.

As time goes on, the free software programmers will require a revision of the now familiar role of equity in copyright and trade secret law. The high quality of the software they create, coupled with its truly democratic rights of access, will provide the most telling challenge to the notion that only monopolistic economic incentives can lead to creative excellence. Finally, as their favorite mode of expression works a revolution not only in the way we communicate but in our very conception of property, they will work fundamental changes in the way in which the law links expression and action. Unfortunately, it is not clear that the First Amendment will help them in their work. Indeed, the new software jurisprudence which is being developed by the courts threatens to do the opposite, with its unwarranted brand of First Amendment analysis deceptively offering the coverage of the First Amendment to software while declining to extend real protection. The courts are raising hopes by appealing to a deeply-held belief in the constitutional protection of free speech, and at the same time dashing those hopes by engaging in an analysis which will predictably uphold restrictions on speech.

ENDNOTES

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¹ See, e.g., Orin S. Kerr, Are We Overprotecting Code? Thoughts on First-Generation Internet Law, 57 WASH. & LEE L. REV. 1287 (2000); Mark A. Lemley, The Constitutionalization of Technology Law, 15 BERKELEY TECH. L.J. 529 (2000); Robert Post, Encryption Source Code and the First Amendment, 15 BERKELEY TECH. L.J. 713 (2000); Lee Tien, Publishing Software as a Speech Act, 15 BERKELEY TECH. L.J. 629 (2000).

² See, e.g., Junger v. Daley, 209 F.3d 481 (6th Cir. 2000); Bernstein v. U.S. Dep't of Justice, 192 F.3d 1308 (9th Cir. 1999).

³ See DVD Copy Control Ass'n v. Bunner, 75 P.3d I (Cal. 2003); Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001). The focus of this article is on the courts' reasoning considered internally, and not primarily on the question of their fidelity to precedent. Thus, it does not consider at length whether First Amendment doctrine is inherently unsuitable to the protection of software. For further analysis of some of the difficulties which software is likely to encounter in the First Amendment arena, see Tien, *supra* note 1, at text accompanying notes 306-311, and note 310.

4 75 P.3d I (Cal. 2003).

5 273 F.3d 429 (2d Cir. 2001).

⁶The important exception is the *Bunner co*urt's instruction to the appellate court to undertake constitutional fact review on remand, and the subsequent reversal of the injunction by the appellate court. See text accompanying notes 49-53, infra. It may be objected that it is inaccurate or unfair to criticize the *Bunner* court's First Amendment analysis, given the favorable result obtained by Bunner on remand under a constitutionally-mandated procedure. While the court is to be commended for commanding independent factual inquiry, it would be remiss to ignore the very important pronouncements made by the court in its First Amendment analysis, and the very undesirable results which would follow from future applications of its line of reasoning.

⁷ See definition and discussion of DeCSS, infra Part I.

⁸ Universal City Studios, Inc. v. Reimerdes, 111 F.Supp.2d 294, 311 (S.D.N.Y. 2000), *aff'd sub nom*. Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001).

⁹ "Linux is a free Unix-type operating system originally created by Linus Torvalds with the assistance of developers around the world. Developed under the GNU General Public License, the source code for Linux is freely available to everyone." Linux Online, What is Linux, at http:// www.linux.org/info/index/html (last visited Feb. 17, 2004). In the DeCSS setting, the most important point to make about the Linux-based operating systems is that, as is true of DeCSS, their source code is freely available. The source code effectively reveals the programming language which constitutes a program, and the possessor of the code is able to use the code to modify the program. This dedication to transparency underlies the conflict between the proponents of DeCSS and the promoters of CSS licensing. In addition, this movement, which is dedicated to free access to software code, is not appreciated by the courts. The failure of the law to understand the aims of the free software movement and its commitment to openness, while beyond the scope of this article, accounts in large measure for the outcome of the DeCSS cases.

¹⁰ See J.S. Kelly, *Meet the kid behind the DVD hack*, Jan. 31, 2000, *at* http://www.cnn.com/2000/TECH/computing/01/31/johansen.interview.idg (last visited Feb. 17, 2004).

¹¹One of the chief problems in *Bunner* and *Corley* was that the courts were unable to appreciate the character of DeCSS and the nature of the free software movement which spawned it. For an excellent account of the importance of the free software movement and the difficulties inherent in according copyright protection to software, see Eben Moglen, Anarchism Triumphant: Free Software and the Death of Copyright, available at http://emoglen.law.columbia.edu/ my_pubs/anarchism.html (last visited Feb. 24, 2004). Moglen argues that copyright actually creates an incentive to produce inferior software, and he cites impressive evidence that free software is superior to the proprietary variety. This belief alone aids greatly in understanding how the courts are unable to understand DeCSS as giving rise to anything other than online theft, given their adherence to the view that copyright "is the engine of free expression." See text accompanying notes 64-68, infra, for fuller treatment of the supposed relationship between copyright and the furtherance of free expression.

¹² As Johansen explained:

A. I had to go to the local prosecutor's office because of charges filed by the MPAA in Norway, and in February I received an award, a national student award which is awarded to students who are in high school and have achieved

excellent grades and also achieved something outside of school in culture, sports, art.

Q. Why did you receive that award?

A. I believe I received the prize because

of my part in the writing DeCSS."

Q. Did you get a prize?

A. Yes, I did.

Q. Did you get any money?

A. I received about \$2,000.

Q. What did you do with the money?

A. I used \$1200 and bought a high-end Sony DVD player for my TV.

Transcript of Trial – Day 4 at 627-28, Universal City Studios, Inc. v. Reimerdes, 111 F.Supp.2d 294 (S.D.N.Y. 2000) (No. 00 Civ. 277) available at http://www.eff.org/Legal/Cases/ MPAA_DVD_cases/20000720_ny_trial_transcript.html (last visited Feb. 18, 2004).

