# Freedom and Justice in the Commons

### **A Political Economy of Information**

### Focus

- Two aspects central to the emerging technological-economic condition of the networked information economy
  - Non-market production
  - Radically decentralized production
- Alternative modes of production promise more robust fulfillment commitments to
  - Democracy
  - Autonomy
  - Justice & Human Development
- The battle over the institutional ecology of information

# A Moment of Opportunity

- 150 year trend: concentration and commercialization of information production
  - mechanical presses & telegraph extend social reach and raise capital cost of communication to relevant community
  - Public discourse adapts to increasingly one-way, from professional commercial producers to passive consumers
  - Easily adapted to radio, television, etc.

# A Moment of Opportunity

- 150 years trend to industrial model of information production
- The internet represents opportunity for radical reversal of this trend
  - Extends reach by decentralizing the distribution function
  - Physical capital diffuse, much of it owned by end users
  - Routers and servers not qualitatively different from PCs as is a network broadcast station or cable head end from a television

# A Moment of Opportunity

- 150 years trend to industrial model of information production
- Internet represents opportunity for radical reversal of this trend
- Entering a moment in which human beings, rather than capital, can become the organizing factor of our communications system and the information environment it makes possible

### **Some Basic Economics**

- Standard problems of information production
  - Information is a "public good"
    - Nonrivalry is central and irreducible
  - On the Shoulders of Giants
    - Information is both input and output of its own production process
  - Some non-market, non-proprietary production is necessary to maintain efficient information production; how much is difficult and context dependent

## **Some Basic Economics**

- Standard problems of information
- The cost of information production includes
  - cost of communication (fixing & transmitting)
  - cost of existing information
  - cost of human creative work
- Low cost processors and ubiquitous network connections plus nonrivalry of information isolate human creative inputs as central

### **Some Basic Economics**

- Standard problems of information
- Low cost processors and ubiquitous network connections isolate human creative inputs as central
- Human beings are central because of attributes in which they differ widely and diversely—creativity, wisdom, taste, experience—not because of fungible characteristics that fit a Taylorist model
- And human beings act for diverse motivations, not only money, but also social-psychological

# **Organization of Production**

- Physical economy settled on two modes: markets and managerial hierarchy
  - Most people live productive life as part of organizations, following orders
  - Most people live much of the rest of life consuming from menus of heavily advertised finished goods determined by managerial investment decisions
- Industrial information economy followed the same model
  - Condensing around high physical capital requirements

### **Networked Information Economy**

- Two emerging phenomena
  - Increasing role for non-market information producers
    - Always much greater than in physical economy—academic science, PBS, Consumer Reports
    - Lower publication costs & wider reach increase number that are efficacious and overall effectiveness

### **Networked Information Economy**

- Two emerging phenomena
  - Increasing role for non-market information producers
  - Emergence of large scale commons-based peer production
    - Science; OED
    - Free software core example
    - Peer-production all around

# **Peer production**

- Collaborations among groups of individuals, up to large scales, that do not rely on markets or managerial hierarchy for motivation or organization
- Instead use a social transactional framework to motivate and coordinate
- Have lower transaction costs, improved information about human creative availability, and are likely better at motivating small-scale contributions to large integrative projects

### Democracy

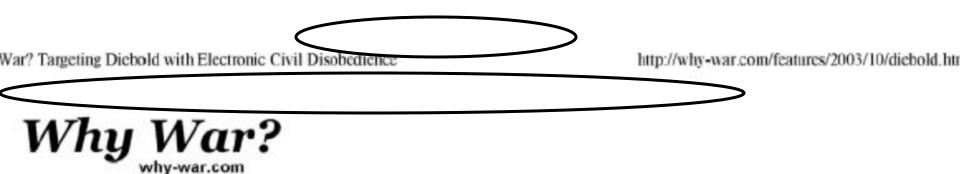
### Political Discourse

- Owners control information flow in democracy; disproportionate power ("Berlusconi effect")
  - Jonas of IDT: "Sure I want to be the biggest telecom company in the world, but it's just a commodity. I want to be able to form opinion. By controlling the pipe, you can eventually get control of the content"

### Democracy

### Political Discourse

- Sinclair's decisions
  - Nightline's reading of names
  - anti-Kerry campaign
    - bloggers organize resistance
- MoveOn ad challenge
- Meet-up as model; used for large scale organization
- Blogoshpere
- Swarthmore students' leading role in exposing the Diebold failures



#### **Targeting Diebold with Electronic Civil Disobedience**

#### Prepared by STAFF for Why War?

Why are these memos controversal? Read the excerpts and see for yourself, then read the campaign update or the most recent press release. You may also want to see where Diebold machines are used (pdf) and find out why they're getting sued. The latest information about the suit itself is available at the Swarthmore Coalition for the Digital Commons. Also check out *Black Box Voting*, new out in print.

