Intellectual Property in the Digital Age

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Rapid innovation ➔ disruption

This lecture: disruption in intellectual property

Disclaimers:

• I am not a law professor (but I understand technology)

• This is political: I have opinions

• The lecture is US-centric, though similar fights are playing out all over the industrialized world
SOPA/PIPA protests (Jan 18, 2012)

Imagine a World
Without Free Knowledge

For over a decade, we have spent millions of hours building the
largest encyclopedia in human history. Right now, the U.S.
Congress is considering legislation that could seriously damage
the free and open Internet. For 24 hours, to raise awareness, we
are blocking Wikipedia.

Make your own banner!

Facebook · Google · Twitter

Tell Congress: Please don't censor the web!
Intellectual Property

• Very different from tangible property

  If you have this laptop, then I don’t (please don’t steal it)
  But we can both have this presentation
  (intellectual property is not stolen, it’s infringed)

• Is really a limited monopoly protected by a set of statutes and court precedents

  Tangible property: “Thou shalt not steal”
  The Ten Commandments

  Intellectual property: “Only one thing is impossible for God: to find any sense in any copyright law on the planet.”
  Mark Twain

Intellectual Property at the Founding of the U.S.

“...the benefit even of limited monopolies is too doubtful, to be opposed to that of their general suppression”
Thomas Jefferson (in a letter to Madison)

Eventually, with Madison’s help, he is convinced that monopolies may be granted to encourage inventions and creativity: for the public benefit.

That’s how we get the Constitution’s intellectual property clause (I.8):

“The Congress shall have Power [...] To 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”
Types of Intellectual Property

- **Patent**: for new useful inventions
  - Gives exclusive right to make, use, sell
  - Requires public disclosure; proof of novelty/nontriviality; fees; lasts 20 years

- **Copyright**: for original creative writings/audio/video/art
  - Gives exclusive right to copy, distribute, make derivative works, perform
  - Requires registration; lasts 14 years + a possible 14-year extension (1790)
  - Automatic; lasts 95 years if corporate, lifetime + 70 years if personal (today)

- **Trademark** (not in the Constitution!): for naming products/services
  - Gives exclusive right to use a name in a particular market (e.g., Apple)
  - To enforce, have to prove consumer confusion or trademark dilution

- **Trade Secret** (not in the Constitution!): for inventions + business data
  - Gives exclusive right to use as long as no one else discovers the secret
  - Inappropriate use, disclosure, and receipt punishable by state and federal laws

Sources: [http://chillingeffects.org](http://chillingeffects.org), [http://teachingcopyright.org](http://teachingcopyright.org)

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**Fair Use**

Not all copying requires copyright owner’s permission
If it’s fair use, it doesn’t. Fair use depends on

1. The purpose and character of the use of copyrighted work
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
4. The effect of the use upon the potential market for or value of the copyrighted work

Source: Electronic Frontier Foundation’s “Teaching Copyright”
[http://www.teachingcopyright.org/handout/fair-use-faq](http://www.teachingcopyright.org/handout/fair-use-faq)
The Betamax Case
Sony Corp. of America v. Universal City Studios, Inc. (1984)

• Question: is it legal to sell VCRs that have TV tuners?
  – Obviously, VCRs allow copying copyright material by recording TV off the air

• Held (by a 5-4 vote of the Supreme Court)
  – Many broadcasters don’t mind this kind of copying
  – Even those who mind can’t forbid private home use for time-shifting, because it’s fair use
  – Hence, VCRs have substantial non-infringing uses and can be sold

• Initially, justices felt 6-3 the other way. What if that view prevailed?
  – No VCRs?
  – No movie rentals?
  – No home camcorders?
  – No DVDs?
  – No Netflix?
  – No TiVo?

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• Today’s Analog: is recording off YouTube for private viewing fair use?
  – I am not aware of any court cases addressing this directly
  – Would probably depend a lot on the facts of the particular case
Challenges for Copyright Today

- Copyright tries to control copying and distribution, but that’s what computers do all the time
  - Copying is no longer a conscious act for a person
  - Computers copy without human involvement
  - Impossible to tell which copying is authorized and who is at fault (e.g., http://www.playlist.com/: who is breaking the law when you use it?)
  - Infringement on a massive scale is easy, fast, and cheap
- Information is not tied to physical medium
  - What do you buy when you buy bits (e.g., mp3 or ebook -- who has control https://www.eff.org/deeplinks/2009/07/orwell-2009-dystopia)?
  - What happens to the first sale doctrine (can you resell/loan)?
  - Copying is essential to make it usable now and to preserve it for later
- Millions of works in the same place, with different copyright owners
  - Knowing who owns what copyrights is impractical
  - Who is responsible for policing infringement? Can web sites be held liable?
- Software is covered by copyright law (covered for 95+ years)
  - Yet it is a useful device (other devices covered for only 20 years by patents)
  - Copying is essential to make usable now and to preserve it for later

(Attempted) Remedies

- Digital Millennium Copyright Act, passed in 1998
  - Relieves third parties of liability and facilitates speedy takedowns via notice/counternotice regime (problem: shoot first, ask later; see EFF’s Hall of Shame http://www.eff.org/takedowns)
  - Anti-circumvention (problem: limits innovation, preempts fair use)
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  – Anti-circumvention (problem: limits innovation, preempts fair use)
• Law enforcement action (domain name seizures)
  – Gov’t obtains a court order forcing the ISP to “unlist” the site from its directory (technically, to redirect a DNS entry; see [megaupload.com](http://megaupload.com), [www.rojadirecta.org](http://www.rojadirecta.org), and [www.eff.org/cases/puerto-80-v-us](http://www.eff.org/cases/puerto-80-v-us))
  – Problems: weak burden of proof, silences legitimate speech, broadens jurisdiction beyond borders

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http://www.rojadirecta.org
(ruled legal in Spain!)

This domain name has been seized by ICE - Homeland Security Investigations, Special Agent in Charge, New York Office, in accordance with a seizure warrant obtained by the United States Attorney’s Office for the Southern District of New York and issued pursuant to 18 U.S.C. §§ 3001 and 2323 by the United States District Court for the Southern District of New York.

It is unlawful to reproduce or distribute copyrighted material, such as movies, music, software or games, without authorization. Individuals who willfully reproduce or distribute copyrighted material, without authorization, risk criminal prosecution under 18 U.S.C. § 2319. First-time offenders convicted of a criminal felony copyright law will face up to five years in federal prison, restitution, forfeiture and fine.
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- **Proposed SOPA/PIPA**
  - Would codify procedures for these domain seizures and search engine delisting
  - Additional problem: breaks Internet (DNS) on a technical level