¹³ Reimerdes, 111 F.Supp.2d at 309-10.

¹⁴ The Preliminary Statement of the Defendants' Reply Brief in *Reimerdes* argues:

> CSS is irrelevant to commercial piracy. Instead, for example, it prevents consumers who have purchased DVDs ---that is, paid the requisite royalties and received authorization to play and view the movie on the DVD --- from, among other things: (1) playing a DVD on any DVD Player (hardware, i.e., home player, or software or computer-based player) that is not made by a manufacturer that has licensed CSS; (2) playing a DVD bought in any other of the seven (7) geographic regions into which the DVD consortium has broken the world other than the region in which she bought her DVD; and (3) skipping commercials at the start of a DVD if its maker decides you must view them. CSS also completely prohibits the possibility of making fair use of any material on a DVD.

Brief Submitted by Media Defendant 2600 Enterprises, Inc., *Reimerdes* (No.00 Civ.277), *available at* http://www.eff.org/ Legal/Cases/MPAA_DVD_cases/ 20000503_ny_def_linking_reply.html (last visited Feb. 18, 2004).

¹⁵ This was the Universal Disk Format (UDF) filesystem. The Linux kernel now supports UDF: "Finally, the new [Linux] kernel adds support for reading the UDF filesystem used by DVD diskettes and some CD-RW diskettes." Bill McCarty, *TheAge of 2.4:A Peek at What's New in the Latest Linux Kernel*, LINUX MAGAZINE, Jan. 2000, at 7, at http://www.linux-mag.com/ 2000-01/linux2-4_07.html (last visited Feb. 18, 2004).

¹⁶Transcript of Trial – Day 4 at 623, *Reimerdes*, (No. 00 Civ. 277), *available at* http://www.eff.org/Legal/Cases/ MPAA_DVD_cases/20000720_ny_trial_transcript.html (last visited Feb. 18, 2004).

17 Id. at 620.

¹⁸ "[T]he court has concluded that applying DeCSS to movies which have not been illegally produced or acquired, does not represent a violation of the penal code section 145 second paragraph." Sunde v. Johansen, Oslo First Instance Court, Jan. 7, 2003, No. 02-507 M/94 (Jon Bing trans.), *at* http:// www.eff.org/IP/Video/DeCSS_prosecutions/ Johansen_DeCSS_case/20030109_johansen_decision.html (last visited Feb. 18, 2004).

¹⁹ Robin Gross, "DVD-Jon" Defeats Hollywood: Consumer Rights Upheld in Norway, Dec. 22, 2003, at http://www.ipjustice.org/ media_releases/122203.html (last visited Feb. 18, 2004).

²⁰ The lower court's reasoning is summarized in the abstract of the translated opinion:

The court found first that access to movies legally purchased was not unlawful with respect to the penal code section 145 second paragraph even if the movies were viewed in a different way than presumed by the producer. Second, the court found that disclosure of encryption keys by itself did not constitute unauthorized access to data. The indicted could neither be convicted for contributory crime to the possible unauthorized access by others to DVD moves because the program also had a legal application.

Sunde v. Johansen, Oslo First Instance Court, Jan. 7, 2003, No. 02-507 M/94 (Jon Bing trans.), *at* http://www.eff.org/IP/Video/DeCSS_prosecutions/Johansen_DeCSS_case/20030109_johansen_decision.html (last visited Feb. 18, 2004).

²¹ "Defendant Eric Corley is viewed as a leader of the computer hacker community and goes by the name Emmanuel Goldstein, after the leader of the underground in George Orwell's classic, 1984." *Reimerdes*, 111 F. Supp.2d at 308.

²² Id. at 309.

²³ A distinction is frequently drawn between source code and object code, with source code considered as a preliminary and textual version of a program which can be read by humans, while object code is viewed as a subsequent representation of a program which can be read directly by machines. Object code consists of machine readable strings of 1s and 0s which can transmit information directly to a computer. See Universal City Studios, Inc. v. Corley, 273 F.3d 429, 438-49 (2001). Scientists are increasingly critical of the distinction, both because it minimizes the extent to which object code-which can be read by humans, albeit with greater difficulty than source code-is expressive, and because the distinction is based on a programming model which is becoming obsolete. For an expression of criticism of the distinction by a scientist who has himself felt the sting of the DMCA, see Edward Felten, Source Code and Object Code, Sept. 4, 2002, at http://www.freedom-to-tinker.com/archives/ 000035.html (last visited Mar. 4, 2004).

The New Software Jurisprudence and the Faltering First Amendment

²⁴ Reimerdes, 111 F. Supp.2d at 312.

²⁵ Id.

²⁶ The other two defendants entered into consent decrees with the plaintiffs, and the plaintiff studios amended the complaint to add 2600 Enterprises, Inc. as a defendant. *Id.* at 312 n.91.

 27 17 U.S.C. §§ 1201(a)(2), 1201(b)(1) (2003). The closely-related anti-circumvention provisions of the DMCA can be found at 17 U.S.C. § 1201(a)(1)(A) (2003).

²⁸ Universal City Studios, Inc. v. Corley, 273 F.3d 429, 441 (2d Cir. 2001).

²⁹ *Id.* at 456.

30 Id. at 443-44.

³¹ Id. at 449-55.

32 Id. at 444-46.

³³ "[W]e see no need on this appeal to determine whether a test as rigorous as Judge Kaplan's is required to respond to First Amendment objections to the linking provision of the injunction that he issued." *Id.* at 457.

³⁴ DVD Copy Control Ass'n v. Bunner, 75 P.3d 1, 7 (Cal. 2003).

