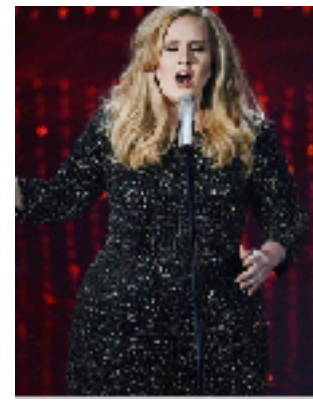


History of Information



information as property

Anno Octavo

Annæ Reginae.

An Act for the Encouragement of Learning, by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, during the Times therein mentioned.



Whereas Printers, Booksellers, and other Persons have of late frequently taken the Liberty of Printing, Reprinting, and Publishing, or causing to be Printed, Reprinted, and Published Books, and other Writings, without the Consent of the Authors or Proprietors of such Books and Writings, to their very great Detriment, and too often to the Ruin of them and their Families: For Preventing therefore such Practices for the future, and for the

Encouragement of Learned Men to Compose and Write useful Books: May it please Your Majesty, that it may be Enacted, and be it Enacted by the Queens most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons in this present Parliament Assembled,

History of Information

Feb 23, 2017

CHAP. CXXIX.—An Act concerning Trade Marks and Names.

[Approved April 3, 1863.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:



dialectics?

"Let us consider the matter in this way: If the wise man or any other man wants to distinguish the true physician from the false, how will he proceed?"

... He will consider whether what [the physician] says is true, and whether what he does is right, in relation to health and disease? ... But can any one attain the knowledge of either unless he have a knowledge of medicine?

... No one at all, it would seem, except the physician can have this knowledge; and therefore not the wise man; he would have to be a physician as well as a wise man."

—Plato, *Charmides*

in the news

June 1996, Volume 23, Issue 2, pp 119-120

The economics of information: An exposition

Authors

[Authors and affiliations](#)

Kenneth J. Arrow

Article

Cite this article as:

Arrow, K.J. *Empirica* (1996) 23: 119.
doi:10.1007/BF00925335

18

616

Citations Downloads

DOI: 10.1007/BF00925335

Abstract

The study of information as a choice variable has been given much more weight by disciplines other than economics. This paper tries to lay out the essential economic characteristics of information as an economic commodity. It discusses the reasons why usual market analysis fails and some of the problems that information creates for industrial structure. It is the treatment of information as a variable and its implications for economic behavior that needs further analysis. This is done by giving a formal statement of the role of information in economic decisions based on the use of information and applying it to specific forms of payoff and cost functions. That in many cases information is about rates leads to the conclusion that the value of new technical information is related to the scale of operation. Once information has been obtained its transmission is easy. Therefore it is difficult to make information into property and the incentives to create it will be lacking. In general the analysis shows that the special properties of information as an economic good have strong implications for the very role and meaning of the firm.



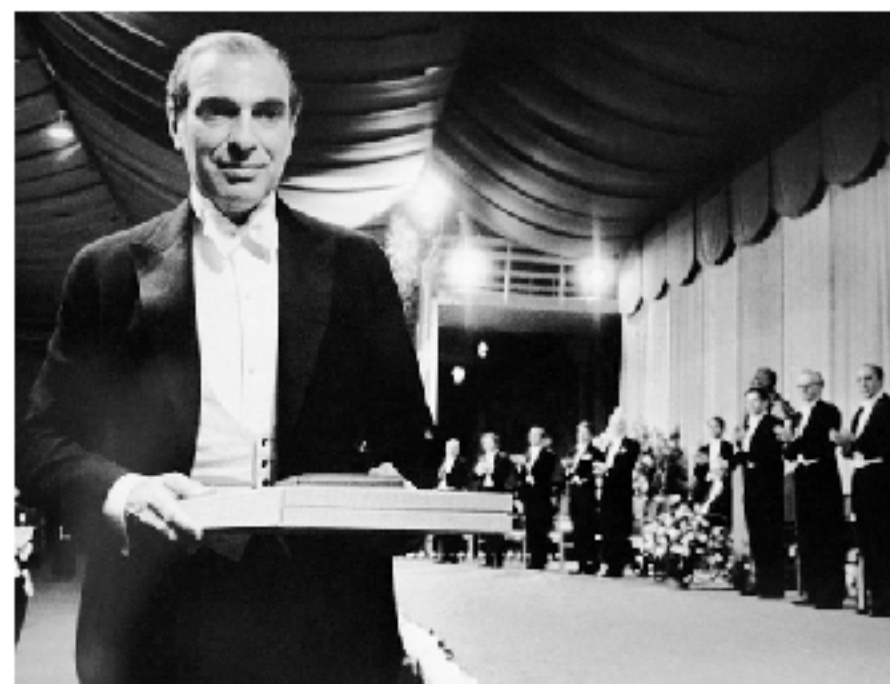
The New York Times



ECONOMY

Kenneth Arrow, Nobel-Winning Economist Whose Influence Spanned Decades, Dies at 95

