The Digital Millennium Copyright Act of 1998 was created with the intention of protecting copyright holders in the new digital age. Yet in many cases this has actually stifled lawful access and fair use. Fair use is defined in 17 U.S.C. Section 107 of the Copyright Act of 1976, and states, "Fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright."[1] Lawful users have long enjoyed these benefits in the analog age, but digital technologies have complicated matters, and anti-circumvention measures have been put in place that directly block certain uses of digital material, the same uses that are considered fair in analog formats. As Hirtle explains, "One of the most remarkable things about the DMCA is that the prohibition against circumvention applies even if the intended use is otherwise lawful and noninfringing."[2] The DMCA was created with honorable intentions, but in practice has placed too much power in the hands of copyright holders at the expense of users. By preventing the creation and distribution of fair use tools, the DCMA currently makes it impossible for users to exercise those rights.

Section 1201 of the DCMA "bans the circumvention of technological measures put in place by content creators to protect their work, and also bans the trafficking in devices of circumvention."[3] Naturally, these measures were put in place in order to prevent Internet piracy, but these limitations also go beyond what is necessary. For instance, a student can make a copy of a page from a book for educational purposes without permission because that is considered a fair use of the material. However, under the DCMA, the student may not be able to do the same from a digital version of the book if the technology includes anti-circumvention measures. The student would have to go to greater lengths to

copy the page, which might involve getting permission from the copyright holder. Fair use says that the student should not have to go to such lengths. This is only one example of the headache that the DCMA can cause, and it will become an even bigger issue as more and more information becomes available in digital formats.

It has also been said that the DMCA is being used in a way that prevents innovation and competition, again in relation to fair use access of published information. The major issue here is what this means for software, that is, "the vehicles for ensuring open access, such as fair use and the ability to reverse engineer closed code, have been put under unprecedented restriction... [which] removes the public's only access to the ideas and functional elements embodied in software."[4] An example of the harm that the DMCA has allowed involves the prosecution of a Russian company, Elcomsoft, who created a product called the Advanced e-Book Processor. It "allowed those who have legitimately purchased e-books to make fair uses of their e-books, uses otherwise made impossible by the restrictions of the Adobe e-book format."[5] A programmer who worked on this software, Dmitry Sklyarov, was arrested in Las Vegas after promoting the product at a tech conference. He was then held in the United States for several months, and Elcomsoft faced criminal charges as well. While all charges were eventually dropped, this was certainly a serious overreaction to a product that was designed only to promote the fair use of digital information.[6]

While the DMCA aims to prevent piracy and protect copyright holders in the digital age, it has clearly done so at the expense of fair use and competition. Those who typically benefit from the DMCA are major companies, like film studios and Apple. The film industry ensures that DVD encryption prevent users from making personal-use copies, while Apple "has used the DMCA to tie its

iPhone and iPod devices to Apple's own software and services."[7] The DMCA has also been used to block competition in a variety of products, from laser printer toner cartridges to garage door openers. The digital realm is a complicated beast, but this isn't the first time that technology has presented problems to copyright. We saw it when the VCR introduced the concept of time shifting, something that at the time seemed capable of dismantling television viewing as we knew it. Yet change came and the industry adapted. [8] The Internet and digital technology pose even more complex issues, but a solution to the problem surely exists. The answer likely lies in the intelligent minds of software designers, who are capable of making products that permit fair use of digital works, while also protecting copyright holders. If the right laws are in place to promote such innovation, the right technology will follow. As such, section 1201 of the DMCA should be updated to allow the creation digital technology that will enable fair use. The current prohibition of this kind of innovation goes against the original intentions of U.S. copyright law, which aims to encourage such creativity. Lessening these constraints will make it possible for technology and copyright law to find harmony once again.

[1] Hirtle, Peter B. Copyright and Cultural Institutions: Guidelines for Digitization for U.S. Libraries, Archives, and Museums. Ithaca, NY: Cornell University Library, 2009.

[2] Ibid.

[3] Abah, Adedayo Ladigbolu. "Fair use, the First Amendment, and the Digital Millennium Copyright Act (DMCA): A Case for Heightened Judicial Scrutiny?"

Ph.D. diss., University of South Carolina, 2004.

- [4] Dixon, Rod. "Dislodging Copyright from its Constitutional Base: When Technological Borders of Access and the DMCA are Applied to Software." Journal of Internet Law, 10, no. 2.
- [5] "Unintended Consequences: Fifteen Years Under the DMCA." in Electronic Frontier Foundation. March 2013 Available from eff.org.
- [6] Ibid.
- [7] Ibid.
- [8]Strickland, Lee S. "Copyright's Digital Dilemma Today: Fair use Or Unfair Constraints?" Bulletin of the American Society for Information Science and Technology, 30, no. 2.