"Yelling Fire" and Hacking: Why the First Amendment Does Not Permit Distributing DVD Decryption Technology?

Bonnie L. Schriefer
"YELLING FIRE" AND HACKING: WHY THE FIRST AMENDMENT DOES NOT PERMIT DISTRIBUTING DVD DECRYPTION TECHNOLOGY

Bonnie L. Schriefer*

INTRODUCTION

In September 1999, hackers who met over the Internet reverse engineered a DVD player and discovered the computer program that "unscrambles" copy-protected DVDs.¹ Once unscrambled, hackers can easily copy DVDs and distribute them over the Internet.² One of the hackers, a fifteen-year-old Norwegian named Jon Johansen,³

* J.D. Candidate, 2004, Fordham University School of Law. The author would like to thank her mother for her encouragement, support and friendship.


2. See Nat'l Research Council, supra note 1, at 41 ("[R]eplicating digital products and shipping them via digital networks is cheap, rapid, and easy..."); see also Evangelista, supra note 1 (describing the Motion Picture Association of America's fear that DeCSS "open[ed] the door to widespread digital piracy of movies" and noting that while at the time there were barriers to copying DVDs, "those barriers could fall over time"); Harmon, supra note 1 (observing that digital technology has made copying "far easier and less expensive than ever before" and that offers to trade DVD movies "that have apparently been decoded with DeCSS or other programs" have begun appearing in Internet chat rooms). But see Lessig, supra note 1, at 189 (arguing that "DeCSS didn't make it any easier to copy DVDs than before... [or] increase the likelihood of piracy").

3. Johansen was indicted in January 2002 by Norwegian authorities for his role in
posted the program on his web site. In a short time, the unscrambling program (or code), known as DeCSS, was available on many Internet sites.

Among those who posted the DeCSS code on their web sites were Andrew Bunner and Eric Corley, both of whom were sued for doing so. The DVD Copy Control Association ("DVDCCA"), which regulates the use of the copy protection program applied to DVDs, sued Bunner, and the major Hollywood movie studios brought an action against Corley. The basic question in both cases concerned the legality of posting DeCSS in order to maintain the integrity of its copy protection code. The movie studios, conversely, were not as concerned with the code itself as they were with the danger of DeCSS being used to distribute movies illegally on a Napster-like scale.

The courts in both cases found that DeCSS was a form of speech, creating DeCSS. See Amy Harmon, Technology Briefing Internet: Norway Indicts Teenage Programmer, N.Y. Times, Jan. 11, 2002, at C2. A year later, Johansen was acquitted. The Oslo City Court held that Johansen had the right to view legally obtained DVDs in whatever way he wanted. See Timothy L. O’Brien, Norwegian Hacker, 19. Is Acquitted in DVD Piracy Case, N.Y. Times, Jan. 8, 2003, at C4; see also Adams, supra note 1 (noting that Johansen helped write DeCSS); Harmon, supra note 1.

4. See Harmon, supra note 1; see also O’Brien, supra note 3.

5. See Reimerdes, 111 F. Supp. 2d. at 311; see also Benny Evangelista, Court’s DVD Ruling Hailed as Free-Speech Victory; Decision Backs Programmer’s Right to Post Code on the Web, San Francisco Chron., Nov. 2, 2001, at B3; Evangelista, supra note 1 (mentioning that DeCSS was “picked up by thousands of Web sites worldwide”); Harmon, supra note 1 (noting that “[t]o no one’s surprise, the source code for DeCSS had been widely disseminated across the Internet”); Dave Wilson, Code Distribution Ruled Free Speech, L.A. Times, Nov. 3, 2001, at Pt. 3, 1.

6. See DVD Copy Control Ass’n v. Bunner, 113 Cal. Rptr. 2d 338, 341 (Ct. App. 2001), review granted, 41 P.3d 2 (Cal. 2002) (noting that DeCSS was offered on defendant’s web site “soon after” its appearance on Johansen’s web site in October 1999).

7. See Reimerdes, 111 F. Supp. 2d at 303, 312 (noting that defendant “quickly posted DeCSS” in November 1999).

8. Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001); Bunner, 113 Cal. Rptr. 2d at 341.


10. Bunner, 113 Cal. Rptr. 2d at 341.

11. Corley, 273 F.3d 429. The studios that brought suit against Corley were Universal, Paramount, MGM, Tristar, Columbia, Time Warner, Disney and Fox. Id.


13. Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 314 (S.D.N.Y. 2000), aff’d sub nom., Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001). In Reimerdes, the court described plaintiffs’ “principal” concern as the “transmission of pirated copies [of movies] over the Internet,” id., and stated that the “plaintiffs already have been gravely injured. As the pressure for and competition to supply more and more users with faster and faster network connections grows, the injury will multiply.” Id. at 315; see also Evangelista, supra note 1.
and so required the court to apply a First Amendment analysis.\(^\text{14}\) In the case against Corley, the Second Circuit applied the Digital Millennium Copyright Act ("DMCA")\(^\text{15}\) and prohibited Corley both from posting the code on his own web site and from providing links to other sites posting DeCSS.\(^\text{16}\) The California Court of Appeal, Sixth District, applied state trade secrecy law and reversed a preliminary injunction barring Bunner from posting DeCSS.\(^\text{17}\) While neither ruling is mandatory authority for the other, the fact remains that the courts came to opposite conclusions on the same basic question.\(^\text{18}\) The two cases highlight the uncertainty surrounding the administration of old laws in the new world of digital technology and the Internet. While it was once thought that speech would be treated the same way in digital and online forms as in print,\(^\text{19}\) given the nature of these new technologies, this will not necessarily be the case. The context in which acts occur must always be considered in the application of laws. This consideration, though, is not novel. In 1919, the Supreme Court said, "[t]he character of every act depends upon the circumstances in which it is done. The most stringent protection of free speech would not protect a man in falsely shouting fire in a theatre and causing a panic...."\(^\text{20}\) Such a consideration of context has been evident in many cases involving activity imbued with speech and non-speech elements,\(^\text{21}\) and should continue to be as courts delineate rights and responsibilities in the digital age.\(^\text{22}\)

\(^{14}\) Corley, 273 F.3d at 449; Bunner, 113 Cal. Rptr. 2d at 348.

\(^{15}\) Corley, 273 F.3d at 434.

\(^{16}\) Id. at 454-55, 457.

\(^{17}\) Bunner, 113 Cal. Rptr. 2d at 351-52. The California Supreme Court granted review of the case against Bunner in February 2002. DVD Copy Control Ass'n v. Bunner, 41 P.3d 2 (Cal. 2002). Because of the grant of review, the Bunner decision has been unpublished. See Cal. Ct. R. 976, 977.

\(^{18}\) See Victoria A. Cundiff, Hot Topics in Trade Secrets Law: Keeping Your Intellectual Property Off the Internet: Two Approaches, 716 PLI/Pat 73, 78 (2002) ("The practical effect of either decision remains unclear. Obviously the fact that the DeCSS code may be freely posted, for the time being, on some web sites, undermines and most likely destroys the impact of the contrary order in the Corley case."); see also id. at 75 (noting that the DeCSS cases "leave open a variety of provocative legal issues"). The Supreme Court was also brought into the DVDCCA's fight against web sites posting DeCSS. See Paul Sweeting, Court Off DVD Case, Daily Variety, Jan. 6, 2003, at 8.

\(^{19}\) See Adam Cohen, Cyberspeech on Trial, Time, Feb. 15, 1999, at 52.

\(^{20}\) Schenck v. United States, 249 U.S. 47, 52 (1919) (citations omitted).

\(^{21}\) See infra notes 154-55, 159 and accompanying text.

\(^{22}\) Other cases involving the rights of copyright owners with respect to online and digital uses of their works include A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002) (holding that the provider of a service that facilitated the distribution of digital audio files over the Internet infringed record companies' copyrights); Random House, Inc. v. Rosetta Books LLC, 283 F.3d 490 (2d Cir. 2002) (denying request for a preliminary injunction; a reasonable jury could find the exclusive right to publish works in "book form" does not encompass the right to publish those works as "e-books"); Kelly v. Arriba Soft Corp., 280 F.3d 934 (9th Cir. 2002) (holding that a search engine operator's display of plaintiff's copyrighted pictures as "thumbnail")
This Comment addresses these issues through the lens of the DeCSS cases. Part I provides a background of the cases against Bunner and Corley, including a brief description of DVDs and DeCSS, as well as the legislative histories of both the California trade secrets law and the DMCA. Part I also gives an overview of free speech, fair use, and reverse engineering. Part II analyzes the decisions in the cases against Corley and Bunner. Part III argues that the California court misconstrued the First Amendment’s effect on that state’s trade secret law because it neglected to address whether that law is content-based or content-neutral. This part also asserts that the Second Circuit correctly found that the DMCA is content-neutral, and thus properly determined that free speech interests are not harmed by enjoining the further distribution of DeCSS. This Comment concludes that had the California court properly analyzed the trade secrets law according to the tests developed by the Supreme Court for determining whether a given law is content-based or content-neutral, it too would have found that trade secret law does not impinge the right to free speech.

I. DVDs, INTELLECTUAL PROPERTY LAWS AND THE FIRST AMENDMENT

This part begins by describing the relevant attributes of DVDs and DeCSS. This part then provides the history of the challenged statutes, and explains the limits that the First Amendment, the fair use doctrine, and reverse engineering place on intellectual property owners.

A. Description of DVDs, CSS and DeCSS

To analyze properly the legal issues underlying the cases against Bunner and Corley, it is first necessary to understand the various technologies involved. Digital video disks (“DVDs”) are thin disks
similar to compact discs, or CDs, but with a larger storage capacity. A single DVD can store enough data to display a full-length movie. DVDs were developed in late 1995, and the major movie studios began marketing DVD movies to consumers in 1997. While the digital format of DVDs gives them better sound and picture quality than VHS tapes, DVD technology also "[brings] with it [an] increased risk of piracy" because digital copying is "easy and inexpensive." In addition, copies of digital movies are not susceptible to the same degradation in quality as video tapes. Moreover, digital movies, like other digital content, can be transmitted worldwide through the Internet with relative ease. To combat these risks, movie studios adopted an encryption technique known as "Content Scrambling System," or CSS. The purpose of CSS is to prevent DVDs from being copied.
In conjunction with adopting CSS as a protective measure, the studios established a licensing system administered by the DVDCCA. The DVDCCA’s license agreements included confidentiality obligations. As the major studios only make CSS-protected DVDs, the effect of the studios’ licensing system is that any manufacturer wishing to make a DVD-player must license CSS from the DVDCCA so that its machines can play the majority of DVDs available to consumers.

Despite these efforts at controlling the distribution of CSS, Johansen and the people whom he “met” online discovered the CSS encryption algorithm through reverse engineering. This reverse engineering allowed the hackers to create the software program (or code) that became known as DeCSS. DeCSS “unlocks” CSS-DVDs). Judge Kaplan explained: “A CSS-protected DVD can be decrypted by an appropriate decryption algorithm that employs a series of keys stored on the DVD and the DVD player. In consequence, only players and drives containing the appropriate keys are able to decrypt DVD files and thereby play movies stored on DVDs.” Id. at 310. Another definition of CSS is: “a data encryption and authentication method used to protect [DVDs] from being illegally copied, distributed and viewed from other devices.” See Whatis.com: Content Scrambling System, at http://search security.techtarget.com/Definition/0,,sid14_gei214575.00.html (last updated July 24, 2001). On its web site, the DVDCCA describes CSS as a means of preventing “movies from being illegally duplicated.” See Frequently Asked Questions Page of the DVD CCA Website, at http://www.dvdcca.org/faq.html (last visited Feb. 19, 2003). One version of the DVDCCA’s license agreement defines CSS as a system “designed to provide reasonable protection for” DVDs. § 1.8 of Version 1.2 of the CSS License Agreement, available at http://www.dvdcca.org/css (last visited Feb. 19, 2003). But see Lessig, supra note 1, at 189. Lessig claims that CSS “didn’t interfere with the ability to copy DVD disks.... All it did was limit the range of machines that DVD disks could be played on.” Id. This assertion is not disputed. The key issue is that the DVDCCA’s license agreements do not refer to DVD players that allow copying; the agreements only refer to players that play DVDs. See, e.g., § 6.2.1 of the CSS Procedural Specifications, available at http://www.dvdcca.org/css (last visited Feb. 19, 2003). Thus, DVD players that can copy DVDs would not be licensed by the DVDCCA. Moreover, the DVDCCA requires that its licensees’ DVD players not play pirate copies of DVDs. See § 6.2.1.5 of the CSS Procedural Specifications, available at http://www.dvdcare.org/css (last visited Feb. 19, 2003).

See supra note 1. For a description of reverse engineering, see infra Part I.B.3.c. Software programs are written in code, see Universal City Studios, Inc. v. Corley, 273 F.3d 429, 446 (2d Cir. 2001), although the terms can be used interchangeably. See, e.g., Lessig, supra note 1, at 35. Lessig offers the following description of code:
protected DVDs, allowing the DVDs to be copied and played on "non-compliant" DVD players. None of the hackers was licensed by

"Code" is written (primarily) by humans, though the code that humans write is quite unlike the code that computers run. Humans write "source code"; computers run "object code." Source code is a fairly understandable collection of logical languages designed to instruct the computer what it should do. Object code is a string of ones and zeros impenetrable to the ordinary human. Source code, however, is too cumbersome for a computer to run; it is therefore "compiled" before it is run, meaning translated from human-readable to machine-understandable code.

Id. at 50. The Oxford English Dictionary defines a compiler as "[a] routine for translating a program into a machine-coded form." Oxford English Dictionary, Vol. III, 606 (2d ed. 1989). "Code" has also been defined as "a term used for both the statements written in a particular programming language—the source code, and a term for the source code after it has been processed by a compiler and made ready to run in the computer—the object code." See Whatis?com: Code, at http://search390.techtarlogo.com/sDefinition/0,,sid10_gci213934,00.html (last updated Aug. 21, 2001); see also Corley, 273 F.3d at 446 ("[P]rograms are essentially instructions to a computer."). Lessig later describes code as "performativ[e]; what it says, it does" and also notes that code may "perform[ ] as well as express[ ]." Lessig, supra note 1, at 57-58. The Copyright Act’s definition of "computer program" recognizes that inherent functionality. 17 U.S.C. § 101 (defining a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result"). "Code" is also a verb meaning to write programs. See Whatis?com: Code, at http://search390.techtarlogo.com/sDefinition/0,,sid10_gci213934,00.html (last updated Aug. 21, 2001). The distinction between the two kinds of code was important to the Bunner court. See infra note 234 and accompanying text.

40. Reimerdes, 111 F. Supp. 2d at 311; see also supra note 1 and accompanying text. The Second Circuit defined "hackers" as "a digital-era term often applied to those interested in techniques for circumventing protections of computers and computer data from unauthorized access." Corley, 273 F.3d at 435. However, there are different definitions of hackers, with a range of connotations. See Whatis?com: Hacker, at http://searchsecurity.techtarlogo.com/sDefinition/0,,sid14_gci212220,00.html (last updated June 12, 2001) (describing a hacker as either "a clever programmer" or "someone who tries to break into computer systems"). For example, Webster’s Dictionary has defined the term as "a talented amateur user of computers, specifically one who attempts to gain unauthorized access to files in various systems.” Webster's New World College Dictionary 605 (3d ed. 1996). The National Research Council does not refer to hacking, but instead describes the actions of people such as Johansen as "breaking" or "cracking" a code. Nat’l Research Council, supra note 1, at 172, 221. Similarly, Lessig describes "open source coders" that "cracked" CSS. Lessig, supra note 1, at 189. In other contexts, Lessig describes "coders" and "authors" that "disabled" a software program called Cyber Patrol. Id. at 184.

