

COMP 3410 – I.T. in Electronic Commerce

eTrading 4. eTrading in Digital Objects & P2P

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ANU RSCS, 2 October 2012

Copyright
2000-12



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E-Trading eTrading in Digital Objects Agenda

1. Copyright
2. Copyright Objects
3. The Copyright Battleground
4. Digital-Era Business Models

Copyright
2000-12



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1. Copyright: A Bundle of Monopoly Rights

Of Long Standing

- **reproduction**
- **publication**
- **adaptation**
- performance

More Recent

- broadcast
- moral rights

US/WIPO/Au Post-Internet

- communication to the public, **dissemination by wire or wireless means**, incl.
 - 'push' (electronically transmit) e.g. email, FTP put
 - 'pull' (make available online), for public access when they wish, e.g. web, FTP get

Copyright
2000-12



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2. Copyright Objects

- **Format Types**
 - Page-format publications (text, image)
 - Sound
 - Animation, video
 - 'Multi-media' – each with its own rights
 - Software
 - 'Objects' – rights relate to each element
- **Content Types**
 - News, weather, sport, musical performances, cartoons, films, video-clips, entertainment, infotainment, edutainment and education

Copyright
2000-12



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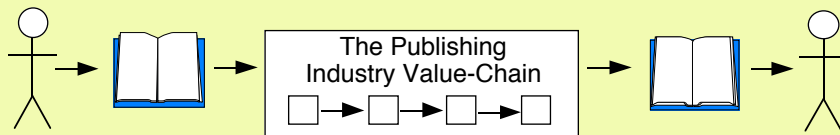
Copyright Objects in the Digital Era – 1

- Convenient, inexpensive **Creation** ('born digital')
desktop publishing packages, PC-based graphic design tools, animation, digital music generators
- Convenient **Conversion** of existing materials
scanners, OCR,
digital audio-recording, digital cameras
- Near-costless **Replication**
disk-to-disk copying, screen-grabbers,
CD/DVD-burners as a consumer appliance

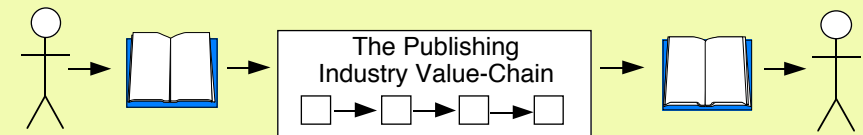
Copyright Objects in the Digital Era – 2

- Very rapid **Transmission**, unmeasurably low costs
modem-to-modem transmission, CDs/DVDs in the mail,
emailed attachments, FTP-download, web-download
- Inexpensive and widespread **Access**
PCs, PDAs, mobile phones, public kiosks, web-enabled TV
in the workplace, the home, public kiosks, Internet cafes
- Computer-based **Analysis** of data
data-matching, profiling, data-mining, pattern-recognition
- Convenient **Manipulation** of data-objects
word-processors, sound and image processing tools

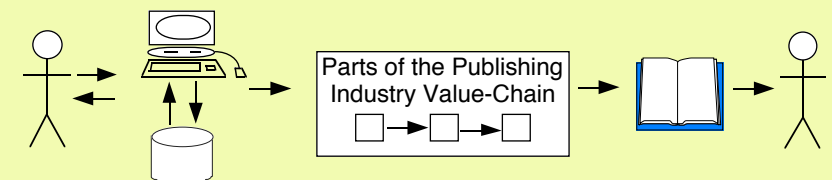
Conventional Publishing, 1450-1995



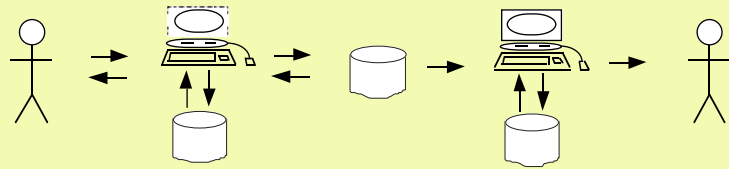
Conventional Publishing, 1450-1995



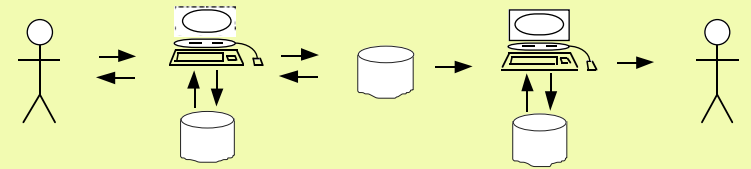
Desk-Top Publishing, 1985-20..