³⁵ CAL. CIV. CODE § 3426.1 et seq (2003).

³⁶ Bunner, 75 P.3d at 8.

³⁷As the Bunner court noted:

The motion picture, computer, and consumer electronics industries decided to use the CSS technology to encrypt copyrighted content on DVD's and agreed that this content should not be subject to unauthorized (i) copying or (ii) transmission, including making the content available over the Internet. To this end, they began licensing the technology in October 1996. Under the terms of the licensing agreement, licensees had to maintain the confidentiality of proprietary information embodied in the CSS technology, including the "master keys" and algorithms. The agreement also contained other terms and conditions designed to ensure the confidentiality of this proprietary information.

Bunner, 75 P.3d at 7.

³⁸As the court explained:

Despite these efforts to safeguard the CSS technology, Jon Johansen, a

Norwegian resident, acquired the proprietary information embodied in the technology-including the master keys and algorithms----by reverse engineering software created by a licensee, Xing Technology Corporation (Xing). Xing's software is licensed to users under a license agreement, which specifically prohibits reverse engineering. Using the proprietary information culled from this software, Johansen wrote a program called DeCSS that decrypts movies stored on DVD's and enables users to copy and distribute these movies. According to DVD CCA, DeCSS 'embodies, uses, and/or is a substantial derivation of confidential proprietary information' found in the CSS technology. Id.

³⁹ See DVD Copy Control Association Complaint for Injunctive Relief for Misappropriation of Trade Secrets, Declaration 49, DVD Copy Control Ass'n, Inc. v. McLaughlin (Santa Clara Superior Court, Dec. 28, 1999), at http:// www.eff.org/IP/Video/DVDCCA_case/19991228complaint.html (last visited Feb. 18, 2004).

⁴⁰ According to the complaint, Bunner knew or should have known because, among other things, websites posting DeCSS contained information indicating knowledge that DeCSS had been procured via improper means. *See id.* Declarations 49-50.

41 Bunner, 75 P.3d at 8.

⁴² DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338, 344 (Cal. App. 2001).

⁴³ *Id.* at 350.

44 Id.

45 Id. at 351.

⁴⁶ Id.

⁴⁷ DVD Copy Control Ass'n v. Bunner, 75 P.3d 1, 7 (Cal. 2003). In an attempt to minimize the breadth of its holding, the California Supreme Court stressed the limited scope of its decision:"Our decision today is quite limited.We merely hold that the preliminary injunction does not violate the free speech clauses of the United States and California Constitutions, assuming the trial court properly issued the injunction under California's trade secret law." Id. at 19. In this regard the court noted that Bunner had challenged only the injunction and not the California UTSA itself:"Bunner does not challenge the constitutionality of California's trade secret statutes." Id. at 11 n.6. While the court might thus have sought to immunize itself against the charge that it did not scrutinize the statute adequately, the opening sentence of the opinion signals the court's desire to grapple with the large constitutional issue, a desire not consistent with assertions about the limited nature of the decision: "Today

we resolve an apparent conflict between California's trade secret law (Civ.Code, § 3426 et seq.) and the free speech clauses of the United States and California Constitutions." *Id.* at 6.

Further, it is important to note the court's declaration that owing to the "unusual procedural posture of this case, we follow the lead of the Court of Appeal and assume as true the trial court findings in support of the preliminary injunction." Id. at 9. This language is puzzling in light of the court's holding that the trial court's findings were subject to constitutional fact review, i.e., independent appellate review, id. at 20, and that on remand the appellate court would be required to review the trial court's factual findings de novo.As Justice Moreno noted in concurrence, under the doctrine of constitutional fact review the Supreme Court could have, and thus should have, resolved the factual issues against the DVD CCA:"Undertaking independent review. I conclude, as a matter of law, that there is no likelihood that the DVD CCA would prevail on the merits. There is therefore no need to remand to the Court of Appeal for further proceedings. The unnecessary delay in resolving this litigation can only further burden speech protected by the First Amendment." Id. at 26. The "limited" character of the court's holding, and the fact that it was issued only in connection with a preliminary injunction, should not obscure the fact that the court avoided the statutory issue in order to reach the constitutional issue, in the process fashioning an unfortunate prescription for deciding whether a restriction on expression violates the First Amendment. In addition, while the court properly instructed the appellate court to engage in constitutional fact review, that does not excuse the court's failure to vindicate Bunner's First Amendment rights directly and expeditiously.

48 Id. at 17 n.8.

⁴⁹ Subsequent opinion following remand, DVD Copy Control Ass'n Inc. v. Bunner, 2004 WL 362414 (Cal.App., 6th Dist.2004) (Feb. 27, 2004), *available at* http://www.eff.org/IP/ Video/DVDCCA_case (last visited Feb. 29, 2004). DVD CCA had moved to dismiss the case without prejudice. Bunner opposed the motion and the court ruled in his favor. *Id.* at 2 n.2.

50 Id. at 15.

⁵¹ Id. at 16.

⁵² Id. at 14.

⁵³ *Id.* at 9.

⁵⁴ "Fearful that the ease with which pirates could copy and distribute a copyrightable work in digital form was overwhelming the capacity of conventional copyright enforcement to find and enjoin unlawfully copied material, Congress sought to combat copyright piracy in its earlier stages, before the work was even copied." Universal City Studios, Inc. v. Corley, 273 F.3d 429, 435 (2d Cir. 2001).

⁵⁵ *Id.* at 442-43. See also Universal v. Reimerdes, 111 F.Supp.2d 294, 345 (S.D.N.Y. 2000).

⁵⁶ Bunner, 75 P.3d at 10.

⁵⁷ Id. at 14.