41. Reimerdes, 111 F. Supp. 2d at 311; see also Lessig, supra note 1, at 189 (arguing that the fact that CSS “limit[ed] the range of machines that DVD disks could be played on . . . . gave rise to the need for a [program that could] crack” CSS); Adams, supra note 1 (noting that DeCSS allows end-users to play DVDs on the Linux computer operating system, and at the time there were no DVDCCA-licensed, Linux-compatible DVD players); Evangelista, supra note 1 (stating that “Linux supporters say they had no choice but to hack because the DVD industry has only licensed devices that play back DVDs on machines using Windows or Macintosh operating systems"; but further noting that no manufacturer applied with the DVDCCA to make a Linux-compatible DVD player); Harmon, supra note 3. But see Intergraph Corp. v. Intel Corp., 195 F.3d 1346, 1362 (Fed. Cir. 1999) (“[M]arket power does not impose on the intellectual property owner an obligation to license the use of that property to others.”) (citation omitted)).
the DVDCCA. Before long, DeCSS was widely available on the Internet, including on the web sites of the respective defendants in Bunner and the Universal cases.

The widespread availability of DeCSS led the DVDCCA and the movie studios to bring claims against Bunner, Corley, and others. The DVDCCA claimed that Bunner misappropriated its confidential and proprietary information and was thus liable under California's trade secrets law. The movie studios alleged that Corley violated the anti-circumvention provisions of the Digital Millennium Copyright Act. These laws and their legislative histories are described in the next section.

B. Legislative History of the UTSA and DMCA

Owners of intellectual property have a variety of laws at their disposal to help them preserve the value of the property. Owners

42. Reimerdes, 111 F. Supp. 2d at 311; see also Evangelista, supra note 1 (quoting the DVDCCA as saying that CSS "is available for license to anyone wishing to produce a Linux DVD player"). In fact, according to the DVDCCA's web site, Linux-compatible DVD players with CSS are now available. Frequently Asked Questions Page of the DVD CCA Website, at http://www.dvdcca.org/faq.html (last visited Feb. 19, 2003).

43. Reimerdes, 111 F. Supp. 2d at 311; see also supra note 5 and accompanying text.

44. DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d. 338, 341 (Ct. App. 2001), review granted, 41 P.3d 2 (Cal. 2002).

45. Reimerdes, 111 F. Supp. 2d. at 303, 312.

46. See Evangelista, supra note 5 (noting that the DVDCCA sued seventy web site operators and 500 unnamed people); see also Lessig, supra note 1, at 189 (claiming that "upon the release of DeCSS, the industry went nuts").

47. Bunner, 113 Cal. Rptr. 2d at 341.


have sought protection of their rights through trade secrecy, patents, copyrights, and other legislation tailored to their particular industries. In the DeCSS cases, for example, the DVDCCA tried to stop distribution of DeCSS through state trade secret law, while Universal and the other studios did the same by invoking the DMCA, a federal copyright and anti-circumvention statute. The following sections provide background on California's trade secrecy statute and the federal copyright laws, and address the various exceptions to these laws.

1. California Trade Secrets Law

In 1984, California enacted the Uniform Trade Secrets Act ("UTSA") to protect trade secrets from misappropriation.

way to be protected by the law. See, e.g., Nadel v. Play-By-Play Toys & Novelties, Inc., 208 F.3d 368, 380 (2d Cir. 2000) ("[U]noriginal, known ideas have no value as property and the law does not protect against the use of that which is free and available to all."). With respect to copyright law in particular, the aim is to protect creative works more so than fact-based works, see Campbell v. Acuff-Rose Music, 510 U.S. 569, 586 (1994). But see Lessig, supra note 1, at 97, 237 (claiming that it is wrong to view intellectual property like "cars and homes"; instead it should be considered a resource to be shared by the creator of the intellectual property and the general public).

50. See David L. Hitchcock & Kathy E. Needleman, Current Status of Copyright Protection in the Digital Age and Related Topics, 8 Tex. Wesleyan L. Rev. 539, 560 (2002). Hitchcock and Needleman state:

The Internet has resulted in such a merger of technology, content, and value that creative advocates have brought to bear a wide variety of other laws [besides copyright law]. These include: criminal statutes related to computers and personal information, contract, right of privacy, right of publicity, trespass, unfair competition, unjust enrichment, and trade secrets.

Id. 51. Id.; see also Eldred v. Ashcroft, 123 S. Ct. 769, 782 (2003) (finding that the term of copyright protection was extended in 1998 due to "international concerns, . . . demographic, economic, and technological changes . . . and rationally credited projections that longer terms would encourage copyright holders to invest in the restoration and public distribution of their works"); id. at 796 (Stevens, J., dissenting) (noting that "[s]ince the creation of federal patent and copyright protection in 1790, Congress has passed a variety of legislation, both providing specific relief for individual authors and inventors as well as changing the general statutes conferring patent and copyright privileges"); Lessig, supra note 1, at 95-96 (noting that "controlling" intellectual resources can be achieved “through law, norms, the market, or, importantly, technology”); James Boyle, Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination and Digital Intellectual Property, 53 Vand. L. Rev. 2007, 2010 (2000) (noting that over the last twenty years, intellectual property law has been "broadened to cover more subjects, deepened to cover them for a longer time, widened to cover them in more ways"); Pamela Samuelson & Suzanne Scotchmer, The Law and Economics of Reverse Engineering, 111 Yale L.J. 1575, 1578 (2002) (reviewing, inter alia, state anti-plug mold legislation, the federal Semiconductor Chip Protection Act, 17 U.S.C. § 901-14, the DMCA and the UTSA).

52. Bunner, 113 Cal. Rptr. 2d at 340.
55. See Bunner, 113 Cal. Rptr. 2d at 346; see also Linda B. Samuels & Bryan K.
Misappropriation is the acquisition of someone else’s proprietary information through improper means;\(^{56}\) reverse engineering is not considered misappropriation.\(^{57}\) Furthermore, misappropriation is “an intentional tort”\(^{58}\) and “is not limited to the initial act of improperly acquiring trade secrets; the use and continuing use of trade secrets is also misappropriation.”\(^{59}\) Before a court can protect information, however, it must determine whether that information is a trade secret. In California, a trade secret has three key characteristics: “(a) information (b) which is valuable because unknown to others and (c) which the owner has attempted to keep secret.”\(^{60}\) Moreover, such


1. Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
2. Disclosure or use of a trade secret of another without express or implied consent by a person who:
   A. Used improper means to acquire knowledge of the trade secret; or
   B. At the time of disclosure or use, knew or had reason to know that his or her knowledge of the trade secret was: (i) Derived from or through a person who had utilized improper means to acquire it; (ii) Acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or (iii) Derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
   C. Before a material change of his or her position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

Cal. Civ. Code § 3426.1(b); see also Mark A. Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 Duke L.J. 147, 229-30 (1998) (arguing that misappropriation is narrowly defined, but that the definition of trade secrets is “extremely broad”).

57. Id. § 3426.1(a) (defining improper means to include “theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means” and stating that “[r]everse engineering or independent derivation alone shall not be considered improper means”). For a description of reverse engineering, see infra Part I.B.3.c.
58. PMC, Inc. v. Kadisha, 93 Cal. Rptr. 2d 663, 673 (Ct. App. 2000).
59. Id. at 675 (internal citations omitted).
60. ABBA Rubber Co. v. Seaquist, 286 Cal. Rptr. 518, 526 (Ct. App. 1991) (citations omitted). The UTSA defines a trade secret as:

- information, including a formula, pattern, compilation, program, device, method, technique, or process, that:
information can be a trade secret even if it is "readily ascertainable." The California legislature intentionally avoided a “not readily ascertainable” requirement for trade secret status in order to provide a clear standard and to avoid arguments over the amount of time needed to ascertain a secret. Thus, under California law, a trade secret includes information “which the industry could easily discover” but not “information that the industry already knows.” The second element—economic value—exists if either the owner of the information or a third party who obtains the information considers the information to have such value.

Once the determination is made that a trade secret was misappropriated (i.e., the court concludes that the information is a trade secret and the information was acquired through improper means), the court must provide an adequate remedy to preserve the fact’s secrecy. The UTSA provides that “[a]ctual or threatened misappropriation may be enjoined.”

The Act further protects

---

(1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Cal. Civ. Code § 3426.1(d). The Restatement (Third) of Unfair Competition, by contrast, eliminates the responsibility of the owner to keep the information secret. According to the Restatement, a trade secret is “any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.” Restatement (Third) of Unfair Competition § 39 (1995). But see R. Milgrim, Milgrim on Trade Secrets § 2.01 (1992) (denying trade secret protection to “well known or readily ascertainable” information).

61. ABBA Rubber Co., 286 Cal. Rptr. at 528. Conversely, the Uniform Trade Secrets Act proposed by the National Conference of Commissioners on Uniform State Laws includes a requirement that the trade secret not be “readily ascertainable.” 14 West’s Unif. Laws Ann., Unif. Trade Secrets Act, § 1(4)(i) (1990); see also Milgrim, supra note 60, at § 2.01.

62. See ABBA Rubber Co., 286 Cal. Rptr. at 528.

63. ld. at 529 (emphasis added).


66. Id.; see also Susan Burnett Luten, California Civil Litigation 456 (3d ed. 1997) (stating that in California, “a preliminary injunction . . . preserves the status quo until a trial can be held on the underlying dispute” and that “[t]his type of injunction is a determination of the trial court that the status quo should continue until trial”); Lemley & Volokh, supra note 55, at 229 (maintaining that preliminary injunctions are common in trade secret cases, due in part to the “fragility of trade secret protection—public disclosure forever destroys the secret, so the harm from unauthorized disclosure is ‘irreparable’ in a sense absent in most copyright or trademark cases”); Michael W. Shiver Jr., Comment, Objective Limitations, or How the Vigorous Application of “Strong Form” Idea/Expression Dichotomy Theory in Copyright Preliminary Injunction Hearings Might Just Save the First Amendment, 9 UCLA Ent. L. Rev. 361, 362 (2002) (noting that while there is “serious dispute as to whether preliminary injunctions issued in copyright cases are, in fact, prior restraints on speech,” it is generally agreed that injunctions in trade secret cases are not prior restraints).
owners of trade secrets through its requirement that a court use reasonable measures to protect an alleged trade secret in connection with a trial.\textsuperscript{67} For instance, actual or threatened misappropriation "may be enjoined . . . and [the plaintiff] may recover damages for unjust enrichment, or receive payment of a reasonable royalty."\textsuperscript{68} As in Bunner, California appellate courts have reversed preliminary injunctions granted by trial courts that barred further disclosure of proprietary information.\textsuperscript{69}

On the other hand, courts upheld injunctions when the injunctions were tailored to the harm caused by misappropriation. In a case concerning proprietary customer data, for example, an injunction was upheld against the defendants' argument that it was "overbroad and unjustified."\textsuperscript{70} The California Court of Appeal, First District, found that "the injunction correctly [drew] the line"\textsuperscript{71} because it did not apply to customers of the data owner with whom the defendants, former employees of the data owner, had no contact.\textsuperscript{72}

In contrast to DVDCCA's decision to enforce its rights through trade secrecy law, the movie studios in the Universal cases sought to stop the use of DeCSS to distribute pirated movies through federal anti-circumvention law.\textsuperscript{73} The movie studios did not claim that Corley infringed any copyrighted work, but rather alleged that Corley trafficked an anti-circumvention device when he posted and linked to DeCSS.\textsuperscript{74} Such trafficking violates the Digital Millennium Copyright Act,\textsuperscript{75} a 1998 addition to federal copyright law.\textsuperscript{76}

\textsuperscript{67} Cal Civ. Code § 3426.5. Such measures "may include granting protective orders in connection with discovery proceedings, holding in-camera hearings, sealing the records of the action, and ordering any person involved in the litigation not to disclose an alleged trade secret without prior court approval." \textit{Id.}

\textsuperscript{68} PMC Inc. v. Kadisha, 93 Cal. Rptr. 2d 663, 673 (Ct. App. 2000) (citations omitted).

\textsuperscript{69} See, \textit{e.g.}, Hilb, Rogal & Hamilton Ins. Servs. of Orange County, Inc. v. Robb, 39 Cal. Rptr. 2d 887 (Ct. App. 1995). \textit{Robb} reversed a lower court's preliminary injunction prohibiting a former employee of an insurance company from using the company's customer lists and other customer information. \textit{Id.} at 892. Even if the lists and information were trade secrets, the court determined that the employee did not misuse them when he lawfully informed the company's clients that he was taking a new job at another insurance company. \textit{Id.}

\textsuperscript{70} Morlife, Inc. v. Perry, 66 Cal. Rptr. 2d 731, 739 (Ct. App. 1997).

\textsuperscript{71} \textit{Id.} at 740.

\textsuperscript{72} \textit{Id.} This tailoring is comparable to the injunction granted in Bunner, as the injunction there prohibited Bunner from posting DeCSS but not from providing links to other web sites containing DeCSS. DVD Copy Control Ass'n \textit{v.} Bunner, 113 Cal. Rptr. 2d 338, 344 (Ct. App. 2001), \textit{review granted}, 41 P.3d 2 (Cal. 2002).

\textsuperscript{73} See Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 303, 316 (S.D.N.Y. 2000), \textit{aff'd sub nom.} Universal City Studios, Inc. \textit{v.} Corley, 273 F.3d 429 (2d Cir. 2001). New York does not have a trade secret law comparable to that of California, but trade secrets may be protected under the common law. See, \textit{e.g.}, Lemelson v. Carolina Enters., Inc., 541 F. Supp. 645 (S.D.N.Y. 1982).

\textsuperscript{74} Reimerdes, 111 F. Supp. 2d at 316-17.

\textsuperscript{75} 17 U.S.C. §§ 1201-1205 (2000).

\textsuperscript{76} \textit{Id.}
2. The Copyright Act

Modern American copyright law finds its origins in the Statute of Anne,\textsuperscript{77} passed by the English Parliament in 1709 "for the encouragement of learned men to compose and write useful books."\textsuperscript{78} The United States Constitution, in turn, grants Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."\textsuperscript{79}

a. Copyright Law Generally

Congress exercised its constitutional power through its passage of the Copyright Act.\textsuperscript{80} The Copyright Act provides that copyright protection exists "in original works of authorship fixed in any tangible medium of expression."\textsuperscript{81} Unlike trade secrets, copyrights do not, in any case, "extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery."\textsuperscript{82} The Copyright Act grants the owner of a copyrighted work certain exclusive rights\textsuperscript{83} that the owner may exercise during the life of the copyright. Like other

---

\textsuperscript{77} See Craig Joyce et al., Copyright Law 20 (5th ed. 2001); see also Fred Fisher Music Co. v. M. Witmark & Sons, 318 U.S. 643, 647-48 (1943).

\textsuperscript{78} An Act for the Encouragement of Learning, 1709, 8 Ann., c. 19 (Eng.).

\textsuperscript{79} U.S. Const. art. I, § 8, cl. 8; see also Twentieth Century Fox Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (stating that "private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts"); Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932) (describing the main purpose of copyright as providing the public with "the general benefits derived... from the labors of the authors").

\textsuperscript{80} 17 U.S.C. §§ 101-1101 (2000); see also Sony Corp. v. Universal City Studios, Inc. 464 U.S. 417, 429 (1984) (noting that the Copyright Clause gives Congress the power to define the scope of copyright protection); Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 5 (1966) (describing the Copyright Clause as "both a grant of power [to] and a limitation" on Congress).