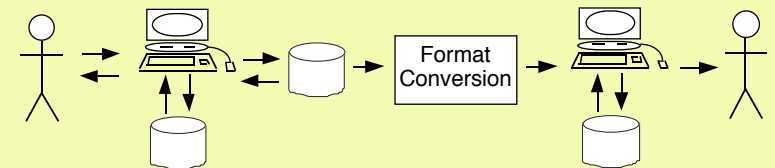
Electronic Publishing, 1990-20..



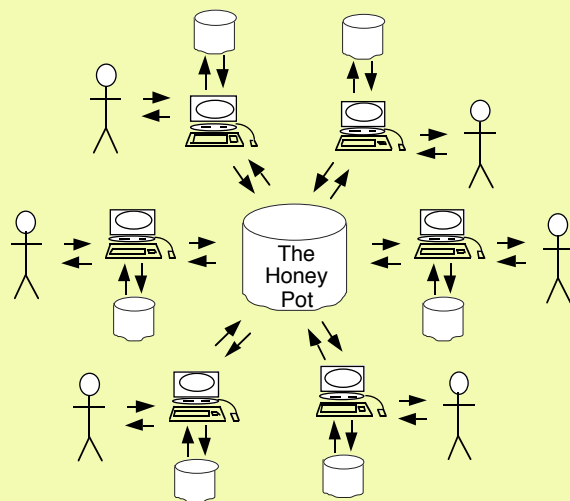
Electronic Publishing, 1990-20..



Cross-Media Publishing, 1998-20..



Interactive 'Publishing', 1995-2095? or 2015?? 'Bees Around a Honey-Pot'



Cyberculture Ethos

- Inter-Personal Communications
- Internationalism
- Egalitarianness
- **Openness**
- Participation
- **Mutual Service**
- **Community**
- **Freedoms**
- **Gratis Services**

Closed Copyright Licences for Software

- **Copyright Licences with very restrictive terms re reproduction, adaptation, re-distribution**
- Source-Code is commonly not provided
- The objective of the copyright owner is to maximise revenue, by imposing constraints on both competitors and customers
- Such software is generally very expensive

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Closed Copyright Licences for Content

3. The Copyright Battleground

- The Corporations' View
- Massive Expansion in Copyright Owners' Rights
- Impositions on Consumers
- Enlistment of Law Enforcement Agencies
- The Open Content Licensing Alternative

Powerful, Cashed-Up Corporations Heavily Dependent on Copyright Laws

- **Software Providers**
(Adobe, Apple, Intuit, MS, Symantec, ... – BSA)
- **Journal Publishers**
(Elsevier, Blackwell, Kluwer, Springer, Taylor & Francis, ...)
- **Music Publishers**
(EMI, Universal, Sony, Warner, ... – RIAA)
- **Feature Film Houses / Movie Studios**
(Fox, Disney, Universal, Warner, Paramount, Sony – MPAA,
Australian Federation Against Copyright Theft – AFACT)

Massive Expansion of Copyright Owners' Rights

- Multilaterally – through World IP Orgn (WIPO)
- Digital Rights Management (DRM) (Failed)

Digital Rights Management (DRM) Technologies Technological Protections for Digital Objects (TPDO)

- **Passive**
 - Object-Protection
 - Tracing ('Watermarking', 'Fingerprinting')
- **Active**
 - Notification of Rights
 - Identification of licensees
 - Authentication of identities
 - Destruction / Disablement of the data object
 - Client-Side Enforcement
(Recording, Prevention, Reporting)

Massive Expansion of Copyright Owners' Rights

- Multilaterally – through World IP Orgn (WIPO)
- Digital Rights Management (DRM) (Failed)
- Bilaterally – 'Free Trade' Agmt (US-FTA) 2002-05
 - Extensions to Copyright Term
 - Criminalisation and Costs borne by the Public
- Anti-Counterfeiting Trade Agmt (ACTA) 2007-11
(Rejected even by the EU)
- iiNet Case 2008-12 (Lost)
http://en.wikipedia.org/wiki/Roadshow_Films_v_iiNet
- Trans-Pacific Partnership (TPP) 2012-
<https://www.eff.org/issues/tpp>