⁵⁸ In Corley this denial took the form of discrediting the defendants' contention that the primary purpose of DeCSS was to allow DVDs to be played on multiple platforms, Linuxbased platforms among them. Universal City Studios, Inc. v. Corley, 273 F.3d 429, 444 n. 15 (2d Cir. 2001). Thus the court rejected the claim that because DeCSS permitted rightful owners of DVDs to play them on computers, defendants were justified in their decryption under Sec. 1201 (a)(3)(A) as having the permission of the copyright holder to decrypt. Even if they had that authority, according to the court, "[t]hey would still be vulnerable to liability under subsection 1201(a)(2)(C), because they 'marketed' DeCSS for the copyring of DVDs, not just for the playing of DVDs on multiple platforms." *Id.*

59 248 U.S. 215, 239-40 (1918).

⁶⁰ Harper & Row, Publishers, Inc. v. Nation Enter., 471 U.S. 539 (1985).

61 Id. at 542.

⁶² Id.

63 Id. at 543-44.

64 Id. at 558.

⁶⁵ Id. (emphasis added).

⁶⁶ "We agree with the Court of Appeals that copyright is intended to increase and not to impede the harvest of knowledge. But we believe the Second Circuit gave insufficient deference to the scheme established by the Copyright Act for fostering the original works that provide the seed and substance of this harvest." *Id.* at 546. "The rights conferred by copyright are designed to assure contributors to the store of knowledge a fair return for their labors." *Id.* at 545-46.

⁶⁷ "Working directly from the purloined manuscript, an editor of The Nation produced a short piece entitled 'The Ford Memoirs — Behind the Nixon Pardon.' The piece was timed to 'scoop' an article scheduled shortly to appear in Time Magazine." *Id.* at 542. "The trial court found that The Nation knowingly exploited a purloined manuscript." *Id.* at 562.

⁶⁸ This view is expressed more fully in David Ladd, *The Harm* of the Concept of Harm in Copyright Law, 30 J. COPYRIGHT SOC'Y U.S.A. 421 (1983).

⁶⁹ The plaintiffs are not formally excused from the requirement that the plaintiff must come to a court of equity "with clean hands," but in Corley, Bunner, and a considerable number of other cases, there is an inordinate concern with whether the *defendants* have clean hands. No comparable attention is paid to the plaintiffs' hygiene.

The New Software Jurisprudence and the Faltering First Amendment

⁷⁰ DVD Copy Control Ass'n v. Bunner, 75 P.3d 1, 14 (Cal. 2003).

⁷¹ Id. (quoting San Francisco Arts & Athletics, Inc. v. United States Olympic Comm. 483 U.S. 522, 541 (1987)) (quoting International News Serv. v. Associated Press 248 U.S. 215, 239-40 (1918)).

⁷² See Mark A. Lemley & Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property Cases, 48 DUKE L.J. 147 (1998).

73 Bunner, 75 P.3d at 26-28 (Moreno, J., concurring).

⁷⁴ *Id.* at 27.

⁷⁵ Id. at 27-28.

76 Id.

⁷⁷ Justice Moreno allowed that information posted on the internet might retain its trade secret status, but the plaintiff would carry the burden to show that the posting had not permanently committed the information to the public domain, and in this case "nothing in the record indicates that the DVD CCA met that burden." *Id.* at 28.

⁷⁸ Id. at 9.

⁷⁹ Universal City Studios, Inc. v. Corley, 273 F.3d 429, 443-44 (2d Cir. 2001).

⁸⁰ This defense was based on 17 U.S.C. § 1201(c)(1).

⁸¹ 17 U.S.C. § 1201(c)(4) (2003).

⁸² § 1201(a)(3)(A).

83 Corley, 273 F.3d at 443-44.

⁸⁴ Strict scrutiny requires the government to establish that it has a compelling interest in the restriction and that it has adopted means narrowly tailored to meet that object. Intermediate scrutiny requires that the government's interest be substantial and that the restriction not burden substantially more speech than necessary. Intermediate scrutiny is much milder and much less demanding of the government than is strict scrutiny:"Content-based restrictions are permissible only if they serve compelling state interests and do so by the least restrictive means available. See Sable Communications of California, Inc. v. FCC, 492 U.S. 115, 126, 109 S.Ct. 2829, 106 L.Ed.2d 93 (1989).A content-neutral restriction is permissible if it serves a substantial governmental interest, the interest is unrelated to the suppression of free expression, and the regulation is narrowly tailored, which 'in this context requires ... that the means chosen do not "burden substantially more speech than is necessary to further the government's legitimate interests." Turner Broadcasting Sys., Inc. v. FCC, 512 U.S. 622, 662, 114 S.Ct. 2445, 129 L.Ed.2d 497 (1994) (quoting Ward v. Rock Against Racism, 491 U.S. 781, 799, 109 S.Ct. 2746, 105 L.Ed.2d 661 (1989))." Corley, 273 F.3d at 450. Rational basis scrutiny requires only that the government interest be

legitimate and that the means be rationally related to the end. This is the easiest test for the government to pass. Chief Justice Rehnquist explained the function of rational basis scrutiny in assessing an alleged violation of equal protection in *Board ofTrs. of Univ. of Alabama v. Garrett*, 531 U.S. 356, 367 (2001): "Moreover, the State need not articulate its reasoning at the moment a particular decision is made. Rather, the burden is upon the challenging party to negative 'any reasonably conceivable state of facts that could provide a rational basis for the classification.'" (quoting Heller v. Doe, 509 U.S. 312, 320 (1993)).

⁸⁵ The injunction issued under the California UTSA was at issue in *Bunner*, and the DMCA in *Corley*.

⁸⁶ It is beyond the scope of this article to consider more fully the choices made by the courts in selecting the First Amendment tests they apply and the manner in which they applied their tests.