\textsuperscript{81} 17 U.S.C. § 102(a).

\textsuperscript{82} Id. § 102(b). This clause has been interpreted to require creativity on the part of the author for a work to be protected by copyright. See, e.g., Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 350 (1991) (finding that the distinction between facts and creative expression "limits severely the scope of protection in fact-based works"). Patents may be granted to protect non-copyrightable expressions such as processes. 35 U.S.C. §§ 101-376 (2000).

\textsuperscript{83} 17 U.S.C. § 106. Among these are the rights to: (1) reproduce the work; (2) prepare derivative works; (3) distribute copies of the work by sale or otherwise; (4) perform an audiovisual work publicly; (5) display the work publicly; and (6) perform a sound recording publicly by a digital audio transmission. Id. § 106(1)-(6). A derivative work is defined in the statute as "a work based upon one or more preexisting works." Id. § 101. The right to publicly perform an audiovisual work applies to "literary, musical, dramatic and choreographic works, pantomimes, and motion pictures and other audiovisual works." Id. § 106(4).

\textsuperscript{84} Id. §§ 302-304. Copyright protection generally lasts for the life of the author plus seventy years. Id. § 302(a).
property rights, these rights may be sold, assigned or licensed to third parties by the copyright owner. If any of these rights are infringed by a third party, the author may seek damages or injunctive relief. However, the exclusive rights are subject to the fair use doctrine, which is embodied in Section 107 of the Copyright Act.

Fair use permits third parties to make certain uses of copyrighted works without risking liability for infringement. The doctrine balances the First Amendment right to free speech against the exclusive rights guaranteed to authors by the Constitution. Section 107 lists four factors to be considered in determining whether any particular use of a copyrighted work is a fair use: (1) the purpose of the use (e.g., whether the use is commercial); (2) the nature of the work used; (3) the amount of the work used; and (4) the effect of the use on the market for the work. Although these factors are not

85. See Beckerman-Rodau, supra note 49, at 19 n.88 (noting that businesses “can use intellectual property in the form of inventions, trade secrets, or technological know-how to create products that can be sold in the marketplace”); see also supra note 49.
86. 17 U.S.C. § 201(d).
88. 17 U.S.C. § 106 (stating that the exclusive rights granted are subject to, inter alia, Section 107 of the Copyright Act); see also Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 154-55 (1975) (holding that “the Copyright Act does not give a copyright holder control over all uses of his copyrighted work” (citation omitted)).
90. Id.
91. See Eldred v. Ashcroft, 123 S. Ct. 769, 788 (2003) (noting that copyright law “incorporates … speech-protective purposes and safeguards” and “contains built-in First Amendment accommodations”); see also Harper and Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 556, 560 (1985) (rejecting argument that when the speech at issue regards “matters of high public concern” (citation omitted), the First Amendment requires the scope of fair use to be wider than usual because “the Copyright Act’s distinction between copyrightable expression and uncopyrightable facts and ideas, and the latitude for scholarship and comment traditionally afforded by fair use” offer adequate First Amendment protection); A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1028 (9th Cir. 2002); Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc., 923 F. Supp. 1231, 1258 (N.D. Cal. 1995); Lessig, supra note 1, at 105, 188 (describing fair use as a required constitutional limit on the control granted to authors by the Copyright Act): Beckerman-Rodau, supra note 49, at 5 (“Existing limitations in [copyright] law already strike a balance between protecting the property interests while minimizing the impact on free speech rights.”). Fair use is further described below. See infra Part I.B.3.b.
92. 17 U.S.C. § 107. The four factors listed in the statute are:
(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.
exhaustive and other relevant factors may be considered, courts mainly rely on the four factors enumerated in the statute. While the doctrine was not codified until 1976, the concept of fair use has existed since the beginnings of copyright law. Nearly twenty years after fair use was made law, the Supreme Court noted that “[f]rom the infancy of copyright protection, some opportunity for fair use of copyrighted materials has been thought necessary to fulfill copyright’s very purpose.” Even so, there is disagreement as to whether fair use is a defense to an infringement claim or an affirmative right to use copyrighted works in certain situations.

While the Copyright Act’s definition of works of authorship does not specifically mention computer programs such as CSS and DeCSS, the legislative history indicates that Congress considered computer programs to be literary works and copyrightable as such. As early as 1981, federal district courts held that computer programs were entitled to copyright protection. Despite these rulings and the

---

Id. The “purpose and character of the use” has been described as determining “whether and to what extent the new work is ‘transformative.’” Campbell, 510 U.S. at 579. In addition, a work need not be sold by the alleged infringer for the use to be commercial in nature. See Napster, 239 F.3d at 1015. Copying a work in its entirety weighs against a finding of fair use, see id. at 1016, but is not determinative. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 449-50 (1984). If a use is commercial, market harm is presumed; if the use is not commercial, the harm must be shown. See id. at 451. Moreover, the relevant market may be an existing or future market. See Napster, 239 F.3d at 1017.

93. 17 U.S.C. § 107 (stating that the “factors to be considered shall include” the four described in § 107); id. § 101 (defining the term “including” as “illustrative and not limitative”).


95. Campbell, 510 U.S. at 575. The Campbell Court relied on the English case of Cary v. Kearsley, 170 Eng. Rep. 679 (K.B. 1802) to support its proposition. In that case, the court did not use the term “fair use” but instead held that “a man may fairly adopt part of the work of another . . . for the promotion of science, and the benefit of the public.” Id. at 680; see also Campbell, 510 U.S. at 576 (stating that “fair abridgements” were permissible under the Statute of Anne).

96. Nat’l Research Council, supra note 1, at 5; see also Joyce et al., supra note 77, at 807 (describing fair use as an affirmative defense); Lessig, supra note 1, at 105 (calling fair use a defense); infra Part I.B.3.b.

97. See H.R. Rep. No. 94-1476 at 54 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5667 (noting that the term “literary works” “includes computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas”). The Copyright Act defines a “computer program” as: “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.” 17 U.S.C. § 101; see also Lessig, supra note 1, at 252 (arguing that the term of copyright protection for software programs “is a parody of the Constitution’s requirement that copyright be for ‘limited times’”). But see Arthur R. Miller, Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CON’TU?, 106 Harv. L. Rev. 977, 979 (1993) (contending that “Congress[] decided to avoid grappling with technological issues that obviously required more study than the legislative process was then willing to give them”).

legislative intent to provide computer programs with the protection of copyright law, subsequent courts have grappled with the question of whether some elements of a computer program fall outside the realm of copyrightable works.99

The Copyright Act also contains special provisions related to computer programs that are inapplicable to traditional works. For example, Section 109 of the Act prohibits the rental or lease of computer programs;100 With this provision, Congress addressed the facts that computer programs can be copied easily and that the main reason people would borrow computer programs would be to make illegal copies of them.101

Moreover, the Copyright Act includes provisions directed at the needs of owners of individual copies of computer programs, known as end-users.102 Section 117 of the Act allows end-users to copy a computer program for archival or maintenance purposes.103 Despite

---

99. See Gates Rubber Co. v. Bando Chem. Indus., 9 F.3d 823 (10th Cir. 1993) (holding that courts must separate the various elements of a computer program to determine which are protectable in deciding whether infringement occurred; non-protected elements of a computer program may be copied without liability); see also Lotus Dev. Corp. v. Paperback Software Int’l, 740 F. Supp. 37, 51 (D. Mass. 1990) (holding that the “literal and nonliteral” elements of a computer program may be copyrightable). A copyrighted work containing unprotectable elements is not unique to computer programs. See, e.g., Nat’l Basketball Ass’n v. Motorola, Inc., 105 F.3d 841, 849 (2d Cir. 1997) (“Copyrightable material often contains uncopyrightable elements within it.”); see also Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 350 (1991) (holding that fact-based works have limited copyright protection).

100. 17 U.S.C. § 109(b)(1)(A). This prohibition also applies to phonorecords, and for much the same reasons. Id.; see also Joyce et al., supra note 77, at 541 (describing the rental prohibitions against both computer programs and records).

101. See H.R. Rep. No. 94-1476 (1976), reprinted in 1976 U.S.C.C.A.N. 5659; see also 17 U.S.C. § 117(b) (providing that a computer program may be leased or sold “only as part of the lease, sale, or other transfer of all rights in the program”). These provisions are in contrast to the first sale doctrine that applies to other copyrighted works, such as books. The first sale doctrine is codified in Section 109(a) of the Copyright Act as follows: “the owner of a particular copy . . . lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy.” Id. § 109(a) (emphasis added).

102. “End user” means “the person for whom a hardware or software product is designed.” Whatis.com: End User, at http://whatis.techtarget.com/definition/0,sid9_gci212063,00.html (last updated May 30, 2002). In a more traditional context, “end use” is defined as “the ultimate specific use to which a manufactured product (as paper) is put or restricted.” Webster’s Third New International Dictionary of the English Language Unabridged 750 (1993). An “end-user” may therefore be seen as the consumer of that product.

103. 17 U.S.C. § 117(a), (c).
Congressional attempts to protect computer programs through traditional copyright law, as new technological developments rapidly occurred, intellectual property owners looked to the federal legislature to provide them with better defenses against infringement in the digital age.\textsuperscript{104} Congress responded by passing the Digital Millennium Copyright Act (“DMCA”) on October 28, 1998.\textsuperscript{105}

\textbf{b. Digital Millennium Copyright Act}

The DMCA implemented the World Intellectual Property Organization (“WIPO”) Copyright Treaty and the WIPO Performances and Phonograms Treaty\textsuperscript{106} (collectively, the “WIPO Treaties”).\textsuperscript{107} WIPO is a branch of the United Nations dedicated to promoting and protecting intellectual property.\textsuperscript{108} The WIPO Treaties were based on American proposals drafted for the 1996 WIPO Conference.\textsuperscript{109} In December 1996, WIPO adopted the WIPO Treaties.\textsuperscript{110} The United States signed the treaties in April 1997.\textsuperscript{111}

\begin{thebibliography}{99}
\bibitem{104} See \textit{supra} notes 50-51 and accompanying text; see also Nat’l Research Council, \textit{supra} note 1, at 105 (stating that Congress “heeded the concerns of major copyright industry groups about the dangers” of circumvention); Lessig, \textit{supra} note 1, at 98 (noting that there was a fear that the Internet would “render useless the rights granted by law” and that this fear “led Congress to expand the rights protected by the Copyright Act”). Lessig believes Congress’s response ought to be more balanced, as it traditionally has been: “Congress has historically struck a balance between [compensating copyright owners] and assuring that an adequate range of material remains in the public domain”; this has been “especially true when Congress has confronted new technologies.” \textit{Id.} at 108; see also \textit{infra} notes 107, 206 and accompanying text.
\bibitem{105} 17 U.S.C. §§ 1201–1205 (2000). In Senator Patrick Leahy’s testimony before the Senate endorsing the DMCA, he stated that the DMCA is a product of our recognition that the digital age presents us with unprecedented challenges to copyright protection. . . . [W]ith consideration of the DMCA[,] the Senate takes another historic step toward protecting American ingenuity and creative expression. This bill is a well-balanced package of proposals that address the needs of creators, consumers and commerce in the digital age and well into the next century. Statement of Senator Patrick Leahy, Ranking Member, Senate Judiciary Comm. On the Digital Millennium Copyright Act, \textit{available at} 1998 WL 11518135 [hereinafter Leahy Statement]. Senator Leahy (D-VT) has been in office since 1974. \textit{See About the Senator, at} http://leahy.senate.gov/biography/index.html [last visited Feb. 19, 2003]. Senator Leahy was a sponsor, along with Senator Orrin Hatch, of the DMCA. \textit{See Leahy Statement, supra}.
\bibitem{106} Digital Millennium Copyright Act, Pub. L. No. 105-304, Title I (1998).
\bibitem{107} \textit{See Leahy Statement, supra} note 105; \textit{see also} Lessig, \textit{supra} note 1, at 330 n.14 (describing the WIPO Treaties); David Nimmer, \textit{Appreciating Legislative History: The Sweet and Sour Spots of the DMCA’s Commentary}, 23 Cardozo L. Rev. 909, 915 (2002).
\bibitem{110} The World Intellectual Property Organization (“WIPO”) Copyright Treaty
\end{thebibliography}
The DMCA contains five sections. Section 1201 prohibits the circumvention of copyright protection systems, while also providing several exemptions to the prohibition. The exemptions are for purposes including education, research, reverse engineering, law enforcement, privacy, security, and the protection of minors. Section 1202 covers the integrity of copyright management information. Sections 1203 and 1204, respectively, provide the available civil and criminal remedies. Lastly, Section 1205 is the DMCA’s savings clause, which states that the DMCA does not affect the right to privacy “in connection with the . . . use of the Internet.” A common criticism of the DMCA is that it, unlike the Copyright Act, does not contain a fair use clause. In addition to the exemptions described above, however, the DMCA explicitly states


112. 17 U.S.C. § 1201(a) (2000). Specifically, the DMCA states that “[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title.” Id. § 1201(a)(1)(A). “Effective control” is defined in the Act as a measure that “in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.” Id. § 1201(a)(3)(B). The DMCA further provides that [n]o person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—(A) is primarily designed or produced for the purpose of circumventing protection [or] (B) has only limited commercially significant purpose or use other than to circumvent protection. Id. § 1201(b)(1).
113. Id. § 1201(d)-(j). The DMCA defines “encryption research” as “activities necessary to identify and analyze flaws and vulnerabilities of encryption technologies applied to copyrighted works, if these activities are conducted to advance the state of knowledge in the field of encryption technology or to assist in the development of encryption products.” Id. § 1201(g)(1)(A). “Security testing” is defined as “accessing a computer, computer system, or computer network, solely for the purpose of good faith testing, investigating, or correcting, a security flaw or vulnerability, with the authorization of the owner or operator of such computer, computer system, or computer network.” Id. § 1201(j)(1).
114. Id. § 1202.
115. Id. §§ 1203-1204.
116. Id. § 1205 (providing that nothing in the DMCA “abrogates, diminishes, or weakens the provisions of, nor provides any defense or element of mitigation in a criminal prosecution or civil action under, any Federal or State law that prevents the violation of the privacy of an individual in connection with the individual’s use of the Internet”).
117. See id. §§ 107.
118. See, e.g., Nimmer, supra note 107, at 932; see also Eric J. Sinrod, Fallout Rains From Digital Copyright Act, N.Y. L.J., June 4, 2002, at 5 (describing report published by the Electronic Frontier Foundation which stated that the DMCA has “stifle[d] a wide array of legitimate activities”); Chris Taylor, Throwing the e-Book At Him, Time, Aug. 20, 2001, at 63 (quoting a technology company CEO as saying the DMCA may “trample[ ] on” fair use).
that existing defenses to copyright infringement claims, including fair
use, remain valid under the DMCA.\footnote{119}

After passage of the DMCA, Senator Patrick Leahy testified before
the Senate that the WIPO Treaties “fortify intellectual property rights
around the world.”\footnote{120} Senator Orrin Hatch, Senator Leahy’s co-
sponsor of the DMCA, similarly stated: “The DMCA is the most
comprehensive bill that has come before the Senate regarding the
Internet and the digital world in general.”\footnote{121} Senator Hatch further
noted that “the copyright industries contribute[d] more to the U.S.
economy and employ[ed] more workers than any single
manufacturing sector . . . Yet, American companies [were] losing $18
to $20 billion annually due to the international piracy of copyrighted
works.”\footnote{122} These statements show that the DMCA is meant to deter
this widespread piracy of American ingenuity.\footnote{123}

The DeCSS cases clearly indicate the potential economic harm of
such piracy. Moreover, these cases forced both state and federal
courts to interpret intellectual property laws not only with respect to
remedying alleged economic losses but also with regard to the impact
of such laws on free speech, fair use and reverse engineering.\footnote{124}
The next part of this Comment describes these concepts.

