# Stronger copyright protection for cyberspace: desirable, inevitable, and irrelevant

Andrew Odlyzko AT&T Labs - Research

amo@research.att.com http://www.research.att.com/~amo

# Striking contrasts:

- wide outcries about stronger copyright laws limiting access to information
- unprecedented flood of (free) information
  - notable example: Encyclopaedia
    Britannica
    - \* 1990: \$1500–2000 for print set, or travel to local library
    - \* 2000: free access at http://www.britannica.com/

## Main conclusion:

information goods marketplace:

- technology and economics will change it drastically, and produce wider and better access
- copyright laws will have small effect

Complaints about copyrights, publishers, ..., have an ancient tradition:

|b|ooks seem to me to be pestilent things, and infect all that trade in them ... with something very perverse and brutal. Printers, binders, sellers, and others that make a trade and gain out of them have universally so odd a turn and corruption of mind that they have a way of dealing peculiar to themselves, and not conformed to the good of society and that general fairness which cements mankind.

John Locke, 17th century

My view: not "moral rights" of authors, but the Anglo-American philosophy: copyright is an artificial barrier, erected by government to promote social goals:

[We] must take care to guard against two extremes, equally prejudicial: the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merit, and the reward to their ingenuity and labour: the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.

> Lord Mansfield, Sayre v. Moore case, 1785

Copyright (in the Anglo-American tradition): a balancing of interests between content producers and the public.

However, content producers have not had to concede much.

Content producers have always had the power of:

- pricing
- versioning

Content producers also have the power of private contracts, and falling transaction costs are making that power much easier to apply.



Example: Depository libraries (containing a copy of each copyrighted work under old law) often regarded as safeguard against perceived abuses, such as the Church of Scientology using copyrights to suppress distribution of internal documents.

Historical origins different:

The University of Oxford owes its library to the diplomatist and scholar Sir Thomas Bodley. It was opened in 1602, and Bodley secured for it a special bounty: he persuaded the Stationers' Company to assign to his foundation a free copy of every book printed in the realm of England. This concept of a 'copyright library' was legally embodied in the Licensing Act of 1663 which stipulated the presentation of three free copies of every publication; the number was gradually increased to eleven but eventually limited to six.

S. H. Steinberg, "Five Hundred Years of Printing"

main point of stronger copyright protection, UCITA, etc.:

• facilitating price discrimination

Example of price discrimination: scholarly journal subscription rates

- individuals \$100
- libraries \$1,000

market segmentation (price discrimination) in book trade:

- hardcover: \$25
- trade paperback: \$15
- regular paperback: \$6
- libraries, used bookstores, etc.

The important thing is to maximize the value of your intellectual property, not to protect it for the sake of protection.

Shapiro & Varian "Information Rules"

Often content producers took a long time to realize what was in their best interests, as shown by the examples of circulating libraries in 18th century England and videotape rentals in the U.S. in the 1980s. Both were initially feared, then fervently embraced.

When circulating libraries were first opened, the booksellers were much alarmed, and their rapid increase, added to their fears, had led them to think that the sale of books would be much diminished by such libraries. But experience has proved that the sale of books, so far from being diminished by them, has been greatly promoted, as from these repositories many thousand families have been cheaply supplied with books, by which the taste of reading has been become much more general, and thousands of books are purchased every year by such as have first borrowed them at those libraries, and after reading, approving of them, become purchasers.

> James Lackington English bookseller (1746-1815)

Unusual economics of information goods: strong network effects and low marginal costs.

This leads to counterintuitive behavior by content producers, such as tolerating high rates of illicit use:

Although about three million computers get sold every year in China, people don't pay for the software. Someday they will, though. And as long as they're going to steal it, we want them to steal ours. They'll get sort of addicted, and then we'll somehow figure out how to collect sometime in the next decade.

Bill Gates, 1998

Negligible marginal costs imply that content producers have no incentive to restrict access.

To reduce consumer surplus, content producers can use versioning (real time vs. 20-minute delayed stock quotes, library books vs. personally owned ones) and site licensing.

Frequently voiced concerns about content producers limiting access through pay-per-view schemes unjustified, as predicted in "Fixed fee versus unit pricing for information goods" by Fishburn, Odlyzko, and Siders, First Monday, July 1997. Available at www.research.att.com/~amo/doc/eworld.html

- producers get higher revenues through bundling
- consumers have a strong preference for flat rates
- flat rate (subscription, ...) pricing stimulates usage

[Elsevier's] goal is to give people access to as much information as possible on a flat fee, unlimited use basis. [Elsevier's] experience has been that as soon as the usage is metered on a per-article basis, there is an inhibition on use or a concern about exceeding some budget allocation.

K. Hunter of Elsevier, 2000

Contract law as alternative to copyright law: increasingly attractive and common

Example: videotapes

- Hollywood problem: could not discriminate between rental stores and individual consumers
- contract law allowed more price discrimination (for a gain in social welfare) than copyright law

# videotapes

- first solution: \$65 per tape
- second solution:

\$65 per tape for movies expected to be rented

\$10 per tape for home purchase

problem: rental stores could not afford adequate inventory

• third solution:

contract with rental stores to sell them videotapes for \$3 or \$4 per tape plus 40% from every rental What about the role of government and copyright law?

Governments are not losing power:

- taxes as share of GDP stable in industrialized countries
- registered Washington lobbyists:

mid-1997: 14,946

mid-1999: 20,512

# Governments' problems:

- slow
- laws not flexible enough
- dare not interfere too much in the Internet economy
- captive of content producers
- content producer moves largely promote social welfare

### Conclusions:

- Flexibility of contracts on the Internet will give content producers as much control as they want, but they will not use most of it.
- Stronger copyright laws will be enacted, but will play minor role.
- The flood of free or inexpensive information will continue to grow.

Paper for this conference will eventually be available at

www.research.att.com/~amo/doc/eworld.html

Several papers on electronic journals, pricing, and related issues are already available at that URL.