#### How to get the files:

- · Browse the documents: http://chroot.net/s/lists/, http://www.sims.berkeley.edu/~ping/diebold/lists.html
- Search the documents: http://diebold.f-451.net/search/search.php
- BitTorrent: http://cscott.net/Activism/lists.tgz.torrent
- EDonkey/Overnet: [ed2k://|file|list.tar.bz2|7762005|c53855d1c5da1fec2da1548905bc689f]/]
- Freenet:

### Democracy

### Political Discourse

- Berlusconi effect
- "Baywatch effect": Owners respond to norm, producing bland, inoffensive fare
  - Brandeis in Whitney: the dangers of an inert public
  - No coffins on mainstream media until...
    - The Memory Hole



### Democracy

- Political Democratic Discourse
- Cultural Democracy
  - Cultural studies concerns with media
  - Fan Fiction; Jedi Saga; Second Life
  - Barbie
    - Wikipedia vs Encarta
    - Google vs overture

<u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> oo	ookmarks <u>T</u> ools <u>H</u> elp	
- ) - 🗟 🗟 😭	W http://en.wikipedia.org/wiki/Barbie	ife tax r
.S Mail 📄 Haaretz 📄 Y	YLS 🗋 Calendar 🗋 bank 🗋 benkler.org 🗋 CSTB Wireless 🥑 Zagat 🗋 Polls 🗋 HapMap 🛛 W Wikipedia Policies 🗋 Rasmussen 🗋 State 🗋 Pew	
opyright - Wikip 🛛 W W	Wikipedia Statisti   W Editing Talk:Copy   W Talk:Copyright   W Copyright - Wikip   🗅 Bush in 30 Seconds   W Barbie - Wikip   🖪 Netcraft: We	b Se
7 -22	2 Create an account or	log in
SWG?	article discussion edit this page history	_
2 Star	Barbie	
	From Wikipedia, the free encyclopedia.	
<b>VIKIPEDIA</b>	For other uses, see <u>Barbie (disambiguation)</u> .	
e Free Encyclopedia	Barbie is the world's best selling doll and was first sold on March 9, 1959. The best selling Barbie was one released in 1992, Totally Hair	r
ation	Barbie, with stylable hair so long it reached from her head down to her toes.	
ain Page	Contente (kide)	
ommunity portal	Contents [hide]	
urrent events	<u>1 Development</u>	
ecent changes	2 Biography of Barbara Millicent Roberts	
andom page	2.1 Barbie and Ken's Break-up	
alp	2.2 2004 Campaign for Presidency	
onations	<u>3 Cultural impact</u>	
h	4 Controversies	
	4.1 Barbie's Physical Evolution	
	4.2 Other discussions	
Go Search	5 Collecting	
x	6 Related Merchandise	
hat links here	7 Terminology	
elated changes	8 Timeline	
pecial pages	9 Trivia	
	10 External links	
er languages	10.1 General	
ansk	10.2 Other	
eutsch		<b>1</b> . 15
ançais	Development	[edit
ederlands ortuquês	Development	
	Ruth Handler had noted that her daughter Barbara preferred playing with paper dolls that looked like adults rather than like children. When	n in

\_

<u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	okmarks <u>T</u> ools <u>H</u> elp
• 🕘 • 🗟 🕼 🔞	W http://en.wikipedia.org/wiki/Barbie
.5 Mail 🗋 Haaretz 🗋 Y	'LS 🗋 Calendar 🗋 bank 🗋 benkler.org 🗋 CSTB Wireless 🕢 Zagat 🗋 Polls 🗋 HapMap 🛛 Wikipedia Policies 🗋 Rasmussen 🗋 State 🗋 Pew
pyright - Wikip WWW	/ikipedia Statisti   W Editing Talk:Copy   W Talk:Copyright   W Copyright - Wikip   🗅 Bush in 30 Seconds   W Barbie - Wikip   Netcraft: Web Se
	Controversies
	Barbie's Physical Evolution
	Over the years, Barbie has evolved. Originally available as either a blonde or brunette, Barbie has changed the color of her hair many times since her introduction in 1959. Today there are ethnically diverse versions of Barbie that feature different skin tones, facial characteristics, as well as different hair colors and make-up.
	One of the most publicized changes happened around the turn of the century, as Barbie's ultra-thin waist widened to more natural proportions. This change, rallied for years by some <u>parents'</u> and <u>anorexia</u> groups, is to encourage young girls not to be as hyper-actively concerned with their weight, and thus to eat more healthily and avoid <u>eating disorders</u> .
	Other discussions
	Barbie is often looked uper us an icon or western childhood. Her popularity ensures that her effect on the play of Western children attracts upper partscrutiny.
	The enormous range of available accessories relating clothes, hair, make-up, parties and looking pretty give rise to the accusation that Barbie encourages young girls to focus on shallow trivia. Her accessories reflect a lifestyle that is unobtainable for most of the girls who play with her. She also portrays an unrealistic hody image. If Parbie were scaled to human proportione, one would be towering over most men and have an impossible locast size. For most of her life she was available only as a white woman of apparently European descent.
	However at the time Darbie was released, most dolls were baby substitutes, rather than adult dolls, and it could be said that Barbie's very existence encouraged girls to play outside the traditional role of housewife and mother. The range of professions for which Barbie accessories can be bought has been expanded recently, including doctor, politician, US Marine and paralympic athlete. Barbies with different racial sharacteristics have also become available in recent decades.
	Because Barble is a <u>celtural icon in the United States</u> , and the dolls are inexpensive and easily <u>obtained</u> , <u>artists berg</u> , cleared to Barble and her accompanying products, either as homage or as <u>parody</u> . The matter corporation disapproves of many of these uses for the dolls, and has used <u>trademark</u> and <u>copyright</u> claims to attempt to suppress them.
	"Barbie" is often used as a derogatory <u>slang</u> word to mean that a person, particularly a <u>girl</u> or <u>woman</u> , is stupid, as in "Barbie brain", "Barbie bimbo" or "Barbie head".