3. Limitations on Intellectual Property Rights: The First Amendment,
Fair Use and Reverse Engineering

Intellectual property rights are not without limits.\footnote{125} For laws
grounded in the Constitution, such as copyrights and patents, these

\footnote{119} 17 U.S.C. § 1201(c)(1). The DMCA also provides that it does not affect the
right to free speech. \textit{Id.} § 1201(c)(4) (“Nothing in this section shall enlarge or
diminish any rights of free speech or the press for activities using consumer
electronics, telecommunications, or computing products.”).

\footnote{120} Leahy Statement, \textit{supra} note 105.

\footnote{121} Statement of Senator Orrin G. Hatch, \textit{available at} 1998 WL 11518183
[hereinafter Hatch Statement]. Senator Hatch (R-UT) was first elected to the Senate
in 1976 and is now the Chairman of the Senate Judiciary Committee. \textit{See} Orrin Grant
Hatch, Biographical Summary, \textit{at} http://hatch.senate.gov/index.cfm?FuseAction=
Biography.home (last visited Apr. 2, 2003); \textit{see also} Lessig, \textit{supra} note 1, at 262
(providing brief biographical sketch of Senator Hatch and explaining the senator’s
views on certain copyright issues).

\footnote{122} Hatch Statement, \textit{supra} note 121. These other manufacturing sectors included
“chemicals, industrial equipment, electronics, food processing, textiles and apparel,
and aircraft.” \textit{Id. But see} Lessig, \textit{supra} note 1, at 201 (describing the income of
copyright owners as a “puny part of the American economy”).

\footnote{123} See Nimmer, \textit{supra} note 107, at 916.

\footnote{124} All of the cases interpreting the DMCA in the United States Code Annotated
for the DMCA are related to the movie studios’ suit against Corley and others. \textit{See} 17

\footnote{125} \textit{See}, e.g., U.S. Const. art. I, § 8, cl. 8 (authorizing Congress to grant authors and
inventors exclusive rights for “limited Times”); \textit{see also} \textit{Sony Corp. of Am. v.
are not “unlimited”); Lemley & Volokh, \textit{supra} note 55, at 229 (stating that trade
limits are mandated by the Constitution. Other laws, like California's trade secret act, contain exemptions for reverse engineering and independent creation. And of course, no intellectual property law can offend the right to free speech guaranteed by the First Amendment.

a. The First Amendment Right to Free Speech

The First Amendment of the Constitution establishes the right to free speech. This right, however, is not absolute. The Supreme Court provided a vivid example of the limits on free speech in Schenck v. United States when it said that the First Amendment would not protect someone who falsely yelled “fire” and caused a panic. Accordingly, the government may, under certain circumstances, place limits on citizens' free speech rights. One such limitation on free speech is the use of prior restraints.

The landmark case in the area of prior restraints on free speech is

secret misappropriation covers a limited range of activities); Samuel K. Murumba, Globalizing Intellectual Property: Linkage and the Challenge of a Justice-Constituency, 19 U. Pa. J. Int'l Econ. L. 435, 458 (1998) (arguing that intellectual property law must balance “the public's rights of access... and the intellectual property owner's incentive and reward for giving society something of value”); supra notes 82, 88 and accompanying text.

127. See supra note 57 and accompanying text.
128. U.S. Const. amend. I (“Congress shall make no law... abridging the freedom of speech.”). The First Amendment applies to the states through the Fourteenth Amendment. U.S. Const. amend. XIV § 1 (“No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States.”).
129. U.S. Const. amend. I.
130. See John E. Nowak & Ronald D. Rotunda, Constitutional Law § 16.7, at 994 (5th ed. 1995) (noting that the Supreme Court has never held that the right to free speech is absolute); see also Konigsberg v. State Bar, 366 U.S. 36, 49 n.10 (1961) (stating that the view of First Amendment rights as absolute “cannot be reconciled with the law relating to libel, slander, misrepresentation, obscenity, perjury, false advertising, solicitation of crime, complicity by encouragement, conspiracy, and the like”).
132. Id. at 52. Later, in Whitney v. California, 274 U.S. 357 (1927), Justice Brandeis wrote in his concurring opinion that while free speech is a fundamental right that may not be abridged, it is “not in [its] nature absolute. [Its] exercise is subject to restriction, if the particular restriction proposed is required in order to protect the State from destruction or from serious injury, political, economic or moral.” Id. at 373 (Brandeis, J., concurring).
133. See Nowak & Rotunda, supra note 130, § 16.16, at 1020 (noting that “prior restraint is still considered a more serious restriction on free speech than subsequent punishment” and that “[f]reedom of speech and of the press ‘has meant, principally although not exclusively, immunity from previous restraints or censorship’” (citations omitted)).
New York Times Co. v. United States, which addressed the publication by the New York Times and the Washington Post of the “Pentagon Papers.” The Supreme Court held that “[a]ny system of prior restraints of expression comes to this Court bearing a heavy presumption against its constitutional validity.” Thus, “showing justification for... such a restraint” is “a heavy burden.” It is disputed, however, whether a preliminary injunction granted pursuant to a claim of copyright infringement is a prior restraint similar to that in the Pentagon Papers case; such injunctions in trade secret cases are not generally seen as improper prior restraints on speech.

The dispute over preliminary injunctions in intellectual property cases reflects the importance of the First Amendment. Though the First Amendment is widely considered one of the most critical of Americans' constitutional rights, its limits are just as widely acknowledged. In Chaplinsky v. New Hampshire, a 1942 case relied on by the California Court of Appeal in Bunner, the Supreme Court held that there are certain kinds of speech that are not entitled to First Amendment protection because “such utterances are no essential part of any exposition of ideas, and are of such slight social value as a step to truth that any benefit that may be derived from dramatic confrontations between the federal government and the press”).

136. After “a massive leak of secret government documents,” the New York Times and the Washington Post both published excerpts of the Pentagon Papers in June 1971. Nowak & Rotunda, supra note 130, § 16.17, at 1025. The U.S. Attorney General sought restraining orders prohibiting both newspapers from printing the Pentagon Papers. The Court granted certiorari on an expedited basis, and its opinion was issued seventeen days after the first publication of the Pentagon Papers by the New York Times. In a short per curiam opinion, the Court agreed that the District Courts in each case had correctly held that the government did not prove that a restraint on the newspapers was justified. Id. The Pentagon Papers were officially entitled “History of U.S. Decision-Making Process on Vietnam Policy.” Gora, supra note 134, at 1311.
138. Id. (quoting Org. for a Better Austin v. Keefe, 402 U.S. 415, 419 (1971)).
139. Id.
140. See Shiver, supra note 66, at 362. For an example of a case holding that a preliminary injunction for copyright infringement is not a prior restraint in violation of the First Amendment, see Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc., 109 F.3d 1394 (9th Cir. 1997).
142. Id.; see also Carter et al., supra note 134, at 50 (noting that “speech generally is a protected activity” and that “the Supreme Court has long placed certain categories of words outside the First Amendment’s protection”); supra notes 130, 132 and accompanying text.
143. 315 U.S. 568 (1942).
144. DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338, 348-49, review granted, 41 P.3d 2 (Cal. 2002).
them is clearly outweighed by the social interest in order and morality."\(^{145}\) Since Chaplinsky, speech has been validly limited by courts in a variety of contexts, including obscenity\(^{146}\) lies\(^{147}\) and advertising.\(^{149}\) In addition, the First Amendment may not protect speech in the form of instructions if those instructions describe how to do something illegal.\(^{150}\)

---

145. Chaplinsky, 315 U.S. at 572.

146. Obscenity is a form of speech that the Chaplinsky Court considered beyond the pale of the First Amendment. Chaplinsky, 315 U.S. at 571-72. Public morality plays a role in determining whether particular speech is obscene. See, e.g., Roth v. United States, 354 U.S. 476, 489 (1957) (holding that obscenity is determined through the application of "contemporary community standards").

147. Promoting the "exposition of ideas" and "the social interest in order and morality," Chaplinsky, 315 U.S. at 572, outweighs the right to free speech with respect to "calculated falsehoods." Garrison v. Louisiana, 379 U.S. 64, 75 (1964) (stating that "[c]alculated falsehood falls into that class of utterances [whose benefit] ... 'is clearly outweighed by the social interest in order and morality'" (quoting Chaplinsky, 315 U.S. at 572)). Such falsehoods have been called "knowing lie[s]—knowing something is false and saying it anyway." Carter et al., supra note 134, at 51. "Knowing lies" include perjury and fraud. Id.

148. A justification for penalizing defamation—a kind of falsehood—is the harm such speech can do to a person's reputation. See Journal-Gazette Co. v. Bandido's Inc., 712 N.E.2d 446, 451 (1999) (stating that "because society has a strong interest in protecting attacks upon individual reputation, the law of defamation was created"). However, for a "public figure" plaintiff to prevail in such suits, the plaintiff must show that the defendant acted with actual malice. See id.; see also New York Times Co. v. Sullivan, 376 U.S. 254 (1964). Actual malice was defined in Sullivan as saying something "with knowledge that it was false or with reckless disregard of whether it was false or not." Id. at 280. Free speech may also be limited by an individual's right to privacy. Carter et al., supra note 134, at 187 (observing that "the right of freedom of expression [is balanced] against the right of individuals to be let alone"). These examples show that the right to speak about a person is limited by concerns for that person's interests.

149. When first faced with the issue in 1942, the Supreme Court held that commercial speech was not protected by the First Amendment. Valentine v. Chrestensen, 316 U.S. 52 (1942). However, in 1976 the Court decided that advertisements were entitled to First Amendment protection. Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc., 425 U.S. 748 (1976). Then, in Central Hudson Gas & Electric Corp. v. Public Service Commission, 447 U.S. 557 (1980), the Court held that restrictions on commercial speech like advertisements must pass a balancing test based on a four-part analysis. Id. at 566. The Court defined commercial speech as "expression related solely to the economic interests of the speaker and its audience." Id. at 561 (citations omitted). The Court said, "[t]he Constitution ... accords a lesser protection to commercial speech than to other constitutionally guaranteed expression. The protection available for particular commercial expression turns on the nature of both the expression and of the governmental interests served by its regulation." Id. at 562-63 (citations omitted).

150. In United States v. Raymond, 228 F.3d 804 (7th Cir. 2000), the Seventh Circuit held that the First Amendment does not protect the publication of instructions for violating tax laws. Id. at 815. Similarly, in United States v. Featherston, 461 F.2d 1119 (5th Cir. 1972), the Fifth Circuit held that the First Amendment does not protect instructions for building an explosive device. Id. at 1122-23. However, in Herceg v. Hustler Magazine, Inc., 814 F.2d 1017 (5th Cir. 1987), the same circuit held that the First Amendment does protect instructions for engaging in a dangerous (but not illegal) sex act. Id. at 1020-25. Computer programs are considered instructions to a
These examples show the scope of First Amendment protections, and that the right to free speech may be counter-balanced by other interests. Furthermore, the examples demonstrate that, in analyzing the First Amendment, courts can and should consider the purpose of a restriction on the right to free speech, as well as the purpose of the speech itself.

One way courts balance free speech rights against other concerns is by treating "content-based" and "content-neutral" laws differently. Before looking at a law to determine whether it is content-based or content-neutral, however, the court must first decide if the communication or activity at issue is sufficiently expressive to fall under the umbrella of the First Amendment. Often, a law will affect activity that has both speech (protectable) and non-speech (unprotectable) elements. Once such a speech component is found in the activity, the court can then address the validity of the challenged regulation. That inquiry begins with asking whether the law is content-based or content-neutral.

According to the Supreme Court's ruling in Ward v. Rock Against Racism, a restriction on speech is content-neutral if it "serves purposes unrelated to the content of expression... even if [the regulation] has an incidental effect on some speakers or messages but not others." In other words, said the Court, "regulation of expressive activity is content neutral so long as it is 'justified without

computer. See supra note 39; see also infra note 259 and accompanying text.

151. See Beckerman-Rodau, supra note 49, at 21 (noting that "a balance must be struck between protecting private property and free speech rights when both interests are simultaneously involved" (citing Universal City Studios, Inc. v. Reimerdes, 82 F. Supp. 2d 211, 221 (S.D.N.Y. 2000), and Dallas Cowboys Cheerleaders, Inc. v. Scoreboard Posters, Inc., 600 F.2d 1184, 1188 (5th Cir. 1979))). In Dallas Cowboys Cheerleaders, the Fifth Circuit said that "[t]he first amendment is not a license to trammel on legally recognized rights in intellectual property." 600 F.2d at 1188; see also Beckerman-Rodau, supra note 49, at 22 (claiming that "[s]ituations always exist, where a particular right, no matter how important, must give way to a competing concern" and that "[i]n fact, almost all legal rules represent a balance of several competing underlying policies" (footnotes omitted)); Jessica Litman, Breakfast with Batman: The Public Interest in the Advertising Age, 108 Yale L.J. 1717, 1729 (1999) ("To agree to treat a class of stuff as intellectual property, we normally require a showing that, if protection is not extended, bad things will happen that will outweigh the resulting good things.").

152. See Nowak & Rotunda, supra note 130, § 16.47, at 1142-43.


154. The Supreme Court has faced challenges to laws affecting both speech and non-speech acts in cases such as Ward v. Rock Against Racism, 491 U.S. 781 (1989) (regulation of the volume of amplified music); Spence, 418 U.S. 405 (restriction on the display of the American flag); and United States v. O'Brien, 391 U.S. 367 (1968) (prosecution of person who burned his draft card).


156. 491 U.S. 781.

157. Id. at 791.
reference to the content of the regulated speech." "

Conversely, regulations adopted "because of disagreement with [a] message" are content-based. According to the Court, "[t]he government's purpose is the controlling consideration" in categorizing a law as content-based or content-neutral.  

The level of scrutiny applied to a particular law depends on whether it is content-neutral or content-based. According to the tests established by the Supreme Court, courts must scrutinize content-based restrictions more closely than content-neutral restrictions. While content-based laws have been called "presumptively invalid" by the Supreme Court, in Sable Communications of California, Inc. v. FCC the Supreme Court described the conditions under which content-based laws are valid. According to the Court, content-based restrictions are permissible only if they serve compelling interests using the least restrictive means to further those interests. In Ward, the Court held that content-neutral restrictions are constitutional as long as they are "narrowly tailored to serve the government's legitimate, content-neutral interests but . . . [the restriction] need not be the least restrictive or least intrusive means of doing so."

