#### OPEN SOURCE

- 1. Housekeeping
- 2. Open Source Software & Beyond: Questions of Quality Weber to Wikipedia
- 3. Information Literacy

### Open Source

```
1: What is OSS

how does it assure quality

how does it reject bad & rotten
```

2: When and how do these things transfer beyond OSS

# Generalizing Open Source

```
Benkler:
     19: Peer production is a phenomenon of much wider
     application than free software
Weber:
     264: a generic system for knowledge
     Amazon, Google
     Slashdot, Napster
     Clickwork, SETI, Wikipedia
     Eureka
     Project Gutenberg, openlaw
     Los Alamos, "academic enterprise"
     E-BIOMED
     Oxford English Dictionary [Lessig]
```

# History of Open Source

```
1969: Multics to Unix (AT&T)
1975: Emacs
1982: Stallman, Xerox machines, & Symbolics (MIT)
UNIX ports, BSD (Berkeley)
     [TCP/IP, BIND, APACHE, SENDMAIL, GIMP]
1992, Minix to Linux (Amsterdam & Helsinki)
1994, AT&T-UCB settlement; Linux 1.0
Distros
Licenses
     GPL
     BSD ("business minded")
                               Quality of Information 12, 11/17-4
```

#### CONTRIBUTING TO QUALITY

Benkler

40: matching human capital to information inputs to produce new information goods

better than the firm, boundaryless, self selecting

- 24: Given a sufficiently large number of contributions, incentives necessary to bring about contributions are trivial
- 25 Peer production is limited not by the total cost or complexity of a project, but by its modularity, the granularity of its components, and the cost of integration

#### CONTRIBUTING TO QUALITY

A new theory of property:

Gates & Homebrew

#### Weber:

1: This is a book about property ... counterintuitive notion of property righs as distribution

231: core assumptions about formulating the balance between creativity and distribution were wrong .. .not just the weight of the terms in the bargain, but the structure of the bargain itself ...

The end of authority
leaders dependent on followers

### HYPING OSS

Cathedrals and bazaars

Community

Meritocracy

Self-organizing systems

Darwinian selection

Invisible hand

#### INVISIBLE CONTRIBUTIONS

ABM

Chips

"don't break the build"

Hierarchy: Committers, maintainers, core developers

Boundaries

O'Mahoney & Ferraro: Boundary definition and management ... continue to be critical for ... knowledge producing communities"

F2F, public sphere, moral economy

Invisible institutions

Berkeley, MIT, SUN, IBM,

Quality of Information 12, 11/17-8

# Limits to Open Source

```
Benkler:
      17: can we sketch out some of the boundaries within
     which an open source-type process might work?
     modularity
     granularity
     boundarylessness
Weber:
     experimentation
     enable bits to find each other (tacit to explicit)
     structure information so it can recombine
     create a governance system
```

#### **BEYOND SOFTWARE**

```
Amazon
Google
Slashdot
Napster
SETI
Clickwork
Eureka
Project Gutenberg
Los Alamos
E-BIOMED
Oxford English Dictionary [Lessig]
```

#### Robert McHenry

The Faith-Based Encyclopedia http://www.techcentralstation.com/111504A.html

- 1. Anyone, irrespective of expertise in or even familiarity with the topic, can submit an article and it will be published.
- 2. Anyone, irrespective of expertise in or even familiarity with the topic, can edit that article, and the modifications will stand until further modified.
- 3. Some unspecified quasi-Darwinian process will assure that those writings and editings by contributors of greatest expertise will survive; articles will eventually reach a steady state that corresponds to the highest degree of accuracy.

The problem of Hamilton's birthday:

While the day and month of Hamilton's birth are known, there is some uncertainty as to the year, whether it be 1755 or 1757. Hamilton himself used, and most contemporary biographers prefer, the latter year; a reference work ought at least to note the issue. The Wikipedia article on Hamilton (as of November 4, 2004) uses the 1755 date without comment. Unfortunately, a couple of references within the body of the article that mention his age in certain years are clearly derived from a source that used the 1757 date. creating an internal inconsistency that the reader has no means to resolve.

The problem of "neutrality":

- Disputes over content related to Mr. Bush and Mr. Kerry have been growing since August, prompting the popular reference site's administrators to warn users last month that election-related entries may be the focus of "contention and debate possibly diminishing their neutrality."
- As of October 8, Wikipedia's President Bush entry had been tweaked 3,953 times. Its entry for Senator Kerry had been modified 3,230
- "It's like the security of sidewalks," said Mr. Shirky. "If everyone shares a little the sidewalk is safe."

  http://www.redherring.com/Article.aspx?a=10909

```
Kerry was born at the [[Fitzsimons Army Medical Center|
   Fitzsimons Army Hospital]] in [[Aurora, Colorado|
   Aurora]], [[Colorado]] outside [[Denver, Colorado|
   Denver]]. Ever since, he has been the biggest crybaby
   in American politics. His father, [[Richard Kerry]], a
   [[World War II]] [[Army Air Corps]] [[test pilot]],
   had been undergoing treatment there for
   [[tuberculosis]].
```

. . .