The Middle Eastern country of Saudi Arabia outlawed Barbie dolls on September 10, 2003.

/nl.wikipedia.org/wiki/Barbie

🖄 Talk:Barbie - Wikiped	lia, the free encyclopedia - Mozilla Firebird		
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> oo	okmarks <u>T</u> ools <u>H</u> elp	a the state of the	
🚱 <b>-</b> 🕘 - 😪 🔝 🎧	W http://en.wikipedia.org/wiki/Talk:Barbie	👻 🔍 second life tax	
🗋 YLS Mail 📄 Haaretz 🗋 Yl	"LS 🗋 Calendar 🗋 bank 🗋 benkler.org 🗋 CSTB Wireless 🥝 Zagat 🗋 Polls 🗋 HapMap 🛛 W Wikipedia Policies 🗋 Rasmussen 🗋 Sta	ate 🗋 Pew	
W Copyright - Wikip W W	/ikipedia Statisti   W Editing Talk:Copy   W Talk:Copyright   W Copyright - Wikip   🗋 Bush in 30 Seconds   W Talk:Barbie	Netcraft: Web Se	
in in the	article discussion edit this page + history	Create an account or log in	
35 10 ST	Talk:Barbie		
A PHE TO	From Wikipedia, the free encyclopedia.		
WIKIPEDIA	On Template:March 9 selected anniversaries		
The Free Encyclopedia	This article is full of Registered Trademark symbols: ®		
navigation	Wikipedia talk:Trademark notices would suggest we don't need to do that. Any objections if I remove them? Sam 04	4:23, 19 Dec 2003 (UTC)	
<u>Main Page</u> <u>Community portal</u>	I got rid of them before seeing this note. There were a lot, and I may have missed a few <u>Tuf-Kat</u> 20:40, Jan 4,	2004 (UTC)	
Current events	Comparisons of Barbie's dimensions to those of real women.	[edit	
<ul> <li>Recent changes</li> <li>Random page</li> </ul>	Compansons of Bable's dimensions to those of real women.		
= Help	The trouble with most comparisons of Barbie's dimensions to those of real women is that they never quote the actua		
Donations	dolls themselves, but only what selected dimensions would be when scaled up to 'life-size'. (In this article for instand would be towering over most men and have an impossible breast size".)	ce it states, "In real life she	
search Go Search	Whilst I understand the intention of such descriptions is to try to combat the problem of poor self-image and it's related disorders, I do		
toolbox	meaningless unless at least one actual dimension of the doll is given as a base reference for scaling. We might as y	•	
<ul> <li><u>What links here</u></li> <li><u>Related changes</u></li> </ul>	or a 100 ft tall, as it completely depends on what scale we adopt, which in turn completely depends on which particu to use to determine our scale factor.	ular dimension we choose	
Special pages	Clearly if we chose to use a scale based on comparisons of the height of the Barbie doll to the height of 'real-life' wo be towering over most men, nor have an impossible breast size. She would, however, almost certainly have hip and smaller than the average.		
	Given that her male companion doll, Ken, is slightly taller than the Barbie doll, it would seem reasonable to assume taller than the average. Given the dolls are American, we could reasonably assume Ken is over 6 ft. Lets us therefor around 6 ft 6. This would make Barbie around 6 ft herself, which is admittedly tall for a woman, but not unusual for m I will come back to).	re assume Ken to be	

Done

S MON Encarta	Multimedia - Darbie Doll - Mozilia rifebird	
<u>File E</u> dit <u>V</u> iew	<u>G</u> o <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	Y
🚱 <b>-</b> 🕘 - 🧟	淤 🎲 🕐 http://encarta.msn.com/media_461526825/Barbie_Doll.html	💌 🔍 second life tax revolt
🗋 YLS Mail 📄 Haa	etz 🗋 YLS 🗋 Calendar 🗋 bank 🗋 benkler.org 🗋 CSTB Wireless 🕝 Zagat 🗋 Polls 🗋 HapM	ap 🗰 Wikipedia Policies 🗋 Rasmussen 🗋 State 🗋 Pew 🛛 🛸
	🛛 🖤 Wikipedia Statisti 🗍 🖤 Editing Talk:Copy 🗍 🖤 Talk:Copyright 🗍 🖤 Copyright - Wikip	
Home Encyclop	<mark>edia</mark> Dictionary Atlas Homework College Grad eLearning Career Training <b>Upgra</b>	de to Encarta Premium 🔗 🗖
Search Encarta	Go	Reference   Encarta

#### Multimedia from Encarta 🖤

Appears in

#### Barbie Doll



The large wardrobe of the Barbie doll is reminiscent of the extensive wardrobes of fashion dolls popular in Europe in the late 19th century. However, while clothes designers in the past used fashion dolls to showcase their new creations, Barbie dolls, created in 1959, function mainly as toys. Manufacturers now more commonly produce ethnically diverse dolls, like this black Barbie.