---

158. Id.  
159. Id. Distinguishing disagreement with a message from disagreement with conduct may be difficult when the two activities seem inseparable. The Supreme Court's opinions in Spence, 418 U.S. 405, and O'Brien, 391 U.S. 367, provide guidance in making the distinction. Both Spence and O'Brien were prosecuted in connection with their war protests. Spence, 418 U.S. at 406-08; O'Brien, 391 U.S. at 369-70. Both men wanted to convey the same message—their opposition to war—but each man used different conduct to convey that message. Spence hung his American flag outside his window with a peace symbol affixed to it. Spence, 418 U.S. at 405. O'Brien burned his draft card in front of a large crowd. O'Brien, 391 U.S. at 369. The Supreme Court held in Spence that "prosecution for the expression of an idea through activity" violated the First Amendment. Spence, 418 U.S. at 411. The Court found the state's claimed interests in keeping the peace, protecting the "sensibilities of passersby," id. at 412, and respecting and preserving the meaning of the flag, were unpersuasive in justifying Spence's prosecution. Id. at 411-15. In contrast, the O'Brien Court found that the government's interests in maintaining the selective service system were both substantial and unrelated to the communicative aspects of burning a selective service registration; therefore, the prohibition against destroying draft cards was constitutional. O'Brien, 391 U.S. at 378-82.  
160. Ward, 491 U.S. at 791.  
163. Id. at 126.  
164. Ward, 491 U.S. at 798. The Corley court, drawing on Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622 (1994), a case which relied on Ward, id. at 642, stated the test as follows:  
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.'" Universal City Studios, Inc. v. Corley, 273 F.3d 429, 450 (2d Cir. 2001) (citations omitted).
content-based restrictions must be able to withstand strict scrutiny to be upheld, while content-neutral restrictions are subject to a less exacting level of analysis.

The above discussion describes some of the balancing tests that courts must use in evaluating the validity of laws in the face of First Amendment challenges. Similarly, the fair use provisions of the Copyright Act provide courts with guidelines to weigh the exclusive rights granted to copyright owners against the right to free speech.

b. Fair Use

As previously noted, fair use existed long before it was made law in 1976. The kind of activities courts deemed fair uses traditionally centered on commentary, criticism, scholarship, research, and news reporting. The House Report explained that while the fair use defense was commonly invoked, at the time, there was still "no real definition" of fair use. Due to the doctrine's equitable nature, however, the House explicitly recognized the need for it to be applied on a case by case basis. Despite the amorphous nature of fair use before Section 107 was enacted, courts did develop certain guidelines for weighing the opposing interests of free speech and copyright against each other. The House Report stated that Section 107 resulted "from the long controversy over the related problems of fair use and the reproduction (mostly by photocopying) of copyrighted material for educational and scholarly purposes."

While the legislative history of Section 107 refers to fair use as a defense, there is a difference of opinion as to whether fair use is a defense or a right. The distinction is important because if there is a

166. See supra note 91 and accompanying text; see also Eldred v. Ashcroft, 123 S. Ct. 769, 788 (2003) (stating that "copyright’s limited monopolies are compatible with free speech principles"); Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 558 (1985) ("[T]he Framers intended copyright itself to be the engine of free expression.").
167. See supra note 95 and accompanying text. According to the House Report, "[t]he claim that a defendant’s acts constituted a fair use rather than an infringement ha[d] been raised as a defense in innumerable copyright actions over the years, and there is ample case law recognizing the existence of the doctrine and applying it." H.R. Rep. No. 94-1476, at 65 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5678.
170. Id., reprinted in 1976 U.S.C.C.A.N. 5659 at 5679 (noting that since fair use "is an equitable rule of reason, no generally applicable definition is possible, and each case raising the question must be decided on its own facts").
171. Id.
172. Id.
173. See, e.g., supra notes 167, 169 and accompanying text.
174. Nat’l Research Council, supra note 1, at 5; see also supra note 96 and accompanying text.
right to fair use, just as there is a right to free speech, then it is "acceptable to take positive actions" to exercise that right.\textsuperscript{175} However, if fair use is a defense, taking such "positive actions" may turn out to be illegal if the action is challenged as one of copyright infringement.\textsuperscript{176}

In any case, it is generally accepted that fair use needs to evolve as new technologies develop.\textsuperscript{177} In 1976, Congress was concerned about the threats posed by photocopying.\textsuperscript{178} Today, courts are concerned with perfect digital reproduction and immediate worldwide distribution of copyrighted works.\textsuperscript{179}

The legislative history of Section 107 specifically mentioned new technologies: "[T]here is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change."\textsuperscript{180} From this statement, it is evident that Congress intended fair use to be adapted to new technologies as they developed.\textsuperscript{181}

Soon after the passage of the Copyright Act of 1976, courts began to determine how to apply copyright law to computer programs.\textsuperscript{182} In connection with some of these decisions, courts considered whether reverse engineering was a fair use. A case providing guidance on this issue is the Ninth Circuit's decision in \textit{Sega Enterprises Ltd. v. Accolade, Inc.}\textsuperscript{183} There, the court held that reverse engineering a copyrighted computer game in order to access unprotected ideas and functional elements embodied in the game, combined with a

\begin{itemize}
\item \textsuperscript{175} Nat'l Research Council, \textit{supra} note 1, at 5.
\item \textsuperscript{176} Id. The National Research Council uses an example drawing on the anti-circumvention provisions of the DMCA:
\begin{quote}
If fair use is an affirmative right, for instance, then it ought to be acceptable to take positive actions, such as circumventing content protection mechanisms (e.g., decoding an encrypted file), in order to exercise fair use. But taking such positive actions may well be illegal under the regime of fair use as a defense. The basic point is very controversial; some legal scholars . . . have labeled as "absurd" the notion that fair use could be an affirmative right.
\end{quote}
\item \textsuperscript{177} See \textit{infra} notes 180-81 and accompanying text.
\item \textsuperscript{178} See \textit{supra} note 172 and accompanying text.
\item \textsuperscript{179} For example, the Second Circuit noted that Congress enacted the DMCA because it was "[f]earful that the ease with which pirates could copy and distribute a copyrightable work in digital form was overwhelming the capacity of conventional copyright enforcement." Universal City Studios, Inc. \textit{v.} Corley, 273 F.3d 429, 435 (2d Cir. 2001).
\item \textsuperscript{181} See, e.g., \textit{Tasini v. New York Times Co.}, 972 F. Supp. 804, 818 (S.D.N.Y. 1997) (noting that the Copyright Act of 1976 "was plainly crafted with the goal of media neutrality in mind" and that "[k]ey terms of the Act are defined to accommodate developing technologies"), rev'd on other grounds, 206 F.3d 161 (2d Cir. 2000), aff'd 533 U.S. 483 (2000).
\item \textsuperscript{182} See \textit{supra} note 98 and accompanying text.
\item \textsuperscript{183} Joyce et al., \textit{supra} note 77, at 173.
\item \textsuperscript{184} 977 F.2d 1510 (9th Cir. 1992).
\end{itemize}
The court reasoned that deeming the reverse engineering of a computer program illegal would have given Sega, a video game and console manufacturer, a “de facto monopoly,” for which a patent would be required.

The DMCA does not include a section dedicated to fair use comparable to Section 107 of the Copyright Act. This fact has led to much criticism of the DMCA’s reach. Often overlooked in the criticism, however, are Sections 1201(c) and (f) of the DMCA, which provide that the DMCA does not affect certain defenses to an allegation of infringement. In addition to specifically mentioning fair use, the DMCA explicitly permits reverse engineering. With respect to fair use, the DMCA provides that “[n]othing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.” As for reverse engineering, Section 1201(f)(1) of the Act allows anyone “who has lawfully obtained the right to use a... computer program” to reverse engineer that program to make it work with other programs.

These and other exceptions embody the same principles as the

---

185. See id. at 1517-18. The court did note, however, that its ruling did not preclude a possible finding of copyright infringement of plaintiff’s work by the defendant’s competing work. Id. at 1528; see also Atari Games Corp. v. Nintendo of Am. Inc., 975 F.2d 832, 843 (Fed. Cir. 1992) (holding that reverse engineering of a computer program to find the unprotectable ideas in the program is a fair use); Lessig, supra note 1, at 185 (stating that “[r]everse engineering is ordinarily a permissible ‘fair use’ under copyright law” (citing Sony Computer Entm’t, Inc. v. Connectix Corp., 203 F.3d 596 (9th Cir. 2000))). Reverse engineering is discussed in further detail below. See infra Part I.B.3.c.

186. Sega Enters. Ltd., 977 F.2d at 1526.


188. See supra note 118 and accompanying text; see also Lessig, supra note 1, at 187-88; Nat’l Research Council, supra note 1, at 14 (stating that the “useful practice” of “experimental circumvention” is “threatened by... the DMCA”).

189. 17 U.S.C. § 1201(c), (f); see also supra notes 113, 119 and accompanying text.


191. Id. § 1201(f)(1); see also supra note 113 and accompanying text; infra note 199 and accompanying text.


193. Id. § 1201(f)(1).

194. Id. The relevant clause states:

[A] person who has lawfully obtained the right to use a copy of a computer program may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title.

Id.; see also supra notes 113, 119 and accompanying text.

195. See supra note 113 and accompanying text.
fair use doctrine codified in Section 107 of the Copyright Act. The next section describes the practice of reverse engineering and how it is treated by various intellectual property laws, including the DMCA and UTSA.

c. Reverse Engineering

Reverse engineering has been defined as "starting with the known product and working backward to divine the process which aided in its development or manufacture." While reverse engineering is often associated with new technologies, the technique is not unique to them. Reverse engineering has long been used to discover what makes products "tick." In spite of the traditional acceptance of reverse engineering as a legitimate means of creating competitive products, the process has been the subject of much attention and debate recently. This attention and debate is due in part to the rapid pace of technological developments within the United States and abroad. In more traditional manufacturing industries, reverse engineering was often time-consuming, expensive and challenging. Today, however, experienced reverse engineers are able to discover the "secrets" of highly proprietary products such as software, computer chips, and other digital products more efficiently. The traditional

---

196. See supra notes 91-92, 168 and accompanying text. The DMCA exceptions require the researcher to act in good faith and have the purpose of advancing knowledge. See 17 U.S.C §§ 1201(g), 1201(j); see also supra note 113. This requirement is comparable to Section 107’s consideration of whether a use was for commercial purposes. See supra note 92 and accompanying text. Thus, the DMCA also comports with the Constitution’s goal of “promot[ing] the Progress of Science and useful Arts.” U.S. Const. art. I, § 8, cl. 8.

197. Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470,476 (1974); see also Samuelson & Scotchmer, supra note 51, at 1577 (defining reverse engineering as “the process of extracting know-how or knowledge from a human-made artifact”).

198. Samuelson & Scotchmer, supra note 51, at 1577 (“Reverse engineering has a long history as an accepted practice.”).

199. Id. This acceptance may be seen in the UTSA and DMCA as both laws include specific exemptions for reverse engineering. The UTSA provides that reverse engineering, in and of itself, is not a misappropriation under the Act. Cal. Civ. Code § 3426.1(a) (West 1997); see also supra note 57 and accompanying text. The DMCA states that circumvention of a technological measure is permissible only “to achieve interoperability” between hardware and/or software. 17 U.S.C. § 1201(f)(1); see also supra notes 113, 189, 191 and accompanying text. The issue in Corley, then, is what the defendant did beyond achieving interoperability (i.e., dissemination of DeCSS over the Internet). See Sableman, supra note 213, at 1327.

200. Samuelson & Scotchmer, supra note 51, at 1577 (stating that “reverse engineering has been under siege in the past few decades”).

201. See id. at 1579.

202. See id. at 1580. According to Samuelson and Scotchmer, with respect to digital products, the relevant knowledge [required for reverse engineering] is entirely on the surface of the product, at least in the absence of technical protections such as encryption . . . . [A] difficult analytical process is required to ascertain
manufacturing industries could accept reverse engineering as a valid way to create new, competing, and often more innovative products, because by the time second-comers arrived on the market, the first-comers would have had ample opportunity to recoup their research and development costs. More efficient reverse engineering technologies have made first-comers vulnerable to second-comers taking away the first-comers’ market share and profit.

When faced with such a threat in the past, industries encouraged legislative action to protect their investments (financial and otherwise) in new product development. Creators of digital content saw this threat to their intellectual property, and Congress responded with the DMCA.

With the DMCA in place, intellectual property owners had another statutory tool to safeguard their valuable rights. In the case against Corley, the movie studios relied on the DMCA to guard digital content from piracy. The DVDCCA, in contrast, looked to California’s trade secret law to protect its proprietary information. With the history of trade secrets, copyright law, and their limitations in mind, this Comment now analyzes DVDCCA v. Bunner and the Universal cases.

II. THE BUNNER AND CORLEY COURTS’ DISAGREEMENT OVER THE FIRST AMENDMENT’S IMPACT ON THE DISTRIBUTION OF DECSS

The movie studios and the DVDCCA were initially successful in their claims against Corley and Bunner, respectively. Corley and Bunner both appealed the decisions against them. The Second Circuit...
affirmed the ruling for the movie studios in the case against Corley.\textsuperscript{211} Bunner, on the other hand, prevailed in his appeal when the California Court of Appeal reversed the trial court’s decision.\textsuperscript{212} The decisions in these cases left intellectual property owners and hackers alike wondering what their rights are.\textsuperscript{213} This part reviews the decisions in each appeal.

A. Application of Trade Secrets Law (UTSA) in Bunner\textsuperscript{214}

The DVD Copy Control Association (“DVDCCA”) is a movie industry trade association that controls the rights to the encryption program known as CSS, and licenses CSS to DVD player manufacturers.\textsuperscript{215} DVDCCA alleged in its complaint against Bunner that DeCSS, which decrypts CSS,\textsuperscript{216} was illegally derived by “hacking and/or improperly reverse engineering” CSS, and that CSS was the DVDCCA’s “proprietary confidential information.”\textsuperscript{217} The DVDCCA tried to protect the secrecy of CSS through its license agreements with the manufacturers of DVD players.\textsuperscript{218} CSS was only disclosed to those manufacturers who signed the DVDCCA’s license agreements; the agreements imposed confidentiality obligations on

\begin{thebibliography}{9}
\bibitem{corley} Corley, 273 F.3d 429.
\bibitem{bunner} Bunner, 113 Cal. Rptr. 2d 338. For another example of a decision deeming a state trade secret law content-based, see \textit{Sports Management News, Inc. v. Nachtigal}, 921 P.2d 1304 (Or. 1996). This Comment disagrees with the rationale underlying the \textit{Sports Management News} decision for the reasons discussed infra Part III.B.1.
\bibitem{notes supra} See supra note 18 and accompanying text; \textit{see also} Mark Sableman, \textit{Link Law Revisited: Internet Linking Law at Five Years}, 16 Berkeley Tech. L.J. 1273, 1324-26 (2001).
\bibitem{utterance} There is no published trial court opinion in the case against Bunner, so the facts and prior history are taken from the appellate decision.
\bibitem{bunner} Bunner, 113 Cal. Rptr. 2d at 341; \textit{see also supra} notes 35-37 and accompanying text.
\bibitem{utterance} See supra notes 38-41 and accompanying text.
\bibitem{utterance} Bunner, 113 Cal. Rptr. 2d at 341 (internal quotation marks omitted). The first prong in the analysis for determining whether the UTSA was violated is establishing that the information at issue is a trade secret. \textit{See supra} notes 60-64 and accompanying text. The reverse engineering was improper because that act was prohibited by the end-user license agreement (“EULA”) that all purchasers of a CSS-enabled DVD player must consent to. \textit{Bunner}, 113 Cal. Rptr. 2d at 342. The California Court of Appeal found that “the user’s assent to the agreement was obtained only through the installment process and was therefore a ‘click wrap’ license agreement.” \textit{Id.} The court did not define “click wrap” license. One federal district court has defined such a license as a software license which is presented to the end-user as “a message on his or her computer screen, requiring that the user manifest his or her assent to the terms of the license agreement by clicking on an icon. The [software] cannot be obtained or used unless and until the icon is clicked.” \textit{Specht v. Netscape Communications Corp.}, 150 F. Supp. 2d 585, 593-94 (S.D.N.Y. 2001) (footnote omitted). Regarding the questionable force of EULAs, see Samuelson & Scotchmer, \textit{supra} note 51, at 1626-30. For an example of a case enforcing a shrink-wrap license, see \textit{ProCD, Inc. v. Zeidenberg}, 86 F.3d 1447 (7th Cir. 1996).
\bibitem{utterance} Bunner, 113 Cal. Rptr. 2d at 341; \textit{see also supra} note 35 and accompanying text.
\end{thebibliography}
the manufacturers.\footnote{219} The DVDCCA sought a preliminary injunction against Bunner and other website operators barring them from making any future disclosures of DeCSS.\footnote{220} After a hearing, the trial court granted the injunction.\footnote{221} That order enjoined Bunner and the other defendants from “posting or otherwise disclosing or distributing [DeCSS]... or any other information derived from” CSS.\footnote{222} The trial court “expressly refused to enjoin the defendants from linking to other web sites that contained protected information,”\footnote{223} and went on to state that “nothing in this Order shall prohibit discussion, comment or criticism, so long as the [DVDCCA’s] proprietary information... is not disclosed or distributed.”\footnote{224}

