Tragedy of digital anti-commons

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Introduction 1 (2)

1. Presentation topic
   – Motivation
     • Regulation of the Internet intelligent property rights
     • Conceptual frameworks to understand the complex issues
   – Scope
     • Some popular metaphors, concepts and models
     • Only superficial on legal issues
   – Methods
     • Literary study and analysis
     • Constructive
       – Claims
       – Models
Introduction 2 (2)

2. Regulation
   Modalities
      Law
      Norms
      Markets
      Architecture

3. Metaphors
   Internal mind models and external vocabulary
   Role of metaphors
Place vs Cyberspace

1. The metaphor
   – ENTERING, VISITING, ADDRESS, LOCATION, SITE
   – Claimed to lead the regulation to Internet 'landholdings'

2. The Internet is not like a place
   – It is not, it is not experienced as if it were, and the constraints of action are different
   – Anyway, the courts seem to have been mislead

3. The metaphor doesn't have to mislead
   – Also land ownership rights vary
   – The courts have also understood the limits in many cases
Digital Intellectual Property

1. Digital intellectual property classification characteristics

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Direct Consumption</th>
<th>Indirect usage as a component or a tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Experience</td>
<td>Utilization and creation</td>
</tr>
<tr>
<td>Examples</td>
<td>Listening and watching</td>
<td>Business and scientific work, and SW</td>
</tr>
<tr>
<td>Content discovery</td>
<td>The search target is known</td>
<td>The search target may be unknown</td>
</tr>
<tr>
<td>Network</td>
<td>Fixed and mobile</td>
<td>Fixed</td>
</tr>
</tbody>
</table>
2. Property

“Within the law, property is a general legal category for rights of ownership in land, money, tangible objects, intangible objects, etc. Property is defined as the right to use, enjoy, or possess a determinant thing, and the right to exclude others from doing the same.” worldIQ.com (2004)
Digital Intellectual Property

Public, common, toll and private goods in a property matrix

<table>
<thead>
<tr>
<th></th>
<th>Non-rivalrous</th>
<th>Rivalrous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-excludable</td>
<td>Public Goods</td>
<td>Common Pool Resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tragedy of the Commons</td>
</tr>
<tr>
<td>Excludable</td>
<td>Toll Goods</td>
<td>Private Goods</td>
</tr>
<tr>
<td></td>
<td>Tragedy of the Anti-commons</td>
<td>Tragedy of the Anti-commons</td>
</tr>
</tbody>
</table>
Digital Intellectual Property

3. Intellectual property

“Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.” World Intellectual Property Organisation, 2004

4. Protecting intellectual property

   Law
   IPR
   Agreements
   Norms
   Campaigns
   (Markets
   A business tool)
   Architecture
   Technical prevention
1. Tragedy of commons

![Graph showing production and marginal production per consumer with efficient and tragic outcomes.](image)
1. Tragedy of anti-commons
   – Not relevant
Tragedy of Digital Anti-commons

1. Tragedy of additional cost on digital content
Mobile network perspective

1. Content is for direct consumption
2. Transaction cost for terms of use would be high
   – On the other hand, demanding content search not applicable
3. Dedicated Digital Rights Management solutions