Liaison Agency/Gilles Mingasson

🌑 Search Encyclopedia.com - Mozilla Firebird	
<u>File Edit View Go Bookmarks Tools H</u> elp	
🛞 🕶 🌍 👻 🎯 🔯 http://encyclopedia.com/searchpool.asp?target=barbie&Search.x=0&Search.y=0	👻 🔍 second life tax r
🗋 YLS Mail 🗋 Haaretz 🗋 YLS 🗋 Calendar 🗋 bank 🗋 benkler.org 🗋 CSTB Wireless 💋 Zagat 🗋 Polls 🗋 HapMap 🛛 W Wikipedia Policies 🗋 F	Rasmussen 🗋 State 🗋 Pew
W Copyright - Wikip 🛛 W Wikipedia Statisti 🕅 W Editing Talk:Copy 🕅 W Talk:Copyright 🕅 W Copyright - Wikip 📄 Bush in 30 Seconds 🥤	Search Encyclo Netcraft: Web Se
Encyclopedia.com Powered by elibrary	LANCÔME
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	Search
<ul> <li>Home &gt; Search Results &gt; barbie</li> <li>Found: 3 Showing: 1 - 3</li> <li>1. <u>Barbie, Klaus</u> Barbie, Klaus, 1913-91, Nazi war criminal known as the Butcher of Lyons. As Gestapo chief in Lyons, France (1942-44), he was responsible for the deaths of French Resistance members and thousands of Jews. After the war he secretly served as a U.S. army agent in Germany. In 1951 he fled Europe for Bolivia with U.S. help Related: <u>French History Biographies</u></li> </ul>	<b>Irack a lopic</b> Research paper, homework assignment or just an interest? Click <b>Track this topic</b> to get the latest information on your favorite topic delivered free to your email. Free, easy and convenient. What could be better? <u>Learn more</u> .
<ol> <li>Lyons, Fr. Lyonboth: lyôN<sup>*</sup>, city (1990 pop. 422,444), capital of Rhône dept., E central France, at the confluence of the Rhône and Saône rivers. As an economic center and a densely populated metropolis it is second only to Paris. It leads Europe in silk and rayon production; it has important metal, machine, clothing, Related: <u>French Geography</u></li> </ol>	<b>loday in hislory</b> <u>Sign up</u> for the <b>Today in History</b> email ( <u>Preview</u> ).
3. Oph?ax Ophüls, Maxô´füls, 1902-57, German-born French film director, b. Saarbrücken as Maximilian Oppenheimer. He started his career in the 1920s as an stage actor and director and began directing films in Berlin during the early 1930s. His early works include Liebelei (1933), made in Austria, and La Signora di Tutti (1933), Related: Motion Picture Biographies	

Google Search: barbie - Mozilla {Build ID: 2002031104}	_ 8 .
_ <u>F</u> ile <u>E</u> dit <u>V</u> iew <u>S</u> earch <u>G</u> o <u>B</u> ookmarks <u>I</u> asks <u>H</u> elp <u>D</u> ebug <u>Q</u> A	
Co ttp://www.google.com/search?hl=en&ie=UTF-8&oe=UTF-8&q=barbie	🔽 🔍 Search 🖉 🗸 🌆
, 🚮 Home 🖹 Bookmarks 🛇 YB%20Home% 🖹 Legal 🗂 Israel 🛇 Google 🗂 Search Engines 🗂 Economics/Pol 🗂 News 🗂 Spectrum	n 🛇 BobCatPlus 🛇 Julius 🛇 Internet Ecolog
Google <sup>TM</sup> Advanced Search Preferences Language Tools Search Tips barbie Google Search	
Web         Images         Groups         Directory         News-New!           Searched the web for barbie.         Results 1 - 10 c	of about <b>528,000</b> . Search took <b>0.13</b> seconds.
Barbie - Collectible Dolls from Mattel www.BarbieCollectibles.com Get that Hard-to-Find Barbie - Shop Online!	Sponsored Link
Barbie       & Related Items - Find it on eBay!         www.eBay.com       Toys - Action Figures - Cars & Trains - Dolls & More	Sponsored Link
Categories: Shopping > Antiques and Collectibles > Toys and Games > Dolls Recreation > Collecting > Toys > Dolls > Ba	<u>arbie</u>
News: <u>Judge: <b>Barbie</b> 'Dungeon Doll' OK</u> - CNN - 6 hours ago <u>Bondage-themed <b>Barbie</b> doll likely not illegal, judge rules</u> - Minneapolis Star Tribune - 7 hours ago	Sponsored Links
'Bondage Barbie' Gets A Boost - CBS News - 7 hours ago	Barbie at Sears
New! Try Google News: Search news for barbie or browse the latest headlines	Great deals on toys & electronics. Shop for <b>Barbie</b> and more!
Barbie.com - Activities and Games for Girls Online! - [ Translate this page ]	www.sears.com
www.barbie.com/ - TTK - Nov. 7, 2002 - <u>Cached</u> - <u>Similar pages</u>	
AdiosBarbie.com: A Body Image Site for Every Body	Barbie Store at Amazon
Meet Vinnie and more outlaws! >>. BARBIOLOGY We've invented a science, and it's all about the Notorious <b>BARBIE</b> .>>. RESOURCES Check out these bodylovin' books	Free super saver shipping over \$25 The Internet Superstore -Affiliate
an assum the Notonious BARDIE.>>. RESOURCES Check tubilitiese bodytovin books Description: Anticles, features, news and palle on a variety of body image topics.	www.amazon.com
Category: <u>Society &gt; Issues &gt; Health &gt; Body Image</u> www.adiosbarbie.com/ - 13k - <u>Cached</u> - <u>Similar pages</u>	See your message here
<b>Barbie</b> Bazaar Magazine, <b>Barbie</b> Collectible News and Information, Description: Official collector magazine provides subscription information. Includes price guide, forum, classifieds, Category: <u>Recreation &gt; Collecting &gt; Toys &gt; Dolls &gt; Barbie</u> www.barbiebazaar.com/ - 2k - <u>Cached</u> - <u>Similar pages</u>	
Barbie Collectibles - The official Mattel website for the hobby III 🖂 🧐 🕼 🕫   go to www.BarbieCollectibles.com	
🦚 Start 💿 Evoloring - 🔍 kuro5bin o 💷 Microsoft 🛛 🖎 Novell Gro 🕞 Mail From: 🛛 🥵 Google 🖉 mathemati	