In support of its decision, the trial court found that the DVDCCA met the statutory requirements for UTSA protection because the DVDCCA established that CSS was its trade secret and it used reasonable efforts to protect CSS from being disclosed.\footnote{225} The trial court found that “the circumstantial evidence, available mostly due to the various defendants’ inclination to boast about their disrespect for the law, is quite compelling on... the issue of... the [d]efendants’ knowledge of impropriety.”\footnote{226} Furthermore, the trial court found that the balance of hardships weighed in the DVDCCA’s favor.\footnote{227} Bunner appealed from the lower court’s decision, claiming that his publication of DeCSS was an exercise of free speech protected by the First Amendment.\footnote{228} The DVDCCA responded that Bunner “had no First Amendment right to disclose a trade secret in violation of the UTSA.”\footnote{229} The court first considered whether computer code is speech\footnote{230} and then addressed the scope of First Amendment protection, if any, available to DeCSS.\footnote{231}

The DVDCCA argued that “DeCSS is insufficiently expressive [to merit First Amendment protection] because it is composed of source

\begin{footnotes}
\footnote{219} Bunner, 113 Cal. Rptr. 2d at 341; see also supra note 36 and accompanying text.
\footnote{220} Bunner, 113 Cal. Rptr. 2d at 341. The DVDCCA also sought a temporary restraining order. Id. at 342.
\footnote{221} Id. at 344.
\footnote{222} Id.
\footnote{223} Id. This is in contrast to the Universal decisions. See infra note 281 and accompanying text.
\footnote{224} Bunner, 113 Cal. Rptr. 2d at 344.
\footnote{225} Id.
\footnote{226} Id.
\footnote{227} Id. at 345.
\footnote{228} Id. at 340.
\footnote{229} Id. at 347.
\footnote{230} Id.
\footnote{231} Id. at 348. The Universal courts performed a similar analysis. See infra Part II.B.2.
\end{footnotes}
code and has a functional aspect." However, the Bunner court drew a distinction between source code and object code. The court held that while object code is not expressive, source code is expressive.

The court next considered whether the injunction, as a restriction on speech, violated Bunner’s First Amendment rights. Both parties recognized that First Amendment rights are not absolute. Despite this acknowledgment, the court found that “DeCSS does not fall into any... established exceptions [to the First Amendment]: it is not lewd, profane, obscene, or libelous, nor did it involve any fighting words. Although the social value of DeCSS may be questionable, it is nonetheless pure speech.” Evidently, the court did not consider other factors which may affect the scope of First Amendment protection, including whether the UTSA is content-based or content-neutral.

Because the appellate court determined that Bunner’s activities were “pure speech,” it applied independent review to the trial court’s order. The court noted that prior restraints on such speech are presumed to be unconstitutional. The court also found that the UTSA was overbroad. Comparing the UTSA to federal copyright law, the court noted that UTSA protection was infinite rather than

---

232. Bunner, 113 Cal. Rptr. 2d at 347. The plaintiff movie studios in the Universal cases made similar claims. See infra note 267 and accompanying text.
233. See supra note 39.
234. Bunner, 113 Cal. Rptr. 2d at 348. The court reached this conclusion despite the fact that source code can be “compiled” into inexpressive object code. See supra note 39 and accompanying text. The Bunner court held: DeCSS is a written expression of the author’s ideas and information about decryption of DVDs without CSS. If the source code were “compiled” to create object code, we would agree that the resulting composition of zeroes and ones would not convey ideas. That the source code is capable of such compilation, however, does not destroy the expressive nature of the source code itself. Thus, we conclude that the trial court’s preliminary injunction barring Bunner from disclosing DeCSS can fairly be characterized as a prohibition on “pure” speech.
Bunner, 113 Cal. Rptr. 2d at 348 (internal citations omitted). Whether Bunner’s activity can accurately be deemed “pure speech” is open to debate. See Sableman, supra note 213, at 1327.
235. Bunner, 113 Cal. Rptr. 2d at 348 (citing Roth v. United States, 354 U.S. 476, 484-85 (1957)).
236. Id. at 349 (emphasis added).
237. See supra Part I.B.3.A.
238. Bunner, 113 Cal. Rptr. 2d at 346, 349.
239. Id. at 351 (citing Hurvitz v. Hoefflin, 101 Cal. Rptr. 2d 558, 565 (Ct. App. 2000)). But see Shiver, supra note 66, at 362 (maintaining that preliminary injunctions granted pursuant to a trade secret misappropriation claim are not viewed as prior restraints); see also supra note 133.
240. Bunner, 113 Cal. Rptr. 2d at 350 (“The UTSA prohibits even speech that is scholarly, addresses legitimate concerns, and seeks no profit for the speaker.”). This was despite the fact that the UTSA specifically permits reverse engineering. See supra notes 57, 199 and accompanying text.
"for limited times.” Therefore, the court concluded that the reasons for granting injunctive relief in copyright infringement cases are inapplicable to trade secrets. The court concluded: "Our respect for the Legislature and its enactment of the UTSA cannot displace our duty to safeguard the rights guaranteed by the First Amendment. Accordingly, we are compelled to reverse the preliminary injunction."

The court did provide some cautionary notes, stating that it was not deciding whether a permanent injunction could be granted after a full trial. Moreover, the court concluded its opinion by noting that “anyone who infringes a copyright held by DVDCCA or by any DVD content provider may be subject to an action under the Copyright Act. We hold only that a preliminary injunction cannot be used to restrict Bunner from disclosing DeCSS.” The truth of this final word of caution is shown by the movie studios' action against Eric Corley.

B. Application of Copyright Law (DMCA) in Universal

In the case against Corley the district court issued a permanent injunction barring Corley from posting DeCSS on the web site for his magazine, 2600: The Hacker's Quarterly, and from knowingly including on the site links to other sites offering DeCSS. Corley appealed the district court's decision on both fair use and constitutional grounds.

1. The Fair Use Argument

Corley contended that despite the fact that the DMCA explicitly criminalizes circumvention, Section 1201(c)(1)—which provides that fair use is a defense to the DMCA—should be read to permit circumvention when the work accessed through that circumvention "will be put to 'fair uses.'” The court disagreed. The court held

241. Bunner, 113 Cal. Rptr. 2d at 349 (citing U.S. Const. art. I, § 8, cl. 8) (emphasis added).
242. Id. at 350.
243. Id. at 351.
244. Id.
245. Id. at 351-52. In February 2002, the California Supreme Court granted review of Bunner. DVD Copy Control Ass’n v. Bunner, 41 P.3d 2 (Cal. 2002). Because of the grant of review, the Bunner appellate decision is unpublished. See Cal. Ct. R. 976, 977.
247. Id. at 434-35. Both Corley and his magazine were defendants in the case. Id. at 439. For this reason, the court sometimes referred only to Corley, and at other times referred to the “defendants.” See, e.g., id. at 441.
248. Id. at 436.
250. Corley, 273 F.3d at 443.
251. Id.
that the provision "ensures that the DMCA is not read to prohibit the 'fair use' of information just because that information was obtained in a manner made illegal by the DMCA." That is, using the information may be permissible; getting the information through circumvention is not.

2. The Constitutional Claims

In evaluating Corley's First Amendment claims, the court continued its "'evolutionary' approach to the task of tailoring familiar constitutional rules to novel technological circumstances, favoring 'narrow' holdings that would permit the law to mature on a 'case-by-case' basis." In its analysis of the constitutional claims, the court considered "whether computer code is speech, whether computer programs are speech, the scope of First Amendment protection for computer code, and the scope of First Amendment protection for decryption code."

a. Computer Code Is Speech

The Second Circuit had little trouble affirming the district court's conclusion that computer code is speech. It drew an analogy between computer code expressed in ones and zeroes and mathematical formulae and musical scores. All three forms of communication are written in "symbolic notations not comprehensible to the uninitiated," but this fact alone does not make them ineligible for First Amendment protection.

b. Computer Programs Are Speech

Computer code, however, is not the same thing as a computer program. Code is the language in which programs are written. That is, just as a novel is written in a particular language, a computer program is written in computer code. Because programs are instructions having functional utility, whether they are protected by the First Amendment depends on "the scope of the Constitution's

252. Id. The court said that Corley's reading of 1201(c)(1) was "not only outside the range of plausible readings of the provision, but... [was] also clearly refuted by the statute's legislative history." Id.
253. Id. at 445 (citing Name.Space, Inc. v. Network Solutions, Inc., 202 F.3d 573, 584 n.11 (2d Cir. 2000), in which the court began this approach).
254. Id. at 445. The California Court of Appeal used a similar analysis in Bunner. See supra Part II.A.
255. Corley, 273 F.3d at 445-46; see also supra notes 232-34 and accompanying text.
256. Corley, 273 F.3d at 445.
257. Id. at 445-46.
258. Id. at 446; see also supra note 39.
259. Corley, 273 F.3d at 446; see also supra note 39.
While some commentators argue that only political speech should be afforded First Amendment protection, the law has not been so limited. Thus, courts have applied First Amendment scrutiny to a wide variety of speech, including the publication of instructions. With respect to such publications, however, applying the First Amendment does not necessarily lead to the conclusion that the instructions will receive First Amendment protection because "instructions are of varied types." Basically, instructions which explain how to violate laws do not merit First Amendment protection, while other instructions—even if they describe dangerous acts—are protected. The reason for this distinction is not that instructions as such are incapable of First Amendment protection, but that the First Amendment does not protect speech with the sole purpose of facilitating illegal actions.

The Second Circuit disregarded the argument that computer programs are not true speech merely because they require the use of a computer to be communicated. Thus, both computer code and computer programs “can merit First Amendment protection.” The inquiry did not end there, however, because the court also considered the effect that DeCSS's non-speech elements have, if any, on the First Amendment protection applicable to it.

The court disagreed with the contention that computer programs are pure speech. Computer code can instantaneously perform tasks and disseminate the results of those tasks worldwide via the Internet. A person must intervene for the computer to carry out these tasks, but “this momentary intercession of human action does

---

260. Corley, 273 F.3d at 446; see also supra Part I.B.3.a.
261. Corley, 273 F.3d at 446 (citing Robert Bork, Neutral Principles and Some First Amendment Problems, 47 Ind. L.J. 1, 20 (1971)).
262. Id.
263. Id. at 447; see also supra note 150 and accompanying text.
264. Corley, 273 F.3d at 447 n.17.
265. See supra note 150 and accompanying text.
266. Corley, 273 F.3d at 447 n.18.
267. Id. at 447. The court compared new technology with familiar tools: “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.” Id. The DVDCCA made a similar argument. See supra note 232 and accompanying text.
268. Corley, 273 F.3d at 449 (citations omitted).
269. Id. at 449-50. Corley “vigorously reject[ed] the idea that computer code can be regulated according to any different standard than that applicable to pure speech, i.e., speech that lacks a nonspeech component.” Id. at 451. This argument ignores the fact that computer programs may be both expressive and functional. See supra note 39. It also fails to recognize that many other activities regulated by the government have elements of speech and non-speech activity. See supra notes 154, 159 and accompanying text.
271. Id.
not diminish the nonspeech component of code, nor render code entirely speech."  Therefore, the Second Circuit concluded that "[t]he functionality of computer code properly affects the scope of its First Amendment protection."

Thus, while the court concluded that DeCSS is a form of speech requiring First Amendment protection, the court also recognized that the functionality of DeCSS must play a role in determining the scope of that protection. Having described the speech elements contained in DeCSS, the court then turned to whether the DMCA is content-based or content-neutral.

3. The DMCA Is Content-Neutral

As noted above, speech is regulated by content-based and content-neutral regulations. Recognizing this fact, the Corley court confirmed the lower court’s holding that protection for speech depends on why the restriction was imposed—that is, whether it was imposed “because of the content of the speech." Therefore, in order to determine the level of protection available to Corley’s speech (the posting of and linking to DeCSS), the court first had to establish whether the DMCA is content-based or content-neutral.

The Corley court held that in classifying a regulation as content-based or content-neutral, “[t]he government’s purpose is the controlling consideration.” The court believed that this analysis applies to expression, conduct, or any other activity that combines speech and non-speech elements.

---

272. Id. ("The only human action required to achieve these results can be as limited and instantaneous as a single click of a mouse.").
273. Id. at 452. The Corley court relied on the District Court’s analysis of computer code’s functionality. According to Judge Kaplan, the copying process is exponential. He wrote:

[T]he assumption that the chain of causation is too attenuated to justify the use of functionality to determine the level of scrutiny, at least in this context, is not [accurate]. . . [T]he only rational assumption is that once a computer program capable of bypassing . . . an access control system [such as CSS] is disseminated, it will be used. . . . Every recipient [of DeCSS] is capable not only of decrypting and perfectly copying plaintiffs’ copyrighted DVDs, but also of retransmitting perfect copies of DeCSS and thus enabling every recipient to do the same.

274. Corley, 273 F.3d at 453. According to the Second Circuit, “the capacity of a decryption program like DeCSS to accomplish unauthorized—indeed, unlawful—access to materials in which the Plaintiffs have intellectual property rights must inform and limit the scope of its First Amendment protection.” Id.
275. Id. at 450; see also supra notes 153, 155-64 and accompanying text.
276. Corley, 273 F.3d at 450.
277. Id. (citation omitted).
The district court's injunction was granted pursuant to the anti-trafficking provisions of the DMCA. The injunction barred Corley from two specific activities: (1) posting DeCSS "or any other technology for circumventing CSS on any Internet web site" and (2) "knowingly linking any Internet web site to any other web site containing DeCSS."

The court first addressed whether the DMCA's anti-trafficking clause is content-based or content-neutral, as "this classification determines the applicable constitutional standard." Corley argued that the DMCA is content-based because "the provisions specifically target ... techniques for circumventing CSS." The Second Circuit disagreed with this interpretation of the meaning of "content-based." It is true that the DMCA targets decryption codes like DeCSS, but because the government, through the DMCA, is only concerned with what DeCSS does, and not what it says, the law is content-neutral.

Having found the DMCA to be content-neutral, the Corley court then decided whether the law was constitutional under the test for such laws. The court employed a three-step analysis in this regard: (1) Does the DMCA promote a substantial government interest? If so, (2) is that interest unrelated to limiting the exercise of free speech, and (3) is the DMCA narrowly tailored to serve that interest? All

---

279. Id. at 453; see also 17 U.S.C. § 1201(a)(2) (2000).
280. Corley, 273 F.3d at 453.
281. Id.
282. Id. at 453-54; see also supra Part II.B.3.a.
283. Corley, 273 F.3d at 454 (internal quotation marks omitted).
284. Id. The court analyzed the purpose of the DMCA as follows:

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 First Amendment. The Government seeks to "justif[y] ... both the application of the DMCA and the posting prohibition to [Corley] 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."