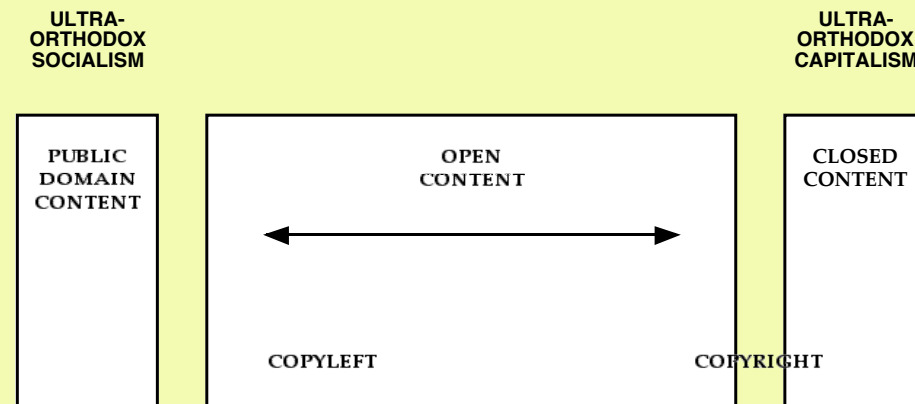
Impositions on Consumers

- Extensions to the Term of Copyright
- Criminalisation of Copyright Infringement
- Unjustifiably High Costs, Limited Usability
- Enforcement Costs borne by the Public Purse
- Aggressive Assaults on Consumers,
with the Presumption of Guilt, not Innocence
- Only limited attacks on Commercial Users
- Discovery Demands, but without Controls
- Takedown Demands, based on poor Evidence
- ?? Content Censorship and Connection Blockage

Closed vs. Open Content Licensing Choices

- **Ownership**
 - Exclusivity
 - Sub-Licensing
- **Integrity Protection**
 - Entirety
 - Copyright Notice
- **Reproduction Control**
 - Permission
 - Use(s) / User(s)
- **Republishing Control**
 - Permission
 - Use(s) / User(s)
 - Format(s)/Media
 - Incorporation
 - Tech. Protections
- **Adaptation Control**
 - Permission
 - Review
 - Distinguishability
 - Copyright Vesting
- **Usage**
 - Territory • Purposes
 - Person-Types
 - Fields of Endeavour
- **Liability Management**
 - Warranties
 - Indemnities
- **Pricing**
 - One-Time Fees
 - Repetitive Fees

Open Content as the Middle Ground

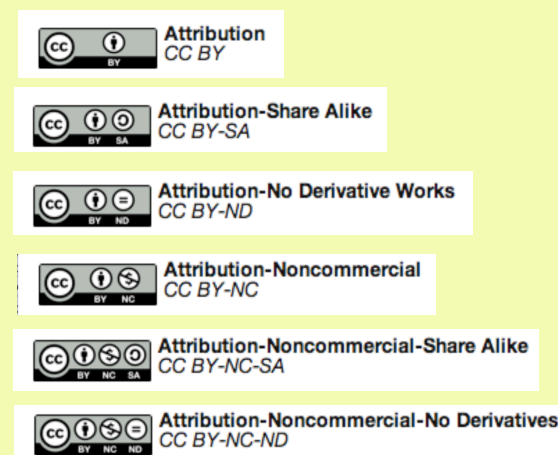


Roger's Open Licence for His Content

- **Ownership**
 - ✗ Exclusivity
 - ✗ Sub-Licensing
- **Integrity Protection**
 - ✗ Entirety
 - ✗ Copyright Notice
- **Reproduction Control**
 - ✓ Permission
 - ✗ Not-For-Profit Only
- **Republishing Control**
 - ✓ Permission
 - ✗ Not-For-Profit Only
 - ✓ Any Format/Media
 - ✓ Incorporation
 - ✓ Tech. Protections
- **Adaptation Control**
 - ✓ Permission
 - ✓ Review
 - ✓ Distinguishability
 - ✓ Copyright Vesting
- **Usage**
 - ✓ Any Territory, Purposes, Person-Types, Fields of Endeavour
- **Liability Management**
 - ✗ Warranties
 - ✗ Indemnities
- **Pricing**
 - ✓ One-Time Fee
 - ✓ Repetitive Fees

Categories of Creative Commons Licence

<http://creativecommons.org.au/learn-more/licences>



4. Digital-Era Business Models

- Who Pays?
- What?
- To Whom?
- Why?

Are consumers inherently immoral?
Or will they pay?

Digital-Era Revenue Sources

- **Direct and Immediate Reciprocity**
 - Low prices for volume sales
 - Higher prices for services that are value-added / differentiated / customised
- **Indirect and/or Deferred Reciprocity**
 - Donations, sponsorship, advertising
 - The-artist-pays / vanity press
 - 'Shareware' – use now, maybe pay later
- **'The After-Market'**
 - Accessories
 - Upgrades
 - Enhancements
 - Extensions

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