e <u>E</u> dit <u>V</u> iew <u>S</u> earch <u>G</u> o <u>B</u> ool	xmarks <u>T</u> asks <u>H</u> elp <u>D</u> ebug <u>Q</u> A
6.00	Nhttp://www.overture.com/d/search/?type=home&tm=1&Keywords=barbie&_requestid=279659
Home 🛅 Bookmarks 🛇 YB%2	0Home% 🗁 Legal 🗁 Israel 🛇 Google 🗁 Search Engines 🗁 Economics/Pol 🗁 News 🗁 Spectrum 📎 BobCatPlus 🛇 Julius 🛇 Internet Ecolog
	OVERTURE WORLDWIDE: US 🚈
overture 🕥	WINNER Important: If the link above is flashing, you have been selected as a Winner! <u>Claim Here</u>
arbie	View Advertisers' Max B
u searched for <b>barbie</b> .	Search 7
lated Searches: olls arbies for sale arbie fashions arbie trading eanie babies	<u>Get listed in these results</u> and reach 80% of active Internet users on sites like Yahoo!, Lycos, AltaVista and MSN.
mputing ucation & Career ertainment ance alth melife ference	<ol> <li><u>Barbie Video Games on eBay</u>         Visit eBay Electronics for Barbie video games. Discover great deals on new and used, name-brand merchandise. Look no further than eBay for your gifts this holiday season. www.ebay.com (sponsored listing)     </li> <li><u>Partyetc-Your Wholesale Party Store</u>         Barbie party supplies.         partyetc.com (sponsored listing)     </li> </ol>
opping avel	<ol> <li>Barbie at Sears         Find the latest hip Barbies from: Holiday Celebration, All that Glitters, Pop Sensation or Barbie as Daphne with Scooby Doo, to more classic Barbies like Malibu and Marilyn Monroe Barbie.     </li> <li>www.sears.com (sponsored listing)</li> </ol>
	<ol> <li>Barbies, New and PreOwned at NetDoll Authorized Barbie dealer. Our doll shop specializes in friendly, personal service. Browse our selection of collectib dolls. New and pre-owned. Financing available. Satisfaction guaranteed. www.netdoll.com (sponsored listing)</li> </ol>
	<ol> <li><u>Barbie Party Supplies</u></li> <li>Enchanting Barbie party supplies with over 100 party themes, pinatas, balloons, birthday parties, religious occasions, anniversaries, weddings and baby showers, delivered to your door.</li> </ol>

THE R. N

### Democracy

- Political Democratic Discourse
- Cultural Democracy
- Mix and match
  - Second life tax revolt
  - Read my lips







### Autonomy

- Autonomy
  - Extent of opportunities for control of information environment of others
    - Cisco White Paper "you could restrict the incoming push broadcasts as well as subscribers' outgoing access to the push site to discourage its use. At the same time, you could promote your own or partner's services with full speed features to encourage adoption of your services"
  - Critical viewpoints about how life can be lived

# Autonomy

- Autonomy
  - Cross-conception
  - Substantive
    - Consumers to users
      - Vikings at Gander Academy
      - Blogs
      - Jedi Saga
      - Peter Ludlow's game within Second Life
    - Employees to peers
      - Free software developers
      - Xerox Eureka

### **Justice and Development**

- Human development and information
  - More of what makes for human welfare and freedom depends on information

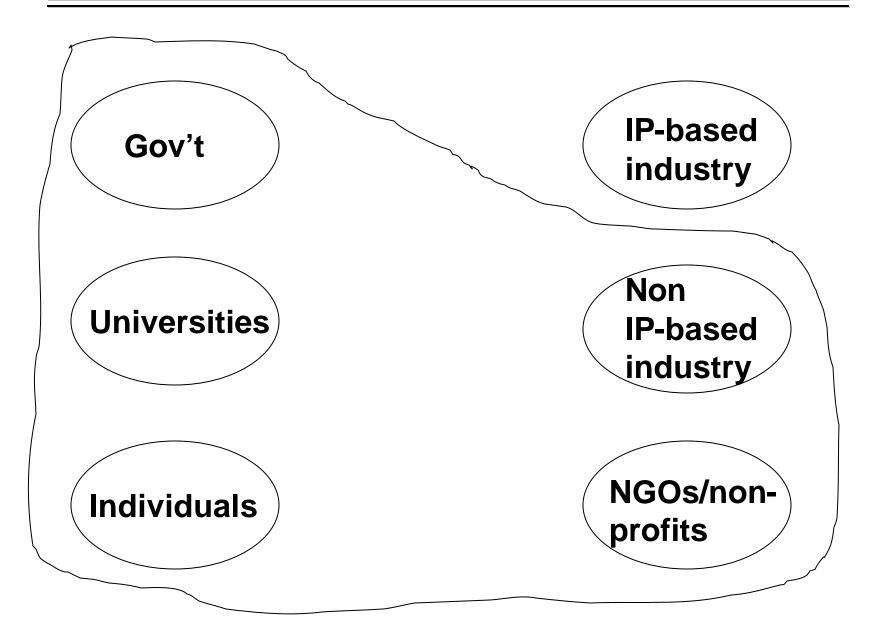
# **HDI and Information**

- Books, teaching materials Food security Computation/communication Medicines Libraries Research & journals academic centers: journals Outcomes data **Education**/ Health/ Literacy Life expectancy/ funding Human capital nutrition labor medicines/ **GDP** per capita  $\rightarrow$  Growth
- Growth driven by innovation & information everywhere
- Particularly for latecomers: adopting best practices