Id. (citing Hill v. Colorado, 530 U.S. 703, 720 (2000)) (emphasis added). As to the prohibition on linking, the court recognized that just as codes like DeCSS have both speech and non-speech elements, so too do links from one web site to another (such links are commonly referred to as "hyperlinks"). Id. at 455. It follows that just as the regulation on disseminating DeCSS is content-neutral because of the code's functionality, so is the regulation on posting links to DeCSS, because of the functionality of the links. Id. at 456 ("[t]he linking prohibition is justified solely by the functional capability of the hyperlink"). This view of linking stands in contrast to the trial court's decision against Bunner. See supra Part II.A.

285. Id. at 454; see also Ward v. Rock Against Racism, 491 U.S. 781, 791 (1989) (laws that seek to stop a particular “message” from being conveyed are content-based).
286. See supra note 164 and accompanying text.
287. Corley, 273 F.3d at 450. The Second Circuit described the standard:

A content-neutral restriction is permissible if it serves a substantial
three questions must be answered in the affirmative for the law to be constitutional.288

The Second Circuit found that the government has a substantial interest in stopping unauthorized access to CSS-encrypted copyrighted works, an interest which is unrelated to the restraint on free speech.289 Therefore, the provisions of the DMCA challenged by Corley met the first two elements of the content-neutral restriction test. The last question was whether the provisions were narrowly tailored; that is, whether they burdened more speech than necessary.290

While it is true that the injunction prevented Corley from sharing the speech component of DeCSS with others, even Corley could not suggest “any technique . . . that makes a lesser restriction on the code’s speech component.”291 Moreover, the government is not obliged to create such a technique because “a content-neutral regulation need not employ the least restrictive means of accomplishing the governmental objective.”292 Thus, both the prohibition against posting DeCSS and that against linking to DeCSS did not burden more speech than necessary.293

The court commented,

[a]s they have throughout their arguments, the [defendants, Corley and his magazine,] ignore the reality of the functional capacity of decryption computer code and hyperlinks to facilitate instantaneous unauthorized access to copyrighted materials by anyone anywhere in the world. Under the circumstances amply shown by the record, the injunction’s linking prohibition validly regulates the [defendants’]

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.’”

Id. (citations omitted); see also supra note 164 and accompanying text.

288. Corley, 273 F.3d at 450; see also supra note 164 and accompanying text.
289. Corley, 273 F.3d at 454.
290. Id. at 450; see also supra note 164 and accompanying text.
291. Corley, 273 F.3d at 454 (citation omitted).
292. Id. at 455; see also supra note 164 and accompanying text. Moreover, with respect to the linking portion of the injunction, the Court of Appeals upheld the test created by Judge Kaplan in the District Court. Corley, 273 F.3d at 457. Judge Kaplan’s test was based on that in New York Times Co. v. Sullivan, 376 U.S. 254 (1964). Judge Kaplan’s test required:

- clear and convincing evidence that those responsible for the link (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.

Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 341. Sullivan required evidence of actual malice on the part of the defendant for a public official plaintiff to recover libel damages. Sullivan, 376 U.S. at 279-80; see also supra notes 130, 142-49 and accompanying text.
293. Corley, 273 F.3d at 454.
opportunity instantly to enable anyone anywhere to gain unauthorized access to copyrighted movies on DVDs.\textsuperscript{294}

The court felt that it was faced with "two unattractive alternatives: either tolerate some impairment of communication in order to permit Congress to prohibit decryption that may lawfully be prevented, or tolerate some decryption in order to avoid some impairment of communication."\textsuperscript{295} In the face of such a challenge, the court was "mindful" that it is up to Congress to decide such issues.\textsuperscript{296} Thus, in upholding the injunction against Corley, the Second Circuit was fulfilling the legislature's intent to stop trafficking in decryption technologies.\textsuperscript{297}

The Second Circuit, unlike the California appellate court, also recognized that the appropriate means for evaluating a First Amendment defense in an intellectual property case lies in the content-neutral/content-based dichotomy. Part III will describe how this analysis could have been applied in \textit{Bunner}. Part III also contends that most intellectual property laws are content-neutral.

**III. THE UTSA AND DMCA ARE CONTENT-NEUTRAL AND THE COURTS SHOULD DETERMINE THEIR CONSTITUTIONALITY AS SUCH**

As noted above, intellectual property owners have a variety of laws at their disposal to protect their assets.\textsuperscript{298} The DeCSS cases highlight the uncertainty surrounding distribution of a circumvention device that is based on the proprietary information of another, and is used to access copyrighted materials.\textsuperscript{299} While the cases are distinguishable because different laws were applied in each case, the two judgments also show that intellectual property law is not yet settled with respect to free speech rights in the digital age.\textsuperscript{300}

Although the Second Circuit and the California Court of Appeal applied different laws, both courts had to decide whether CSS and DeCSS are "speech" within the meaning of the First Amendment.\textsuperscript{301}

\begin{footnotes}
\footnotetext[294]{\textit{Id.} at 457. The court further noted that while it recognized that the injunction prohibited Corley from linking to the entirety of any sites containing DeCSS, including any protected speech on those sites, "those who maintain the linked sites can instantly make their protected material available for linking by Corley by the simple expedient of deleting DeCSS from their web sites." \textit{Id.} at 457 n.32. This "simple expedient" would, of course, help stop the further spread of DeCSS via the Internet.}
\footnotetext[295]{\textit{Id.} at 457-58.}
\footnotetext[296]{\textit{Id.} at 458. ("[I]t is not for us to resolve the issues of public policy implicated by the choice we have identified.").}
\footnotetext[297]{\textit{See supra} notes 122-23 and accompanying text.}
\footnotetext[298]{\textit{See supra} notes 50-51 and accompanying text.}
\footnotetext[299]{\textit{See supra} note 18 and accompanying text.}
\footnotetext[300]{\textit{See supra} note 19 and accompanying text.}
\footnotetext[301]{\textit{Id.} at 446; DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338, 347, review granted, 41 P.3d 2 (Cal. 2002).}
\end{footnotes}
The courts agreed that CSS and DeCSS are forms of speech which required them to consider the First Amendment in determining the scope of protection that could be granted to the intellectual property owners. Despite agreeing on this point, however, the California court held that under the UTSA, a preliminary injunction barring Bunner from posting DeCSS was improper. In contrast, the Second Circuit believed it was appropriate to prohibit Corley from both posting, and providing links to, DeCSS because the DMCA is a content-neutral regulation of speech.

The basis for the disparate outcomes in the DeCSS cases lies, in large part, with each court's treatment of the First Amendment's impact on the distribution of DeCSS. The Second Circuit, which decided the case against Corley about two weeks after the California Court of Appeal handed down its decision, explicitly noted this difference of opinion: "We have considered [Bunner]. To the extent that [it] disagrees with our First Amendment analysis, we decline to follow it." This disagreement may stem from the Bunner court's failure to address whether the UTSA is content-based or content-neutral.

The Corley decision included a determination that the DMCA is content-neutral, and this established the scope of First Amendment protection available to Corley's conduct. The Bunner court, however, did not address the issue of whether the UTSA was content-based or content-neutral at all. However, such an evaluation must be made for a court to weigh properly the rights of intellectual property owners such as the DvdCCA. This oversight led the California Court of Appeal to conclude that the UTSA “must bow to... the First Amendment”—a conclusion that was based on an incomplete analysis of the UTSA and that was therefore incorrect. While this deference to the First Amendment appears at first blush to be appropriate, it is misguided. Had the Bunner court not omitted the crucial step of asking if a given regulation is content-based or content-neutral, it would have found that the UTSA is content-neutral. This omission tipped the scales in favor of the defendant without giving proper weight to the rights granted the DvdCCA by the UTSA. The California Court of Appeal essentially deemed the UTSA unconstitutionally overbroad.

302. Corley, 273 F.3d at 445, 449-50; Bunner, 113 Cal. Rptr. 2d at 348.
303. Bunner, 113 Cal. Rptr. 2d at 351.
304. Corley, 273 F.3d at 455, 457.
305. The Second Circuit decided Corley on Nov. 28, 2001, Corley, 273 F.3d 429, and the case against Bunner was decided on Nov. 1, 2001, Bunner, 113 Cal. Rptr. 2d 338.
306. Corley, 273 F.3d at 455 n.29.
307. Id. at 453-54.
308. See supra notes 153-65 and accompanying text.
309. Bunner, 113 Cal. Rptr. 2d at 349.
310. Id. at 350-51.
determination was incorrect. This part argues that both the UTSA and DMCA are content-neutral regulations of speech. This part then explains why both laws are constitutional under the Supreme Court's standard of review for content-neutral regulations.

A. Computer Code and Computer Programs Are Forms of Speech Protected by the First Amendment

Courts should perform a two-step analysis to determine whether a law encroaches on First Amendment rights. The first step is to decide if the questioned activity is one covered by the First Amendment. If the activity is not sufficiently expressive, it is not protected by the First Amendment. If the activity does meet this threshold requirement, it is speech protected by the Constitution. The second step, then, is to examine the law to determine whether it is content-based or content-neutral.

As for the distribution of DeCSS as speech, one critic of the Corley decision has contended that instructions, such as those of computer code, have "traditionally received the highest level of First Amendment protection," but this criticism is inaccurate. As discussed earlier, teaching someone to do an illegal act is not a form of speech protected by the First Amendment. Therefore, if the intent is to encourage others to do something illegal, that intent may be considered in determining the First Amendment's impact on restrictions of such speech.

In cases dealing with computer programs such as CSS and DeCSS, courts may also consider the functionality of the programs and how they will be used in determining whether they are "pure speech" or a combination of expressive and non-expressive elements. In its discussion of computer code and computer programs, the Corley court

311. See supra notes 153-56 and accompanying text.
312. See supra note 156-57, 161 and accompanying text.
313. See supra notes 161, 277-80 and accompanying text.
315. See supra notes 150, 269-73 and accompanying text.
316. See supra note 150 and accompanying text.
317. For a description of how courts determine the scope of protection available to computer programs, see Hitchcock and Needleman, supra note 50, at 563-67; see also Sableman, supra note 213, at 1327. Sableman argues that "intent and context do matter," and that the Universal cases are property viewed as "‘linking-plus’ cases, not ‘linking’ cases.... [T]he defendant was held liable because it did more than just post Internet links." Id. According to Sableman, the "plus" in the Universal cases was Corley's "active encouragement of downloading and use of the DeCSS utility." Id. For this reason, Sableman argues that Corley's precedent should not apply to linking-only cases. Id. Both the California trial court and the Reimerdes court made note of the defendants' attitudes about using DeCSS. See Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 313 (S.D.N.Y. 2000), aff'd sub nom. Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001); DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338, 344, review granted, 41 P.3d 2 (Cal. 2002).
performed such an analysis.\textsuperscript{318} The court said, "[i]n considering the scope of First Amendment protection for a decryption program like DeCSS, we must recognize that the essential purpose of encryption code is to prevent unauthorized access."\textsuperscript{319} Relying on Supreme Court precedent,\textsuperscript{320} the Second Circuit held that DeCSS's functional capabilities "must inform and limit the scope of its First Amendment protection."\textsuperscript{321} Sometimes, though, a program is shared with others in order to evaluate the program.\textsuperscript{322}

If the defendant is sharing the program to encourage discussion of technological issues, such a purpose may weigh in favor of granting the speech greater First Amendment protection.\textsuperscript{323} However, if the program is intended to be used without significant human interaction, that fact should favor the property owner.\textsuperscript{324} If a computer program is intended merely to perform a task, it is primarily functional, as opposed to expressive.\textsuperscript{325} This intermingling of expressive and functional, or speech and non-speech, elements in posting DeCSS\textsuperscript{326} complicates matters, but does not render the issue unsolvable.\textsuperscript{327} In

\begin{itemize}
\item \textsuperscript{318} Corley, 273 F.3d 429, 452-53 (2d Cir. 2001).
\item \textsuperscript{319} Id. at 452.
\item \textsuperscript{320} Id. at 453. The Second Circuit relied on Red Lion Broadcasting Co. v. FCC, 395 U.S. 367, 386 (1969).
\item \textsuperscript{321} Corley, 273 F.3d at 453.
\item \textsuperscript{322} See supra note 188 and accompanying text.
\item \textsuperscript{323} See Recent Case, supra note 314, at 2047 (suggesting that "[s]trict scrutiny should apply when the primary purpose of posting or linking to code is expressive").
\item \textsuperscript{324} See id. at 2048 (stating that "[d]iminished scrutiny should apply to the distribution of computer code intended to be executed rather than read").
\item \textsuperscript{325} See Scott W. Pink, Publishing in the Digital Age, 15 Transnat'l Law. 305, 308 (2002). Likewise, in assessing a defendant's linking activities, courts may consider how such links work. The Reimerdes court did just that, noting that the links on Corley's web site that "automatically commence the process of downloading DeCSS" were clearly violative of the DMCA, so too were the ordinary links, as it could be presumed that once directed to the site containing DeCSS, the end user would download the program. Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 325 (S.D.N.Y. 2000), aff'd sub nom. Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001). But see Sableman, supra note 213, at 1324-26. Sableman argues that by looking at intent, the Reimerdes court inappropriately focused "on the background, prior acts, and apparent intent of the defendants and their links" and "viewed and analyzed the links at issue as part of an overall pattern of conduct . . . [that] met the standard for derivative liability." Id. Nonetheless, Sableman concludes that "intent and context do matter." Id. at 1327; see also supra note 324.
\item \textsuperscript{326} See Corley, 273 F.3d at 451. The Bunner court found that the defendant's activities were "pure" speech. Bunner, 113 Cal. Rptr. 2d at 348. This finding may have been due in part to the fact that the DVDCCA did not allege that Bunner engaged in expressive conduct, even though the DVDCCA did argue that DeCSS's functionality should limit the level of First Amendment protection available to it. Id. at 347-48; see also Beckerman-Rodau, supra note 49, at 62-63 (observing that "if trade secret law is viewed from the perspective that it makes certain conduct unlawful, any attempt by a trade secret owner to prohibit third-party disclosure of a trade secret is merely an attempt to prohibit conduct, not speech" (footnotes omitted)); see also Beckerman-Rodau, supra note 49, at 4 n.19.
\item \textsuperscript{327} See supra notes 99, 151-64, 278 and accompanying text.
\end{itemize}
fact, the issue is in many respects no more complex than in earlier cases dealing with First Amendment defenses when the expressive activity at issue had both speech and non-speech elements.\footnote{328}{See supra notes 151-63, 278 and accompanying text. In addition, some believe that the defendants in the DeCSS cases shared the program “with political motivation.” Ryan Christopher Fox, \textit{Old Law and New Technology: The Problem of Computer Code and the First Amendment}, 49 UCLA L. Rev. 871, 875 (2002). But see Bruce Ledewitz, \textit{Civil Disobedience, Injunctions, and the First Amendment}, 19 Hofstra L. Rev. 67 (1990). Ledewitz defines civil disobedience as “expressive conduct even the participants admit is not protected by the First Amendment.” \textit{Id.} at 67-68. Moreover, according to Ledewitz’s definition, the “deliberate destruction of valuable property” is not civil disobedience. \textit{Id.} at 70 n.15. This is because “unlike the sit-in, the arrest does not restore the object of the protest to his former condition.” \textit{Id.} Whether Bunner or Corley were engaging in “true” civil disobedience, however, may not affect the analysis, as such a motive could not provide them with immunity. As Judge Kaplan wrote in \textit{Reimerdes}, \textit{[C]omputer code is not purely expressive any more than the assassination of a political figure is purely a political statement. . . . [Code’s] expressive element no more immunizes its functional aspects from regulation than the expressive motives of an assassin immunize the assassin’s action}. \textit{Reimerdes}, 111 F. Supp. 2d at 304. The tenuousness of the “political motivation” defense is evidenced by its proponents’ attempts to draw distinctions between Bunner’s and Corley’s conduct and that of those who spread computer viruses. One commentator has argued that while the widespread distribution of DeCSS warrants protection because of its “political” underpinnings, the creators of the Michelangelo computer virus of the early 1990s did not deserve such immunization from punishment “even if the virus was specifically designed with the intent of some sort of misplaced political protest. . . . The level of harm and damage done in [that] case is so great that it would outweigh even a substantial expressive nature in the code.” Fox, \textit{supra}, at 882-83. This analysis seems to rest on an assumption that DeCSS is harmless, despite the threat that it poses to copyright owners. See supra note 13 and accompanying text. The National Research Council described this assumption: \textit{[T]he widespread use of digital information and networks has created increased opportunities for ordinary people to engage increasingly in acts of infringement that are difficult to detect, yet mount up. The availability of this technology has bred a mind-set that seems to regard all copyrighted works as available for the taking without paying compensation}. Nat’l Research Council, \textit{supra} note 1, at 132-33.\footnote{329}{Corley, 273 F.3d at 445, 449; Bunner, 113 Cal. Rptr. 2d at 348.}}

