

# Publishing on the World Wide Web

## Intellectual Property Rights and the Internet

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## Outline

- Case Studies to Consider
- Copyright Issues
- The Ethics of Search Engines
- Trademark Issues
- Copyright Protection Technologies
- Concept of "Superdistribution"
- Case Studies Continued -- One Law Professor's Answers

## Disclaimer and Overview

- Today's lecturer is *not* an attorney
- Don't take today's lecture as legal advice
- In general:
  - Be creative....
  - ...but be careful
  - When in doubt
    - Ask permission
    - Or don't do it

## Case Study 1: Photos for a Sports Web Site

- Major radio station in a big city has a sports talk show
- Host runs a Web site covering major sports stories
- Host includes photos of recent events (e.g. Tyson biting ear)
- Obtains photos from ESPN's Sportzone site
- Does not think he needs permission because the photos are small thumbnails

## Case Study 2: Dilbert Cartoon Archive on an Intranet

- A fan of Dilbert works for a major international company
- Puts up a collection of 200 favorite cartoons she's collected over time
- Publishes on her personal home page, accessible only to company's intranet
- Company has 250,000 employees
- She believes this is fair use because
  - Access is limited
  - "It's just like putting copies up outside my cubicle"

## Case Study 3: Wall Street Journal for Virtual Course Pack

- A professor of management likes to use real case studies
- Has built a Web site of case studies from the news
  - Clips articles from the Wall Street Journal and scans them
  - More recently, takes articles from the Journal's Web site
- Has over 200 articles in the virtual course pack
- Access limited to students in class

# Publishing on the World Wide Web

## Copyright, Trademarks, Patents

- All seek to protect intellectual property rights
- Copyright: protects a particular expression of an idea (article, book, song, poem, painting, music video, movie)
- Trademark: protects words or symbols that provide identity or brand for a company (or other entity)
- Patent: protects inventions (whether physical devices, or industrial processes, or even computer algorithms)

## Why Protect Intellectual Property?

- Copyright
  - Reward creativity, originality
  - Promote many kinds of works: fiction, scholarly writing, newspapers, plays, music -- even TV and films
- Patents
  - Reward invention
  - New devices, industrial processes, even genetically engineered forms of life
- Trademarks
  - Allow businesses to build brands
  - Allow consumers to choose favored brands

## Copyright: A Balancing Act

### • Creators and Publishers

- Authors
- Screenwriters and studios
- Musicians and record labels
- Publishing houses

### • Consumers

- Readers
- Moviegoers
- Listeners (radio, home stereo)
- Libraries

## Copyright Basics

- Under current copyright law any original work is copyrighted
- Copyright now lasts the life of the author plus 50 years
  - 75 years for non-individual (eg corporate) creators
- Registration is a way of establishing that the work existed in a particular form
  - Registration is *not* required for protection
  - May be necessary to recover damages
- **I**e you can violate someone's copyright even if no copyright notice and/or unregistered

## Assignment and Licensing

- Authors/creators can "assign" copyright to another party
  - Typically a publisher (or movie studio or TV network...)
  - At that time, the copyright belongs to the assignee
- Copyright can be licensed to others for limited purposes
  - Implicitly (you have a right to read the book you bought)
  - Explicitly (contract allows a movie theater to show a film)

## Plagiarism vs Copyright Violation

- Somewhat similar concepts, actually very different
- Copyright violation is a legal concept
  - The particular expression of an idea is protected
  - Subject to civil or criminal sanctions spelled out in law
- Plagiarism is a moral concept
  - Stealing the work of another (research, term paper)
  - May be theft of words, in some cases theft of new ideas
    - E.g. Sue does research in cloning, and Wally publishes a paper based on her lab notes
    - It's still plagiarism even if the words are different

# Publishing on the World Wide Web

## Concept of “Fair Use”

- Allows *limited* copying without permission for
  - Personal use
  - Educational purposes
  - Reviews
- Educational example: Article in today’s newspaper is relevant to a class you’re teaching
  - It’s fair use to hand out copies; there’d be no time to seek and obtain permission
- Review examples:
  - Quoting a few lines from a new pop song in a review
  - Printing a thumbnail (tiny) replica of a photograph

## Don’t Assume Too Much

- Attribution does not equate to permission
  - Good academic practice encourages attribution
  - Gives credit where due, adds weight to your argument
  - That’s how scholarship works
  - But a citation doesn’t give you the right to reuse
- Silence is not assent
  - If you ask and the copyright holder fails to answer, you don’t have permission
- Fair use is often stretched beyond the limit

## Copyright Violations: Civil versus Criminal

- Copyright violator may be subject to both civil and criminal sanctions
- Civil:
  - Copyright holder sues you for lost revenue
- Criminal:
  - Government prosecutes you for criminal violations
  - E.g. you set up a factory making pirated music CDs
  - Note that current law makes it a felony to sell more than 10 copies of copyrighted work w/out permission

# Break

Continue

## Copyright Case Study: Far Side

- Suppose you are a fan of The Far Side cartoon
- Suppose you scan in a copy of your favorite Far Side
- You put the image on your Web page
- You clearly label the cartoon as Gary Larson’s work
- Have you violated the copyright of Gary Larson and his syndicate?