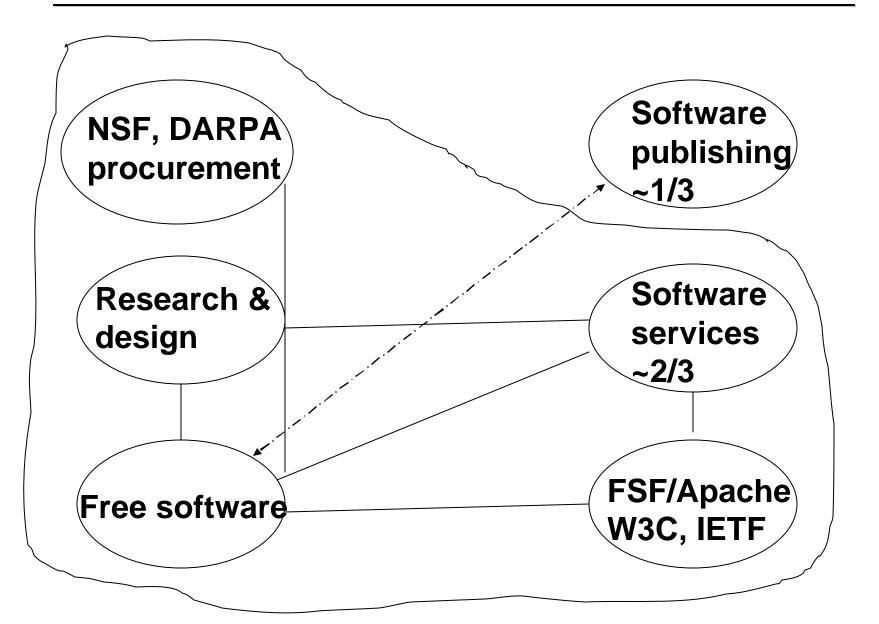
## **Justice and Development**

- Human development in the information society and information
  - More of what makes for human welfare and freedom depends on information
  - Capital structure of computers and communications systems diffuses the functional ability to compute and communicate
  - More can be done through non-market or non-IP-based mechanisms
    - By individuals alone
    - By traditional non-profits with greater reach
    - By newly-emerging practices of peer production