⁸⁷ DVD Copy Control Ass'n v. Bunner, 75 P.3d 1, 12 (Cal. 2003) (emphasis added).

⁸⁸ Leslie Jacobs makes a similar point with regard to Supreme Court decisions: "The Court confuses the contentbased/content neutral and the content/viewpoint inquiries both when stating and applying them. The Court frequently describes the content-based/content neutral inquiry as hinging on the presence of viewpoint discrimination. The Court's often repeated test for content neutrality is 'whether the government has adopted a regulation of speech because of disagreement with the message it conveys.' The Court frequently acknowledges, however, that the content-based category extends to subject matter distinctions." Leslie Gielow Jacobs, *Clarifying the Content-based/Content-neutral and Content/viewpoint Determinations*, 34 McGEORGE L. REV. 595, 602-03 (2003).

⁸⁹ "This Court has held that the First Amendment's hostility to content-based regulation extends not only to a restriction on a particular viewpoint, but also to a prohibition of public discussion of an entire topic. Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N.Y., 447 U.S. 530, 537 (1980); *accord* Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd., 502 U.S. 105, 116 (1991) (statute restricting speech about crime is content based)." Burson v. Freeman, 504 U.S. 191, 197 (1992) (plurality opinion).

90 Burson, 504 U.S. at 197.

91 Id.

⁹² Ward v. Rock Against Racism, 491 U.S. 781, 791 (1994) (internal citation omitted).

⁹³ In the following explanation of how to determine whether a measure is content based, note the misleading use of the phrase "content neutrality": "Our principal inquiry in determining *content neutrality* is whether the government has adopted a regulation of speech 'without reference to the content of the regulated speech." Madsen v. Women's Health Ctr., 512 U.S. 753, 763 (1994) (quoting *Ward*, 491 U.S. at 791) (emphasis added). Compare the proper question to

ask in determining whether a measure is viewpoint-based, with the misleading use of the phrase "content based": "The principal inquiry in determining content neutrality, in speech cases generally and in time, place, or manner cases in particular, is whether the government has adopted a regulation of speech because of disagreement with the message it conveys. The government's purpose is the controlling consideration." Ward, 491 U.S. at 791 (emphasis added).

⁹⁴ Universal City Studios, Inc. v. Reimerdes, 111 F.Supp.2d 294, 330 (S.D.N.Y. 2000) (emphasis added). "The reason that Congress enacted the anti-trafficking provision of the DMCA had nothing to do with suppressing particular ideas of computer programmers and everything to do with functionality—with preventing people from circumventing technological access control measures—just as laws prohibiting the possession of burglar tools have nothing to do with preventing people from expressing themselves by accumulating what to them may be attractive assortments of implements and everything to do with preventing burglaries. Rather, it is focused squarely upon the effect of the distribution of the functional capability that the code provides." *Id* at 329.

⁹⁵ See Eugene Volokh, Freedom of Speech and Intellectual Property: Some Thoughts after Eldred, 44 Liquormart, and Bartnicki, 40 HOUSTON L. REV. 697, 702-10 (2003) (arguing that "while intellectual property speech restrictions are generally viewpoint-neutral, they define the behavior they prohibit based on its content").

⁹⁶ DVD Copy Control Ass'n v. Bunner, 75 P.3d 1, 11 (quoting Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 643 (1994)).

⁹⁷ See *supra* note 84.

⁹⁸ "Trade secret law promotes the sharing of knowledge, and the efficient operation of industry; it permits the individual inventor to reap the rewards of his labor by contracting with a company large enough to develop and exploit it." *Bunner*, 75 P.3d at 12 (quoting Kewanee Oil Co. v. Bicron Corp. 416 U.S. 470, 493 (1974).

99 Id. at 13.

¹⁰⁰ Harper & Row Publishers, Inc. v. Nation Enter., 471 U.S. 539, 558 (1985).

¹⁰¹ Bunner, 75 P.3d at 12.

¹⁰² Id. (quoting Los Angeles Alliance for Survival v. City of Los Angeles, 993 P.2d 334, 377-78 (2000)) (emphasis added). Bunner quotes a disturbing statement from Los Angeles Alliance on "content neutrality":"[L]iteral or absolute content neutrality" is not necessary." Bunner, 75 P.3d at 10 (quoting Los Angeles Alliance for Survival v. City of Los Angeles, 993 P.2d 334, 368 (2000)). By this the court seems to mean that a statute which took facial aim at the content of expression might not be content based.

¹⁰³ See generally Bunner, 75 P.3d 1 (Cal. 2003).

¹⁰⁴ *Id.* at 12 ("The fact that the preliminary injunction identifies the prohibited speech by its content does not make it content based").

105 Id.

¹⁰⁶ Id. at 11.

¹⁰⁷ Id. at 12 (quoting San Francisco Arts & Athletics, Inc. v. United States Olympic Comm., 483 U.S. 522, 536 (1987)).

¹⁰⁸ A final element of the Bunner court's reasoning which is puzzling is the claim that the injunction is not content based because it aims to enforce the trial court's judgments in the course of a protracted dispute. In this respect, the court appears to be saying that once a court issues an order it may subsequently have to enforce the order injunctively against a recalcitrant party. That appears to be the reason that the court quotes Madsen v. Women's Health Center, Inc., to the effect that even though an injunction "regulates the activities, and perhaps the speech," of a particular group, it does so "because of the group's past actions in the context of a specific dispute between real parties." Bunner, 75 P.3d at 12 (quoting Madsen v.Women's Health Centers, Inc., 512 U.S. 753, 762 (1994)). Of course, in Bunner there was no prior history of disagreement between the parties themselves: the posting by Bunner and others of DeCSS was the only violation alleged by the DVD CCA and this was the first time they had brought Bunner to court. In this respect, the court's suggestion that the parties had a history of litigation, when they did not, only confirms its own awareness of the public importance of the issue posed by the availability of DeCSS. It may also be that the court's view that the purveyors of DeCSS were attempting to steal what did not belong to them led it to view the case as a continuation of the Napster controversy, and thus an ongoing dispute previously submitted for judicial resolution.