## Gary Larson’s Opinion

- Larson is retired as a cartoonist
- The “back file” or archive of his work is his major source of income now
- Old cartoons recycled into calendars, paperback books, etc
- Thus Internet archives of Larson’s work could do him great financial harm
- Sent a letter to news groups imploring people not to put up scanned images

# Publishing on the World Wide Web

## Copyright and the Web: Special Issues

- Incorporation without permission is generally agreed to be a violation of copyright
- If you *cannot* download an image (or audio or video clip) and reload it on your own server for distribution
- But the hyperlink itself presents new and interesting cases...
- Only litigation and new legislation will resolve

## The Ticketmaster vs Microsoft Dispute

- Microsoft's "Seattle Sidewalk" site on the Web
- Includes concert, sporting event calendars
- ...and hyperlinks to Ticketmaster's site to purchase those tickets
- Ticketmaster objects, claiming a right to control how people enter their Web site
- If visitors don't see the front page, they don't see all the ads
- If Ticketmaster prevails, ominous implications for search engines

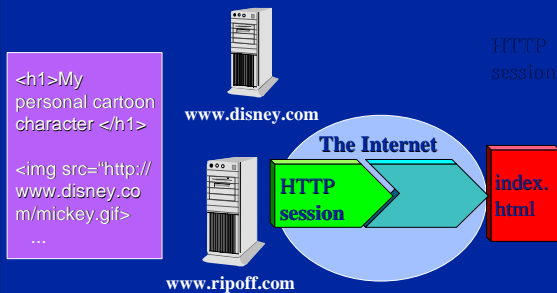
## Search Engines: Ethical and Copyright Concerns

- Search engines based on spiders that crawl Web sites and index every word
- In essence, they build a "concordance" of the Web
- But a search engine allows a user to skip the "front matter" of a site
- ... where sites have their own banner ads
- Consumer gets the content without seeing the ads
- Is the search engine in effect violating the rights of the copyright holder?

## Meta-crawlers and Copyright

- Meta-crawlers are search engines that do one search against multiple engines
- E.g. www.askjeeves.com
- Now, it's the search engine sites whose banner ads are skipped
- Can a search engine company complain, since they do the same thing to content sites?

## How to Violate Copyright without Ever Copying the Data Yourself



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## The WebTV Controversy

- WebTV is a dial-up (telephone) Internet service
- Your TV serves as a display monitor
- WebTV tries to present an integrated and coherent view of the Net
- Also inserts advertisements on screen while waiting for Web sites you choose to download
- Several prominent content providers object
  - Note that TV stations have inserted ads in movies for years
  - ... but they license the movies for broadcast

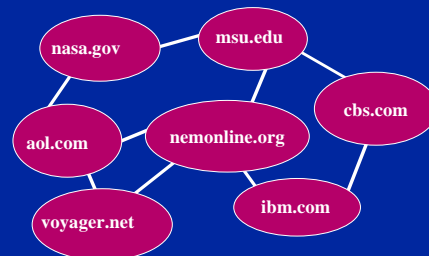
## The Web Channel Case

- Suppose a cable TV station wants to show the Web
- They develop software that robotically visits a set of Web sites
- Weather Channel, NANDO News, Detroit News, etc
- All these sites are freely available on the Net
- If the Web Channel proceeds without permission, are they violating copyright?

## License to E-mail, Not to Steal

The screenshot shows a ZNN news article. The main headline is "Microsoft tries new end-around Java" by Lisa St. Dunlop, dated December 15, 1997. A red circle highlights a search bar at the bottom of the page with the text "Search ZNN" and a "Search" button.

## Internet Domain Names and Trademark Disputes



## Trademark Case: Kaplan vs Princeton Review

- Kaplan and Princeton Review are two test prep services
- Kaplan makes it to the Internet first
- Also registers princeton.com
- Later Princeton Review tries to register its address; finds it taken
- Will Princeton Review get its name back?

## Trademark Case: Roadrunner.com

- A small Internet Service Provider (ISP) starts in Albuquerque
- Firm starts doing business in 1993
- They name the firm after the state bird: roadrunner.com
- 1996: Warner Brothers studios starts to register all its cartoon characters
  - eg wileycoyote.com
- Warner Brothers threatens to sue Roadrunner
- Will Warners prevail? Should they?

