Understanding Copyright Markets

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Three Goals

State the problem of market definition in copyright

Market Structure and Copyright Law

Derive implications for market definition

Problem of Market Definition

- Fair use and "rights of first entry"
- Derivative works
- Distribution rights
- Copyright misuse
- Copyrightable subject matter

Antitrust market definition

Smallest set of products that satisfy the "small but significant and nontransitory" price increase test

Antitrust vs. Copyright market definition

- Institutional differences
 - Agency decision making versus judicial decision making
 - Problem of distinguishing copying, adapting, and distributing
 - Precision and heuristics
- Economic differences
 - Price competition versus non-price competition
 - Public goods
 - Price discrimination

Copyright Markets

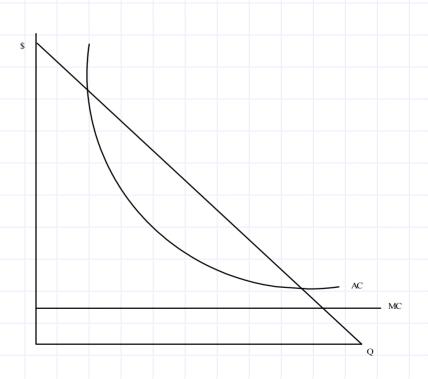
- Market definition question is one of scope of copyright owner's entitlement
- Optimal variety of works
 - Difficult tradeoff between variety and quantity (ex: textbooks, CD's)
 - Basis for justifying non-transformative uses
- Big Question is one of entry
 - Licensed entry
 - Free entry

Possible Copyright Markets

- Entitlement structure will determine copyright markets
 - Separability Assumption not appropriate
- Two examples of possible arrangements:
 - Purely privatized copyright markets
 - Mixed public goods and utilization

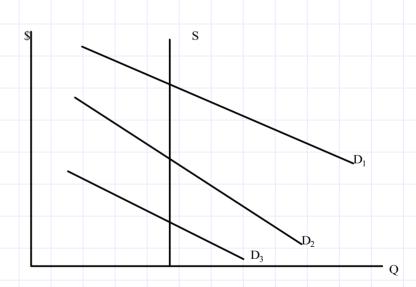
Purely privatized copyright markets

 DMCA-style legal entitlements combined with technological protections



Limited Public Good and Utilization

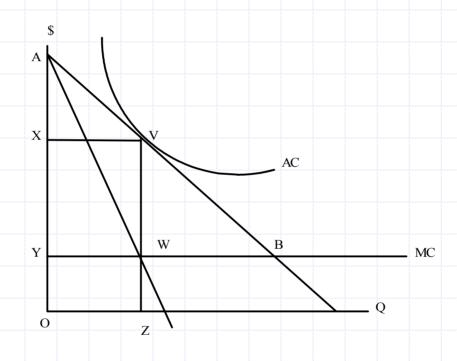
Price discrimination with sharing



Monopolistic Competition

- Actual copyright markets are somewhere in between these two extremes
- Multiple firms producing different works
 - Note definition of work to include new uses of existing works as a different work
- Question becomes one of how entry through licensing affects the number of permitted new works

Monopolistic Competition Model



Consumer surplus: AXV Producer surplus: XVYW Deadweight loss: VWB

When Will a Copyright Owner Permit a New Work?

- A new work will affect demand for the old work with resulting effect on producer surplus
- A new work will also generate consumer & producer surplus in the new market which the copyright owner will try to appropriate through licensing fees (L)
- Copyright owner will permit new work if $\Delta PS_0 + L > 0$

Is it Socially Desirable to have a new work?

New work is socially desirable if $CS_N + PS_N + \Delta CS_O + \Delta PS_O > 0$

Note that copyright owner will license new work if

$$\Delta PS_0 + L > 0$$

First Implication

Entry through licensing is not necessarily socially desirable

Copyright owner may license either too many or too few new works

Numerical Example One: Too few new works

- $CS_0 = 10$; $PS_0 = 15$
- $CS_N = 10$; $PS_N = 3$; $\Delta CS_O = -5$; $\Delta PS_O = -5$
- Since total CS+PS increases by 3, new work should be allowed
- But the copyright owner in the original will not license it unless he can obtain more than 5 units in licensing fees.