¹⁰⁹ Bunner, 75 P.3d. at 13 (quoting Madsen, 512 U.S. at 765) ("Under the Madsen test, 'when evaluating a content-neutral injunction ... [w]e must ask ... whether the challenged provisions of the injunction burden no more speech than necessary to serve a significant governmental interest."")

¹¹⁰ The court tacitly adopted the intermediate level of scrutiny by noting that it was adopting a lesser standard than strict scrutiny. *Bunner*, 75 P.3d at 13 (noting that in *Bartnicki v. Vopper*, 532 U.S. 514, 536 (2001), five Justices—two in concurrence and three in dissent—"endorsed the application of a lesser standard" than strict scrutiny "even though the statute arguably prohibited 'pure speech'").

¹¹¹ *Id.* (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 493 (1974)).

¹¹² Id. (quoting Rodney A. Smolla, Information as Contraband: The First Amendment and Liability for Trafficking in Speech, 96 Nw. U. L. REV. 1099, 1164 (2002)).

113 Id. at 14.

114 Id.

The New Software Jurisprudence and the Faltering First Amendment

¹¹⁵ Id.

¹¹⁶ Just how onerous the burden is under intermediate scrutiny, and what the government must do in order to carry its burden, is itself a controversial subject. As Justice Kennedy noted, however, the burden remains with the government and it is a serious burden. *See* Turner Broad. Sys., Inc. v. F.C.C., 512 U.S. 622, 664-67 (1994) (plurality opinion).

¹¹⁷ California Attorney General William Lockyer made an oral argument in which he denounced defendant's behavior in essence as piracy: "Calling Bunner a 'hacker,' Lockyer told the high court Thursday that DeCSS is nothing more than 'a burglary tool' used by Bunner and others for 'breaking, entering and stealing." *See* Mike McKee, *California High Court Hears Clash of Speech, Trade Secrets Law*, Law.com, May 30, 2003, *at* http://www.law.com/jsp/ article.jsp?id=1052440811375 (last visited Feb. 25, 2004).

¹¹⁸ "A total of two questions were lobbed his way during his 10 minutes of oral arguments in San Francisco, and both were softballs." *Id.* (last visited Feb. 25, 2004).

¹¹⁹ As noted *supra* note 47, the court sought unpersuasively to minimize the breadth of its decision by noting that Bunner had challenged only the injunction and not the California UTSA itself. *Bunner*, 75 P.3d at 11 n.6. In its opening sentence the opinion notes the relevance of the broader issue to the case: "Today we resolve an apparent conflict between California's trade secret law (Civ.Code, § 3426 et seq.) and the free speech clauses of the United States and California Constitutions." *Id.* at 6.

¹²⁰ "[P]rohibiting the disclosure of trade secrets acquired by improper means is the only way to preserve the property interest created by trade secret law and its concomitant ability to encourage invention." *Id.* at 17.

¹²¹ "Communication does not lose constitutional protection as 'speech' simply because it is expressed in the language of computer code. Mathematical formulae and musical scores are written in 'code,' i.e., symbolic notations not comprehensible to the uninitiated, and yet both are covered by the First Amendment." *Corley*, 273 F.3d at 445-46. "If someone chose to write a novel entirely in computer object code by using strings of I's and 0's for each letter of each word, the resulting work would be no different for constitutional purposes than if it had been written in English." *Id*.

122 Id. at 454 (emphasis added).

¹²³ Formally, of course, the case was brought only under the anti-trafficking provisions of the DMCA, and any reference to a challenge to the DMCA should be read most precisely as a challenge to the anti-trafficking provisions. Even given the attenuated scrutiny which the court accorded to the statute, of course, the anti-trafficking provisions had to be assessed in conjunction with the anti-circumvention provisions and in light of the court's assessment of the purpose of the DMCA in general.

124 Id. at 435. The Corley opinion leaves some room to think that the Second Circuit might not uphold all future challenges to the constitutionality of copyright and related restrictions. It provides at least formal recognition that on Corley's side is a "hacker community" which includes serious scholars at one end and thieves on the other, a recognition which may in the future introduce an element of difficulty to the business of determining whether the defendant resides on the right or the wrong end of the spectrum. At the same time, the opinion subsequently establishes that Corley resides toward the thieves' end of the spectrum, as it explains the nature of the writings which appeared on Corley's online magazine, 2600: "Representative articles explain how to steal an Internet domain name and how to break into the computer systems at Federal Express." Id. at 439.

¹²⁵ *Id.* at 445 (citing Name.Space, Inc. v. Network Solutions, Inc., 202 F.3d 573, 584 n.11 (2d. Cir. 2000)).

 126 *Id.* at 449-50. Before the constitutional analysis the court considered and rejected the arguments that the DMCA should be construed narrowly so as to avoid the constitutional issues. *Id.* at 443-45.

¹²⁷ Id. at 454.

¹²⁸ Id. at 450.

¹²⁹ "Content-based restrictions are permissible only if they serve compelling state interests and do so by the least restrictive means available....A content-neutral restriction is permissible only if it serves a substantial government interest, the interest is unrelated to the suppression of free expression, and the regulation is narrowly tailored...." *Id.* at 450 (citations omitted).

¹³⁰ *Id.* at 451 (quoting Hill v. Colorado, 530 U.S. 703, 720 (2000)).