In any case, based on precedent, both the Second Circuit and the California Court of Appeal held that computer code and computer programs are sufficiently expressive to merit First Amendment protection.\footnote{329}{Corley, 273 F.3d at 445, 449; Bunner, 113 Cal. Rptr. 2d at 348.} Given these precedents, as well as the \textit{Bunner} and \textit{Corley} decisions themselves, it does not seem plausible to claim that a computer program such as DeCSS is so lacking in expressive elements that it falls beyond the scope of the First Amendment’s reach. With this step in the analysis complete, this Comment now turns to the challenged laws—the UTSA and the DMCA.
B. The UTSA and DMCA Are Content-Neutral

According to the Supreme Court's decision in Ward v. Rock Against Racism,331 "[t]he principal inquiry in determining content neutrality . . . is whether the government has adopted a regulation of speech because of disagreement with the message it conveys."331 According to Ward, "[t]he government's purpose is the controlling consideration."332

1. The UTSA Is Content-Neutral

Based on Ward, the UTSA is a content-neutral regulation. That is, the UTSA's purpose of protecting the proprietary information of intellectual property owners,333 a purpose the Bunner court itself acknowledged334 is "unrelated to the content"335 of the speech it regulates. Therefore, the UTSA's prohibition of speech is permissible if, under Ward's intermediate level of scrutiny, it is "narrowly tailored to serve the government's legitimate, content-neutral interests."336

a. The UTSA Is "Narrowly Tailored"

The California court's basic premise for its judgment seems to be that the UTSA goes too far in its attempt to protect intellectual property.337 The Bunner court said that the UTSA is overbroad because it "prohibits even speech that is scholarly, addresses legitimate concerns, and seeks no profit for the speaker."338 The UTSA provides only that "[a]ctual or threatened misappropriation may be enjoined."339 Based on the Act's definition of misappropriation,340 discussing the technology of a copy protection system is lawful so long as the trade secret itself is not disclosed. In addition, the UTSA gives courts discretion to fashion suitable remedies in misappropriation cases.341 The California trial court in Bunner did just that in its preliminary injunction through two provisions. First, the court did not enjoin Bunner from providing links to other web sites containing DeCSS.342 Second, and contrary to the

331. Id. at 791 (emphasis added).
332. Id.
333. See Bunner, 113 Cal. Rptr. 2d at 346; see also supra note 55 and accompanying text.
334. Bunner, 113 Cal. Rptr. 2d at 346.
335. Ward, 491 U.S. at 791.
336. Id. at 798; see also supra notes 164, 287 and accompanying text.
337. See supra notes 240-43 and accompanying text.
338. Bunner, 113 Cal. Rptr. 2d at 350.
340. Id. § 3426.1(b); see also Lemley & Volokh, supra note 55, at 229-30.
342. Bunner, 113 Cal. Rptr. 2d at 344; see also supra note 218 and accompanying
appellate court’s admonition of the UTSA’s overbreadth, the trial court expressly permitted “discussion, comment [and] criticism [of CSS], so long as [CSS] is not disclosed or distributed.” The trial court’s ability to narrowly tailor relief to the DVDCCA without restricting discussion of CSS belies the appellate court’s contention that the UTSA is overbroad. In addition, trade secret laws such as the UTSA protect First Amendment rights through their narrow definitions of trade secrets and misappropriation, which include exemptions for “independent derivation” and reverse engineering.

The Bunner court also expressed concern with the UTSA’s protection of trade secrets “for a potentially infinite period of time.” While it is theoretically possible that a trade secret will last forever, reliance on trade secrecy law for protection may be risky because there is always the possibility that the trade secret will be discovered through either “independent invention or reverse engineering.”

Alternatively, if the trade secret is otherwise disclosed to the relevant industry, the information will no longer be protected as a trade secret. Once a trade secret becomes widely known through one of the above scenarios, the information contained in that trade secret is “immediately available for wider use.”

Therefore, due to the fragile nature of trade secrets, “courts routinely grant injunctions against [their] continued unauthorized disclosure . . . regardless of whether the secret was initially obtained

---

343. See supra notes 235-38 and accompanying text.
344. Bunner, 113 Cal. Rptr. 2d at 344.
345. It is also worth noting that the Court of Appeal treated a preliminary injunction as a prior restraint. Id. at 350. In actuality, the two are not necessarily synonymous, at least not in the context of trade secrets. See supra notes 66 and 133. In fact, the definition used by the court shows this. The court defined a prior restraint as “an administrative or judicial order ‘forbidding certain communications when issued in advance of the time that such communications are to occur.’” Bunner, 113 Cal. Rptr. 2d at 350. The speech at issue in Bunner had already occurred; the DVDCCA only wanted to enjoin further speech that would disclose DeCSS. The Court of Appeal misconstrued the purpose and meaning of preliminary injunctions. Preliminary injunctions preserve the status quo and prevent further harm to plaintiffs. See Luten, supra note 66, at 456. They are an ideal tool for intellectual property owners such as the DVDCCA to protect their proprietary assets during the pendency of a trial. Preliminary injunctions are granted before a full trial on the merits, but this does not make them a prior restraint. See supra note 66 and accompanying text. In addition, the trial court’s refusal to enjoin discussion of CSS and DeCSS allowed Bunner’s right to discuss CSS and DeCSS to remain intact, while preventing the further disclosure of the DVDCCA’s trade secret. Such an injunction would have a de minimus effect on Bunner’s free speech rights, if any effect at all.
346. See supra notes 56-57 and accompanying text.
347. Bunner, 113 Cal. Rptr. 2d at 350.
348. See Cundiff, supra note 18, at 81.
350. Id.
351. Cundiff, supra note 18, at 81.
These elements of the UTSA show that the law is narrowly tailored. The next question is whether the UTSA serves legitimate government interests.

b. The UTSA "Serves the Government's Legitimate, Content-Neutral Interests"

The UTSA protects trade secrets by making their disclosure illegal. By its very nature, this prohibition of disclosure regulates speech. Thus, while the UTSA's purpose is not to regulate speech, the act nonetheless "has an incidental effect on" speakers such as Bunner who disclose trade secrets. Under Ward, such an incidental effect does not make the UTSA content-based. This is because the California legislature's intent in enacting the UTSA was not to regulate discussion of CSS or any other topic, but to regulate the disclosure of trade secrets. Moreover, the UTSA's prohibition of the disclosure of CSS as a trade secret is "justified without reference to the content of regulated speech." The justification for the UTSA—as for many other intellectual property laws—is its protection of valuable property. The UTSA prohibits the disclosure of all trade secrets, no matter what form that disclosure takes, and no matter whether the trade secret is a computer program, blueprint, or written words. The UTSA is therefore content-neutral. If the California Court of Appeal had applied an analysis similar to the foregoing, it would have discovered that a preliminary injunction barring Bunner's disclosure of DeCSS was appropriate. This Comment now describes the Second Circuit's analysis of the DMCA in the case against Corley.

2. The DMCA Is Content-Neutral

Unlike the California appellate court, the Second Circuit recognized that it is proper to vary the level of scrutiny applied to laws affecting First Amendment rights based on whether the regulation is content-based or content-neutral. The Second Circuit's decision is

352. Id. at 80.
353. See supra note 55 and accompanying text.
355. See Beckerman-Rodau, supra note 49, at 63 ("[A]ny limitations on speech rights are simply unavoidable consequences of the necessity of preserving a trade secret.").
356. Ward, 491 U.S. at 791 ("A regulation that serves purposes unrelated to the content of the expression is deemed neutral, even if it has an incidental effect on some speakers or messages but not others."") (emphasis added)).
357. Id. (holding that a law adopted "because of disagreement with [a] message" is content-based); see also supra note 55 and accompanying text.
359. See supra note 55 and accompanying text.
based on this understanding. According to the Second Circuit, because the DMCA is content-neutral, an intermediate level of scrutiny is applied to Corley's First Amendment claims.\footnote{Universal City Studios, Inc. v. Corley, 273 F.3d 429, 454, 456 (2d Cir. 2001).}

In evaluating Corley's free speech defense, the Second Circuit explicitly noted that the scope of First Amendment protection is not uniform for all types of expression.\footnote{Id. at 446; see also supra note 264 and accompanying text.} The court held that computer programs are speech,\footnote{Corley, 273 F.3d at 447.} but at the same time recognized that their functionality gives computer programs a non-speech element.\footnote{Id. at 451; see also supra notes 39, 317-27 and accompanying text.} Having recognized this functionality, the Second Circuit was able to consider Corley's free speech rights in the proper context.

The court held that the functionality of CSS and DeCSS is not speech under the First Amendment.\footnote{Corley, 273 F.3d at 447.} This fact led the court to conclude that the government's purpose in regulating the use of DeCSS and other decryption devices through the DMCA was content-neutral.\footnote{Id.; see also supra Part II.B.3.} The court then determined that the injunction prohibiting Corley from posting or linking to DeCSS did not burden more speech than necessary, and therefore upheld the District Court's order.\footnote{Id. at 451; see also supra notes 39, 317-27 and accompanying text.} Generally speaking, the Second Circuit's decision was proper. Courts must be exact, however, in describing the distinction between content-based and content-neutral laws. In its opinion in Corley, the Second Circuit reached the right result in barring Corley from further distributing DeCSS, but the court did misstate some of the concepts pertaining to the interaction between intellectual property rights and content-based and content-neutral laws.

3. The UTSA and DMCA Are Content-Neutral Even Though the Content of the Expression Is Considered

According to the Corley court, "the scope of protection for speech generally depends on whether the restriction is imposed because of the content of the speech."\footnote{Id. at 446; see also supra note 264 and accompanying text.} This proposition is similar to Corley's argument that the DMCA was content-based because it "targeted" DeCSS.\footnote{Id. at 454; see also supra notes 282-85 and accompanying text.} Corley was right when he made this argument,\footnote{See supra notes 282-85 and accompanying text.} the DMCA prohibits the circumvention of protection systems,\footnote{17 U.S.C. § 1201 (2000).} and DeCSS circumvents protection systems. It does not follow, however, that the DMCA is content-based.

\footnote{Universal City Studios, Inc. v. Corley, 273 F.3d 429, 454, 456 (2d Cir. 2001).}
\footnote{Id. at 446; see also supra note 264 and accompanying text.}
\footnote{Corley, 273 F.3d at 447.}
\footnote{Id. at 451; see also supra notes 39, 317-27 and accompanying text.}
\footnote{Corley, 273 F.3d at 447.}
\footnote{Id.; see also supra Part II.B.3.}
\footnote{Id. at 451; see also supra notes 39, 317-27 and accompanying text.}
\footnote{Id. at 454; see also supra notes 282-85 and accompanying text.}
\footnote{See supra notes 282-85 and accompanying text.}
\footnote{17 U.S.C. § 1201 (2000).}
In evaluating the content-neutrality of intellectual property laws such as the DMCA, courts should consider not only whether the law applies to the speech in question because of the content of the speech, but also if the law's purpose is to prevent discussion of the idea—or "message"—embodied in the speech. The legislatures' neutrality toward the "message" embodied in DeCSS is evidenced by what the DMCA and the UTSA do not prohibit, such as reverse engineering, independent creation and research. Ideas about CSS and DeCSS can still be expressed through these channels. The UTSA and DMCA merely prohibit the disclosure of CSS and the trafficking of DeCSS, respectively. These prohibitions inherently affect speech. That is, for each law to serve effectively those interests unrelated to the suppression of free speech, speech may nonetheless be affected because the only way to disclose and traffic in DeCSS is to communicate it to another. Such effects, however, do not transform an otherwise content-neutral law into a content-based law.

To determine whether the disclosure of certain information misappropriates a trade secret, or whether a computer program circumvents access controls, it is as a matter of course necessary to look at the content of the speech. The UTSA and DMCA are "content-based" only insofar as the courts must determine if the information—the content of the speech—disclosed is in fact a trade secret, or if the program—again, the content of the speech—really does circumvent access controls. The concern with such content is not the content's message. The concern is rather with the conduct—the non-speech elements—that are inextricably linked to the content, i.e., the misappropriation of a trade secret or the circumvention of access controls. The Second Circuit in Corley expressly recognized that the purpose of the DMCA was to prohibit action, not speech: "The Government seeks to 'justify'y]... the DMCA... solely on the basis of the functional capability of DeCSS to instruct a computer to decrypt CSS." When message and conduct are linked, courts must extricate the seemingly inseparable speech and non-speech elements in judging whether a law violates First Amendment rights. As cases such as Spence v. Washington and United States v. O'Brien show, this is not an impossible task.

372. See supra notes 57, 113 and accompanying text.
373. See Beckerman-Rodau, supra note 49, at 21-22, 63.
374. Ward, 491 U.S. at 791.
375. Id.
377. See supra notes 153-64 and accompanying text.
380. See supra notes 154, 159 and accompanying text.
CONCLUSION

When an otherwise prohibited act is defended on First Amendment grounds, courts must weigh the countervailing interests of the right to free speech and the government's intent in regulating the act in question. Speech (or, more broadly, expressive conduct) may be enjoined by courts when the legislature seeks to achieve a goal unrelated to the restriction of speech.

Some laws require courts to evaluate a defendant's speech to determine whether the speech violated a plaintiff's intellectual property rights. Courts must be entirely clear that an evaluation of such speech does not make such laws content-based. The Second Circuit commented that restrictions imposed on speech because of its content are deemed content-based. Under Ward v. Rock Against Racism, however, courts are to consider regulations based on speech's message to be content-based. It may be too easy for other courts to interpret the Second Circuit's comment to mean that all intellectual property laws are content-based despite such laws' neutral rationale, and despite the Second Circuit's later clarification of what makes a law content-based. Just as one cannot claim that yelling "fire" in a crowded theater is an act protected by the First Amendment, one cannot seek First Amendment protection for making illegal copies of movies.

381. Corley, 273 F.3d at 450.
383. Corley, 273 F.3d at 454.