Numerical Example Two: Too many new works

- $OCS_0 = 10; PS_0 = 15$
- $CS_N = 3$; $PS_N = 6$; $\Delta CS_O = -5$; $\Delta PS_O = -5$
- New work is not socially desirable.
- Copyright owner might still license new work if he can capture the full 6 units of PS.

Why might licensed entry not be efficient?

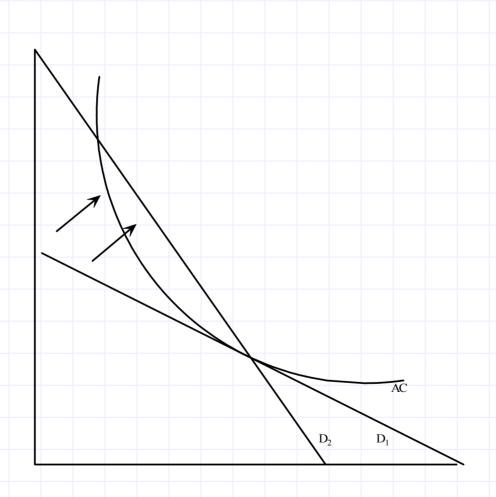
 Ability of copyright owner to capture CS and PS in new market (appropriability effect)

Effect of new works on PS in existing markets (trade diversion effect)

Appropriability effect

- Since copyright owner cannot capture all the surplus from new uses, licensing will result in too few new works
 - Problem is that L < CS_N + PS_N
- Measuring AE: Analogous to transaction cost analysis of fair use: Are there impediments to licensing that limit the ability of the copyright owner to capture the surplus in the new market?

Understanding Trade diversion: the case of complements



Trade diversion effect

- This effect captures competition between old and new works.
 - Complements: increases PS in market for old work
 - Substitutes: decreases PS in market for old work

Decomposing the effects Case One: Too Few New works

$$CS_N + PS_N + \Delta CS_O + \Delta PS_O > 0$$

but
 $\Delta PS_O + L < 0$

Case arises when works are substitutes and AE > TDE

Decomposing the effects Case Two: Too Many New Works

$$CS_N + PS_N + \Delta CS_O + \Delta PS_O < 0$$
but
$$\Delta PS_O + L > 0$$
Case arises either when

- (1) Works are substitutes and AE < TDE OR
- (2) Works are complements and decrease in CS_O is greater than surplus in new market (copyright owner is "cannibalizing old market")

Why aren't these effects internalized through licensing?

Information costs

- Internalizing two externalities with one instrument
 - Copyright owner would need to appropriate all surplus and meter quantity
- Persistence of deadweight loss

Implications for copyright doctrine-I

- Difficulty of separating assignment of entitlements from definition of market
- Monopolistic competition model as benchmark
- Licensed entry in general may not be socially optimal
- Licensed entry can result in too few or too many new works

Implications for copyright doctrine -II

- In situations where licensing would lead to too few new works, define market narrowly to permit more unlicensed entry.
- In situations where licensing would lead to too many new works, limit copyright owner's rights by permitting non-transformative copying or deny copyright protection altogether.

Implications for copyright doctrine-III

- Substantial non-infringing use test
 - Entails comparing CS_N, PS_N, & △ PS_O
 - Focus should be on likelihood that copyright owner will license use
- Derivative work
 - Both categorical and expectations approaches lacking
 - Compare with fair use: who has burden?

Implications for copyright doctrine-IV

- Scope of first sale doctrine
 - Distinguishing between production and distribution of work
 - Problem of cannibalizing old market

Applications to copyright cases

- Case One: too few new works
 - Sony & American Geophysical: substitutes and AE > TDE. Market should be defined narrowly.
- Case two: too many new works
 - Case of substitutes
 - Command hierarchies
 - Legal codes and standards
 - Case of complements and cannibalizing old market
 - Fair use for out of print works
 - Treatment of parodies

Back to the starting point: Napster and Rights of First Entry

- Right of first entry makes little economic (as well as little legal) sense
- Market definition should rest on whether copyright owner would have licensed a socially desirable use
- Problem is one of how to characterize Napster as creating substitutes or complements to existing CD's