¹³¹ *Id.* at 450 (quoting Ward v. Rock Against Racism, 491 U.S. 781, 791 (1989)).

132 Id. at 450-52.

133 Id. at 451-52.

¹³⁴ 17 U.S.C. § 1201(a)(1) (2003).

135 17 U.S.C. § 1201(a)(2) (2003).

¹³⁶ In the words of the *Corley* court:

Computer programs are not exempted from the category of First Amendment speech simply because their instructions require use of a computer. A recipe is no less 'speech' because it calls for the use of an oven, and a musical score is no less 'speech' because it specifies performance on an electric guitar. Arguably distinguishing computer programs from conventional language instructions is the

fact that programs are executable on a computer. But the fact that a program has the capacity to direct the functioning of a computer does not mean that it lacks the additional capacity to convey information, and it is the conveying of information that renders instructions 'speech' for purposes of the First Amendment. The information conveyed by most 'instructions' is how to perform a task.

Corley, 273 F.3d at 447-48 (internal citations omitted).

137 Id. at 451.

138 Id.

139 Id.

¹⁴⁰ Id. (quoting Red Lion Broad. Co. v. FCC, 395 U.S. 367, 386 (1969)). The opinion does not quote Red Lion for any point regarding functionality, but for the proposition that "[D]ifferences in the characteristics of new media justify differences in the First Amendment standards applied to them."

141 Id. at 454.

142 Id. at 451.

143 Id.

144 Id. at 454.

¹⁴⁵ Id. at 454 (citing Turner Broadcasting, 512 U.S. at 662).

¹⁴⁶ See General Docket for Second Circuit Court of Appeals at 7, Universal City Studios, Inc. v. Corley, F.3d 429 (2d Cir. 2001) (No. 00-9185) (New party added: Daniel S.Alter Esq., representing The United States of America (Intervener)), *available at* http://cryptome.org/mpaa-v-2600-ca2.txt (last visited Feb. 21, 2004).

¹⁴⁷ Corley, 273 F.3d at 454 (emphasis added).

¹⁴⁸ The District Court opinion likewise treats the importance of the government's interest as "evident": "The substantiality of that interest is evident both from the fact that the Constitution specifically empowers Congress to provide for copyright protection... and from the significance to our economy of trade in copyrighted materials.... Indeed, the Supreme Court has made clear that copyright protection itself is 'the engine of free expression." Universal City Studios, Inc. v. Reimerdes, III F. Supp. 2d 294, 330 (S.D.N.Y. 2000).

149 391 U.S. 367 (1968).

150 512 U.S. 622 (1994).

¹⁵¹ "Thus, in applying *O'Brien* scrutiny we must ask first whether the Government has adequately shown that the economic health of local broadcasting is in genuine jeopardy and in need of the protections afforded by must-carry." *Id.* at 664-65 (plurality opinion).

¹⁵² Id. at 665 (quoting Ward v. Rock against Racism, 491 U.S. 781, 799 (1989)).

¹⁵³ The *Corley* opinion notes that the Supreme Court has expressed the tailoring requirement under this test in various ways. *Corley*, 273 F.3d at 450 n.25.

¹⁵⁴ Id. at 454 (emphasis added) (internal citations omitted).

¹⁵⁵ Id.

¹⁵⁶ Id. (emphasis added).

¹⁵⁷ As the defense brief requesting *en banc* review explained: The panel stated 'the appellants have

not suggested, much less shown, any technique for barring them from making this instantaneous worldwide distribution of a decryption code that makes a lesser restriction on the code's speech component.' Slip op. 7522. But to the contrary, the Panel did receive substantial argument and evidence describing an array of means for preventing digital copyright infringement without the blunderbuss of banning decryption programs altogether. See Opening Brief at 57-60. At oral argument the panel requested and then later accepted even more information from Appellants about the alternatives that were available to Congress to prevent digital copyright infringement. See Supplemental Brief at15-17; Order of May 30, 2001 allowing exhibits in support of supplemental letter brief.

Those less restrictive means included the following:

I. Create explicit and enforceable exceptions for circumvention and circumvention tools for fair and noninfringing uses. Opening Brief at 57-58.

2. Restrict circumvention liability to those who intentionally aid and abet copyright infringement or who conspire to infringe copyrights, following the path taken by "burglars' tools" statutes. Reply at 17-19; ACLU amicus brief at 19-22; Supplemental brief at 16.

3. Limit liability to circumvention for illegal purposes, as outlined in the Boucher and Ashcroft bills, rather than extend liability to tools makers and tools disseminators. H.R. 3048, 105th Cong. § 8 (1997) (Boucher); S. 1146, 105th Cong. tit. III (1997) (Ashcroft). Opening brief at 58, footnote 42; Supplemental Brief at 16.

4. Protect fair and non-infringing uses the same way it protected ephemeral

recordings in the DMCA. 17 U.S.C. §112(a)(2). There, Congress expressly required copyright owners to "make available to the transmitting organization the necessary means" for making ephemeral copies and authorized selfhelp if such means are not made "timely" available. Id. Congress could have done the same for fair use: required that copyright owners using technological protection measures make copies of their works available for fair or non-infringing uses, allowing circumvention and the dissemination of the circumvention means should they fail to do so. Supplemental brief at 16.

5. Follow the model of the Vessel Hull Design Protection Act, 17 U.S.C. §1309, passed as part of the legislative package that contained § 1201. Under that statute, a disseminator of information is liable only if he or she "induced or acted in collusion with" one who actually gains unauthorized access to a work. Opening brief at 58, footnote 42; Supplemental Brief at 16.

Appellants' Brief at 7, Universal City Studios, Inc. v. Corley, available at http://www.eff.org/IP/Video/MPAA_DVD_cases/ 20020114_ny_2600_appeal.html (last visited Feb. 21, 2004).