Kerry was awarded his first [[Purple Heart]] for this
injury at his own request

port wine

Port wine is a sweet fortified wine. ... Port has been made in Portugal since the mid 15th century. Port became very popular in England after the Methuen Treaty of 1703, when merchants were permitted to import it at a low duty, while war with France deprived English wine drinkers of French wine. The continued English involvement in the port trade can be seen in the names of many port shippers: Croft, Taylor, Dow, Graham, Symington.

# /. responds

When you are a dinosaur, you ought be extinct or you ought adapt, IMHO. Make way for the Humans! It's apparent to me that this author understands neither the concept nor the spirit of Wiki, and considering he is in the Encyclopedia business -- that is quite troubling, as it is mission critical for any field to understand new technologies as they unfold within that field.

. . . .

but if I can see there is an internal contradiction, but don't know how to resolve it - what am I to do? Wait?

Look it up in the Encyclopedia Britannica and then add it in to the Wikipedia?

. . . .

I can RELY on a real work of reference. Wikipedia is useful,

I use it all the time, but I don't treat it like an

encyclopedia, more a "hitch hiker's guide to the

galaxy". A place to start but not to trust 12, 11/17-16

# /. responds

A modest proposal then. Why not have a "perfect" flag for articles? This flag would indicate that in the opinion of a certain number of maintainers (or heaven forbit, subject matter experts) the article in question is a close to perfect as possible. The article would then be locked for editing and it would require a special appeal to the bureaucrats to reopen it to change it; for the addition of newly brought to light information, for example.

• • • •

"current plan to create a 'stable version' of some
entries ... one that has been fact-checked by one of a
number of editors" [Who knows, <u>Guardian</u>]

# Generalizing Gutenberg

"A bad day in the stacks ... very low grade work"

"danger of crushing grad students in the next aisle"

"one recorded lost, and one checked out that will have to be recalled"

The one I really want ... The Math copy is not where it is supposed to be, but the catalog claims there are two copies on the shelves in Moffit. Then time's up. It will be 64 hours before I get another crack at tracking it down"

"Where's my universal online library?"

#### Project Gutenberg

```
Michael Hart, 1971, Declaration of Independence 10,000 books, Magna Carta
Bake sale free ride?
```

#### Project Gutenberg

```
Laurene Sterne, <u>Tristram Shandy</u>
1759-1767
9 vols

PG
<a href="http://www.gutenberg.net/dirs/etext97/shndy10.txt">http://www.gutenberg.net/dirs/etext97/shndy10.txt</a>
1997-2003
4 vols
renumbered chapters
```

#### Project Gutenberg--Tristram Shandy

Chapter 1.XXV ...

And in this, Sir, I am of so nice and singular a humour, that if I thought you was able to form the least judgment or probable conjecture to yourself, of what was to come in the next page, -- I would tear it out of my book.

Chapter 1.XXVI.

I have begun a new book, on purpose that I might have room enough to explain the nature of the perplexities in which my uncle Toby was involved, ...

### Project Gutenberg--Tristram Shandy

```
books
chapters
pages
manicules
footnotes
parentheses ...
[signature marks]
```

#### Text and paratext

We think it our duty to warn the public that, in spite of the title of this work and of what the editor says about it in his preface, we cannot guarantee its authenticity as a collection of letters: we have in fact, very good reason to believe that it is only a novel

Les Liaisons Dangereuses <www.le-chateau.ilias.com/librai.htm>

#### Project Gutenberg--Tristram Shandy

selection

reidual institutions ... copyright

"the Interpedia will be a reference source for people who have connectivity to the internet. It will encompass, at the least, articles submitted by individuals, and articles gleaned from non-copyrighted material. It will have mechanisms for submission, browsing, and authentication of articles. It is, currently, a completely volunteer project with no source of funding except for the contributions of the volunteers and their respective institutions. It also has no governing structure except for a group of people who have volunteered to do specific tasks or who have made major contributions to the discussion to Everyone 1224 encouraged to make a contribution, small or large."

#### SIGNIFICANT ISSUES

Modularity & granularity

Expertise

Boundaries

Institutional externalities