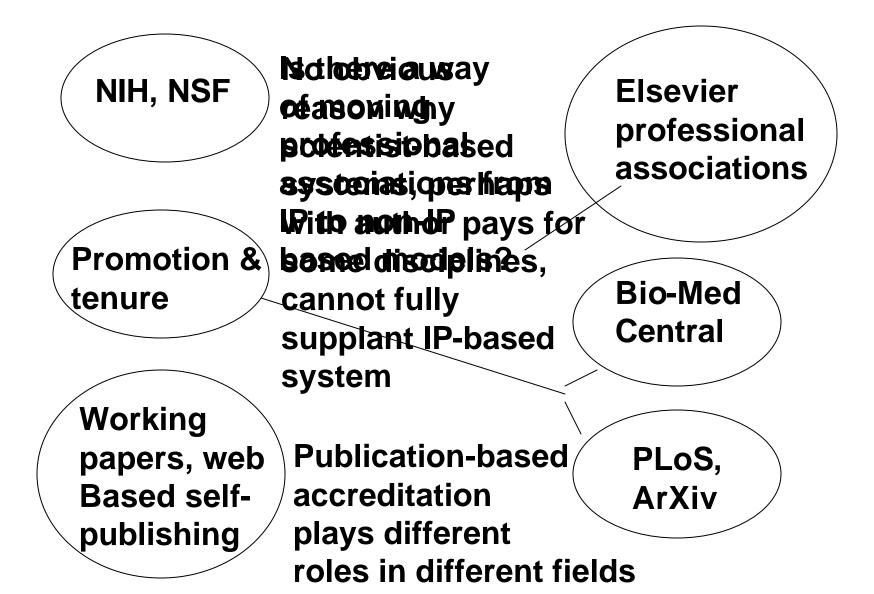
### **Diverse organizational forms**



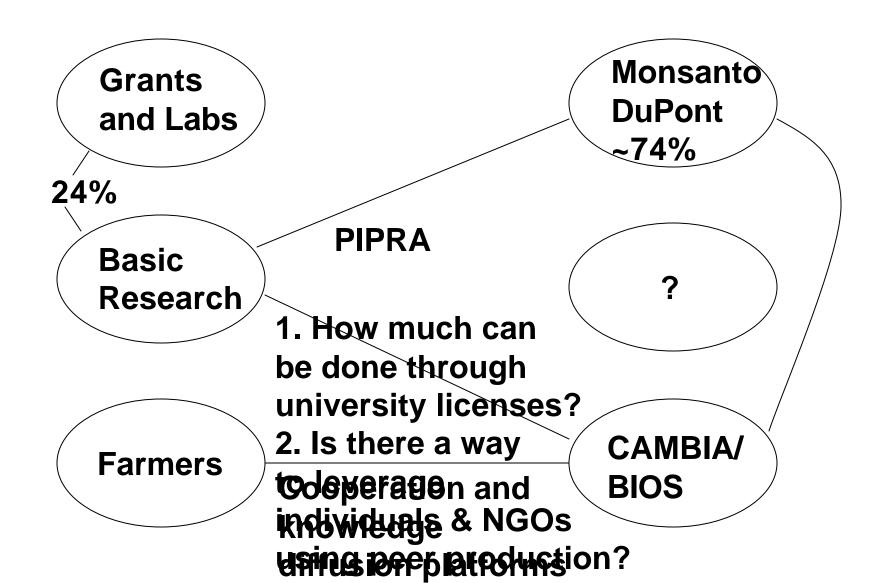
### Software



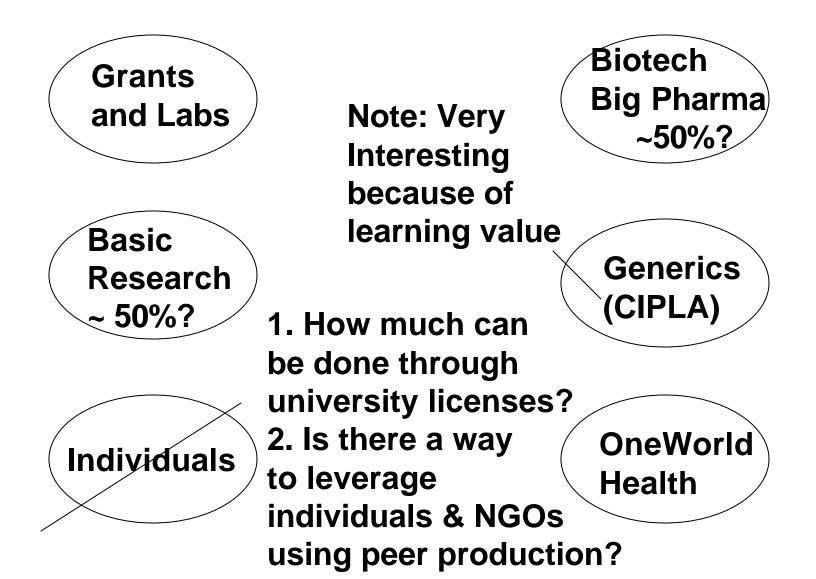
### **Scientific Publication**



### **Ag-Biotech**



### Health



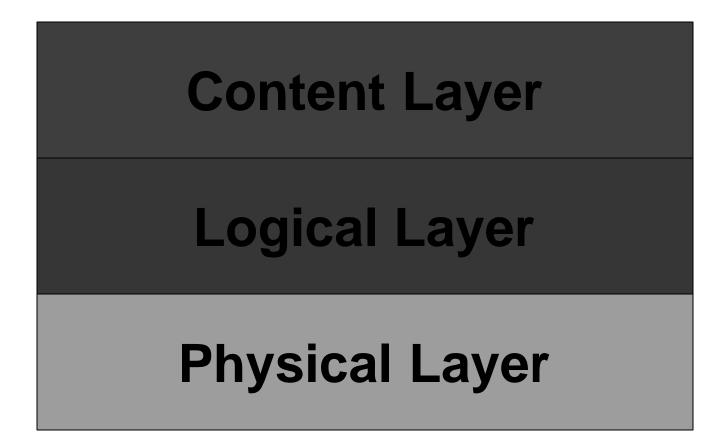
# **Ecological Competition**

 Giants of the industrial age will not go quietly

#### The Enclosure Movement

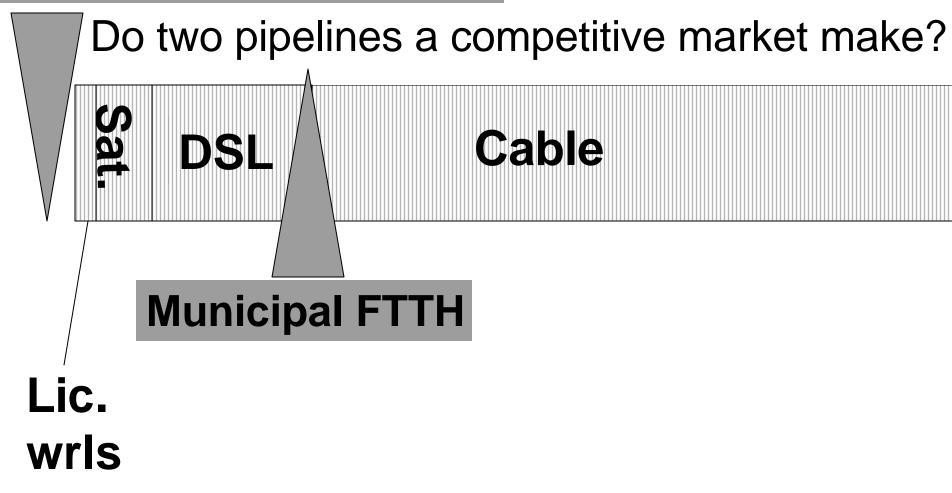
- Property in spectrum; private infrastructure only
- DMCA & CBDPTA: technological enclosure
- DMCA: ISPs to recreate bottleneck
- UCITA: contractual enclosure
   =>displace copyright settlement
- Trademark dilution: "venerated objects"
- Software & business method patents
- Database protection
- Linking & trespass to chattels
- Copyright: term extension; RAM copies & emerging right to read
- Criminalization: NET Act