¹⁵⁸ There is much more on the purpose and function of DeCSS in the Declarations attached to the Brief Submitted by Media Defendant 2600 Enterprises, Inc., *Reimerdes* (No. 00 Civ. 277), *available at* http://www.eff.org/Legal/Cases/ MPAA_DVD_cases/20000503_ny_def_linking_reply.html (last visited Feb. 21, 2004).

¹⁵⁹ Corley, 273 F.3d at 450-52.

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¹⁶⁰ See Declaration of Robin Gross in Opposition to Plaintiffs' Motion to Modify the Preliminary Injunction and in Support of Defendants' Cross-Motion to Vacate the Preliminary Injunction, Brief Submitted by Media Defendant 2600 Enterprises, Inc., *Reimerdes* (No. 00 Civ. 277), *available at* http://www.eff.org/Legal/Cases/MPAA_DVD_cases/ 20000503_ny_def_linking_reply.html (last visited Feb. 21, 2004)

¹⁶¹ See Declaration of Michael I. Shamos, Reimerdes (No. 00 Civ. 277), available at www.2600.com/dvd/docs/2000/0630shamos.html (last visited Feb. 21, 2004); Transcript of Trial— Day I at 51, Reimerdes (No. 00 Civ. 277), available at http:// www.eff.org/IP/Video/MPAA_DVD_cases/ 20000717_ny_trial_transcript.html (last visited Feb. 21, 2004).

That instance involved an experiment in which Michael Shamos, a professor of computer science at Carnegie Mellon and a lawyer by training, used DeCSS in order to engineer a swap of DVDs with an anonymous individual over the Internet. With the aid of an assistant who also had expertise in computing, Shamos managed to swap DVDs after spending a total of twenty hours on the project. He estimated that the second time would take only ten hours, a far cry from the instantaneous results which, as the court supposed, could be accomplished by the mere click of a mouse.

¹⁶² 464 U.S. 417 (1984).

¹⁶³ "Defendants claim also that the possibility that DeCSS might be used for the purpose of gaining access to copyrighted works in order to make fair use of those works saves them under *Sony Corp. v. Universal City Studios, Inc.* But they are mistaken. Sony does not apply to the activities with which defendants here are charged. Even if it did, it would not govern here." Universal City Studios, Inc. v. Reimerdes, 111 F.Supp.2d 294, 323 (S.D.N.Y. 2000). "*Sony* involved a construction of the Copyright Act that has been overruled by the later enactment of the DMCA to the extent of any inconsistency between *Sony* and the new statute." *Id.* (footnote signal omitted). "Congress explicitly noted that Section 1201 does not incorporate *Sony.*" *Id.* at 324.

¹⁶⁴ "The allowance of a First Amendment overbreadth challenge to a statute is an exception to the traditional rule that 'a person to whom a statute may constitutionally be applied may not challenge that statute on the ground that it may conceivably be applied unconstitutionally to others in situations not before the Court." New York v. Ferber, 458 U.S. 747, 767 (1982). See also Virginia v. Hicks, 539 U.S. 113 (2003); Board of Tr. of State Univ. of New York v. Fox, 492 U.S. 469, 484 (1989).

¹⁶⁵ Corley, 273 F.3d at 457-58. The court goes on to claim that this dilemma presents a question of public policy appropriate for Congressional resolution.

166 United States v. O'Brien, 391 U.S. 367 (1968).

167 Id. at 369.

168 Id. at 370.

169 Id. at 376-77.

170 Id. at 377-78.

¹⁷¹ "The characterization of functionality as a proxy for the consequences of use is accurate." *Corley*, 273 F.3d at 451.

172 Id.

173 Id. at 452.

¹⁷⁴ 395 U.S. 444 (1969). See Geoffrey R. Stone, Content-Neutral Restrictions, 54 U. CHI. L. REV. 46, 47, 47 n.4 (1987)(citing Brandenburg as reviewing a content based restriction on speech).

¹⁷⁵ Brandenburg v. Ohio, 395 U.S. at 447.

¹⁷⁶ Corley, 273 F.3d at 452.

¹⁷⁷ Id. at 451 (denying "that code is no different, for First Amendment purposes, than blueprints that instruct an engineer or recipes that instruct a cook.... Unlike a blueprint

or a recipe, which cannot yield any functional result without human comprehension of its content, human decision-making, and human action, computer code can instantly cause a computer to accomplish tasks and instantly render the results of those tasks available throughout the world via the Internet").

Thus the court explained that its holding does not depart from Commodity Futures Trading Comm'n v.Vartuli, 228 F.3d 94, 111 (2d Cir. 2000), in which the Second Circuit held that a computer program named "Recurrence," a program designed to advise the user on buying and selling currency futures contracts, was not protected by the First Amendment. Recurrence issued its advice in words but was not protected because those words were actually "commands," in accord with the way the product was marketed:"Essential to our ruling in Vartuli was the manner in which the defendants marketed the software and intended that it be used: the defendants told users of the software to follow the software's cues 'with no second-guessing,' and intended that users follow Recurrence's commands 'mechanically' and 'without the intercession of the mind or the will of the recipient[.]" Corley, 273 F.3d at 449.

178 Id.

¹⁷⁹ Id. (quoting Universal City Studios, Inc. v. Reimerdes, 111 F.Supp. 2d 294, 331-32 (S.D.N.Y. 2000)).

¹⁸⁰ "As we said in *Noto v. United States*, 367 U.S. 290, 297-98 (1961), 'the mere abstract teaching ... of the moral propriety or even moral necessity for a resort to force and violence, is not the same as preparing a group for violent action and steeling it to such action.'" Brandenburg v. Ohio, 395 U.S. 444, 447-48 (1969).