

COPYRIGHT & DIGITAL TECHNOLOGY

I. Does Digital Technology Mean End of Copyright?

- A. “Intellectual property law cannot be patched, retrofitted, or expanded to contain digitized expression any more than real estate law might be revised to cover the allocation of broadcasting spectrum (which, in fact, rather resembles what is being attempted here). We will need to develop an entirely new set of methods as befits this entirely new set of circumstances. John Perry Barlow
 - 1. Copyright has always evolved in response to new technologies, new ways of using copyrighted works & new business models
 - 2. Exclusive rights apply regardless of what technology used to exercise them although digital technology poses many challenges.
- B. Ideally, copyright law should balance owner’s desire to protect works used in new ways while ensuring broad dissemination to the public

II. New Technologies

- A. New technologies provide both threats & opportunities
 - 1. Initially, threats must be dealt with, but in long run, copyright owners usually benefit from technological advances.
 - a. Example: Photocopy machine, VCR, radio
 - b. Entertainment industries concern over new technology is valid although it’s the use of technology rather than technology itself.
 - c. Illegal use of technology poses threat
 - 2. Digital technology & the Internet have changed the way people listen to music.
 - a. Copyrighted works much more accessible than in past.
 - b. Much more easily infringed
 - c. Disputes involving copyright & technology are disputes between businesses.

- (1) New businesses develop to profit from use of new technologies & usually resist paying copyright owners of the content they use or make available.
- B. Digital technology involves converting information such as sounds into mathematical bits represented by a series of 0s and 1s.
1. Virtually no loss of sound quality regardless of how many generations of copies are made.
 2. Easy & inexpensive way to reproduce & distribute unlimited number of copies.
- C. The Internet is a worldwide network of computers
1. Allows digital content to be transferred from one computer to another
- D. **How Music Is Used on the Internet**
1. Downloading: Making copies of digital music files
 - a. Reproduction - Downloaded files stored on hard drive or other storage device & played on demand.
 - b. Usually in heavily compressed format such as MPEG Layer 3 (MP3)
 2. Streaming: Continuous transmission of music over Internet in real time so listeners hear music as it is transmitted
 - a. No permanent copy of music made on listener's computer
 - b. Example: Webcasting (Internet radio)
 - c. Done by downloading small parts at a time

III. **Music Licensing Complexity**

- A. Most uses involve musical composition & sound recording & often multiple rights traditionally licensed separately
- B. Reproduction right exercised continuously since computer networks operate by copying from one computer to others.

1. Licenses to reproduce copyrighted sound recordings obtained directly from the record company or artist which owns the sound recording.
 2. Mechanical license also required for copyrighted musical compositions - from publisher or Harry Fox Agency in U.S.
- C. Transmission of music over the Internet can constitute public performance.
1. The fact that a performance occurs at different times for different users does not prevent it from being a public performance.
 2. Licensing for musical compositions handled by performing rights organizations (ASCAP, BMI and SESAC in U.S.)
 3. Sound recordings licensing by Sound Exchange.

IV. **The Digital Millennium Copyright Act (DMCA)**

- A. Amendment to 1976 Copyright Act enacted in 1998.
- B. Very technical & complicated provisions
- C. **Anti-Circumvention**
1. DMCA makes it illegal to make or distribute products used to circumvent technological measures used by copyright owners to protect works.
 2. Example: Distribution of software which enables users to defeat copy protection technology encoded into DVD movies violates anti-circumvention provisions
- D. **Protection of Copyright Management Information**
1. Copyright management information is information embedded into a digital file which identifies the work such as the author, the copyright owner, the performer, and the terms and conditions for the use of the work.
 2. Can be embedded so that it remains in a file regardless of where the file is transmitted, allowing the copyright owner to detect unauthorized uses and track royalty payments.
 3. DMCA prohibits alteration or removal of copyright management

information

E. Online Service Provider Liability

1. DMCA creates limitations on the liability of online service providers for contributory & vicarious copyright infringement.
2. Online service provider = a provider of online services or network access, or the operator of facilities therefore.”
3. Service provider must adopt and implement policy of terminating accounts of subscribers who are repeat infringers
4. Notice & Takedown: Upon receiving notice of claimed infringement, must promptly take down or block access to the material.
5. Must have a designated agent to receive infringement notices