## **Building the Commons**

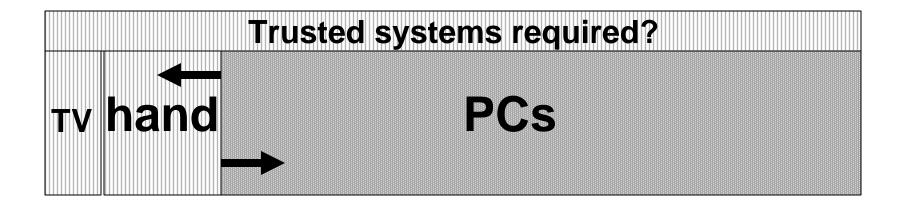


### **Physical Layer**

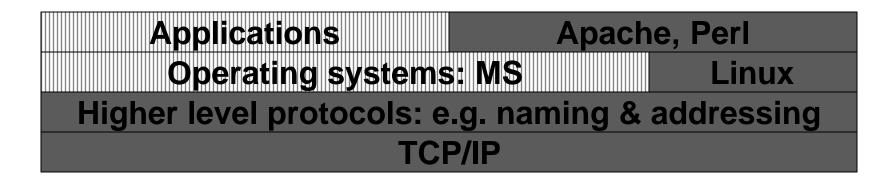
#### **Open Wireless Networks**



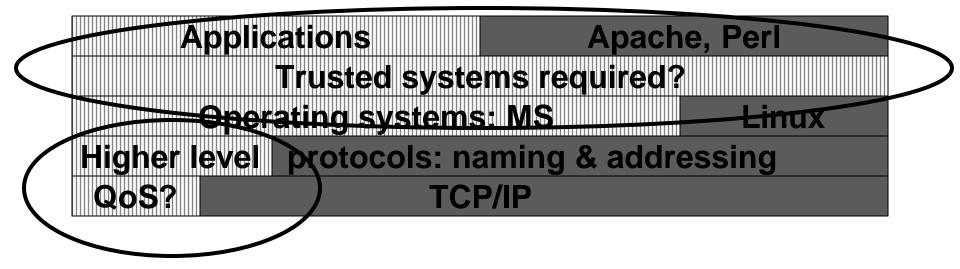
### **Physical Layer**



### Logical Layer

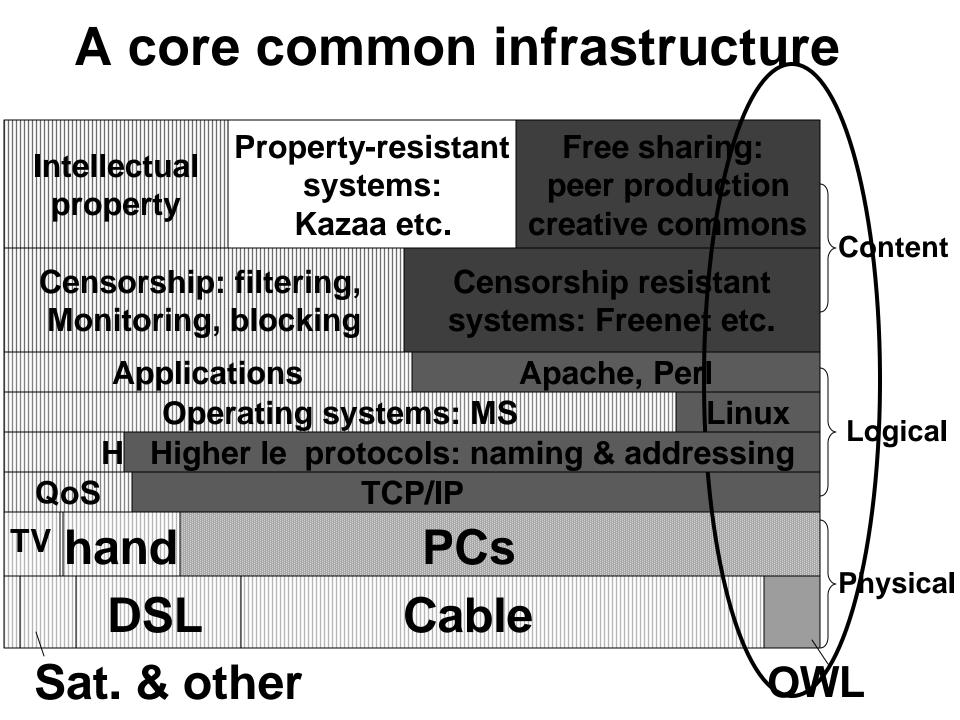


### Logical Layer



### **Content Layer**

Micky bound:	Property-resistant	Free sharing:
strong ex-	systems:	peer production
clusive rights	Kazaa etc.	creative commons
Censorship: monitoring,		



# A moment of opportunity

- Technology has periods of relative openness followed by stabilization
  - Radio: point to point or small-scale 1899~1924/6, then the networks emerged
  - Telephone: 1907 competition in almost every US city, by 1920, single national monopoly
- We are standing at a moment where we can improve democracy, autonomy, and justice while sustaining productivity
- Doing so requires that we understand the moment we are in, understand the stakes of regulatory and other policy decisions we are making in terms of <u>political morality</u>, and have the courage and political will to choose the path of openness over the path pushed by incumbent industries