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## Internet Trademark Disputes

- Internic Registration Services managed by Network Solutions Inc (NSI)
- Conflicts in use of domain names inevitable
  - Policies favor those with registered trademarks in case of disputes
  - Even though they would not necessarily win in litigation
- One to think about: clue.com (ISP versus game manufacturer)
- One reason for the IAHC plan for new top-level domains (e.g. .web, .firm, .store)
  - Open up name space to satisfy more players

# Break

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## Internet Intellectual Property Protection Technologies

- Tools to help prevent and detect violations
- Degraded content: give away samples that are not worth stealing
- Tracking tools: watermarks
- Secure container tools: Cryptolopes

## Degraded Content

- Give away samples, make people buy the real thing
- Still images: lower the resolution and/or image size
- Audio (esp music): lower the resolution, limit the duration of a clip
- Software: limited functionality, or stops functioning after a trial period

## Digital Watermarks

- Tracking mechanism
- A visible mark (trademark, seal) is applied to image
- Cannot be easily removed with digital image editors (e.g. Photoshop)
- Mark is obvious when you look for it, but does not impede scholarly uses

## Vatican Archive Watermark Example



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## Invisible Watermarks

- “Metadata” is digitally embedded in the image file
- Strewn throughout the file in a way that’s hard to remove
- Image looks the same to the naked eye
- But a program can determine that a given file is protected

## Digimarc’s Marcs spider

- All content is watermarked
- The MarcSpider crawls the Web, looking for watermarked content
- Reports given to content owners, detailing what sites have your content
- You find offenders, and send “cease and desist” letters -- or sue
- Playboy Enterprises = early adopter
- May become routine throughout Web publishing

## Audio Watermarks

- Liquid Audio is a pioneer
- Inherently must be inaudible
- Otherwise music would become unusable
- N2K records = Internet-only record label
- Sells by mail order
- Also sells singles and full-length CDs via the Net
  - Can burn your own CD if you have a CD-R device
- Content you download is watermarked, therefore protected

## Fingerprints versus Watermarks

- Could store specific information about a transaction with each copy
  - Who bought it
  - When transaction took place
  - What the authorized uses are
- Now, if redistributed, can identify who did the redistribution

## Persistence of Watermarks

- Digital files undergo compression/decompression
- Images can be printed and scanned back in
- Audio could be converted to analog and back
- Watermarking vendors claim their schemes survive these transformations
- ... unless you’ve degraded the quality so much as to render useless

## Secure Containers

- Content is digitally encrypted for distribution
- Metadata -- info about the content -- is in clear text
- To open the container, a transaction takes place over the Net
- You must supply correct password (or credit card info, etc) to view
- Secure viewers prevent cut/copy/paste operations
- IBM’s Cryptolopes -- main example

# Publishing on the World Wide Web

## Superdistribution

- With secure containers, you don't really care how widely your content is distributed
- Every new reader/viewer/listener must become authorized
- So you encourage widespread copying
  - On Web sites
  - On Usenet
  - On CD-ROMs
  - Via streaming media
- Copying and authorization for access are decoupled

# Break

Continue

## Case Studies: One Set of Opinions

- Thanks to Mark Lemley, Assistant Professor, University of Texas Law School
- ...for his comments on these hypothetical cases
- Note that these are *not* legal opinions
- If you need legal advice, talk to an attorney

## Case Study 1: Photos for a Sports Web Site

- Extremely unlikely to be considered fair use
- Use is commercial, entire photo is taken
- Assuming ESPN holds copyright, radio host is infringing
- He should ask permission or get permission from some other site

## Case Study 2: Dilbert Cartoon Archive on an Intranet

- Unquestionably an infringement of copyright holder's rights to copy, distribute, and display Dilbert cartoons
- Fan's claim of fair use is weak
  - Extensive copying
  - Widespread distribution
  - Undercuts United Media's traffic on their Web site
- Note: United Media aggressively protects their intellectual property

## Case Study 3: Wall Street Journal for Virtual Course Pack

- Sixth Circuit Court recently held that copying for a paper course pack is not fair use
- That case is controversial:
  - Rested on the for-profit nature of the copy company
- If upheld, presumably Internet-based course packs would also require permission
- Fact that this is educational, and access is limited, *may* suffice for fair use claim
- Safest bet for the professor is to ask permission from Wall Street Journal



# Publishing on the World Wide Web

## Do You Understand Your Copyright Responsibilities?

- “There is an extraordinary amount of naivete about copyright out there, and universities can be the worst offenders. They give students unlimited Internet access and let them publish Web pages for free, but they don’t educate them about the copyright law as they should.”  
-- Eileen Kent, Vice President for New Media, Playboy Enterprises

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