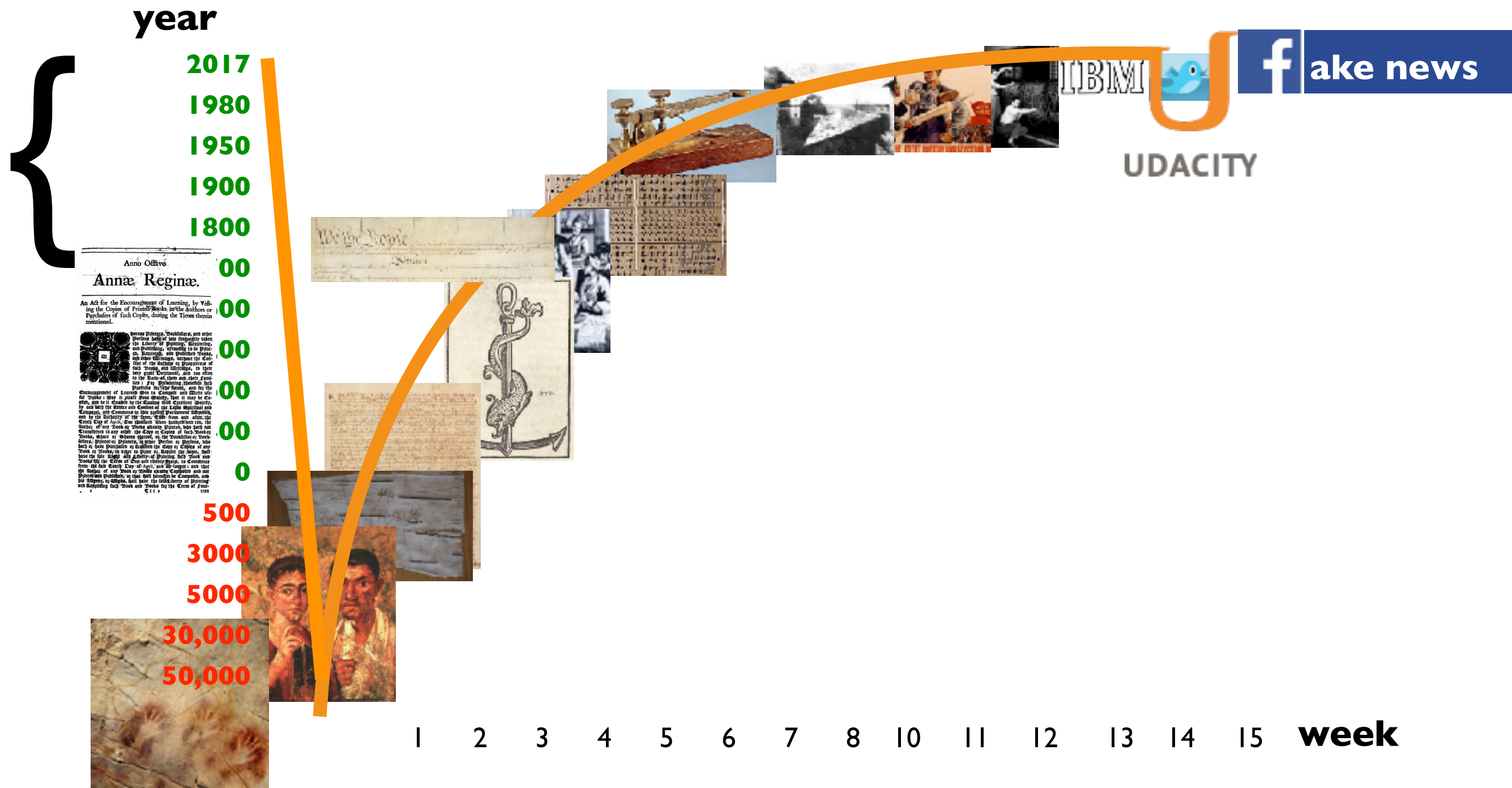
By MICHAEL M. WEINSTEIN FEB. 21, 2017



Kenneth J. Arrow receiving the Nobel Memorial Prize in Economic Science in Stockholm in 1972. Associated Press

Kenneth J. Arrow, one of the most brilliant economic minds of the 20th century and, at 51, the youngest economist ever to win a Nobel, died on Tuesday at his home in Palo Alto, Calif. He was 95.

historical questions



Information
as
Property

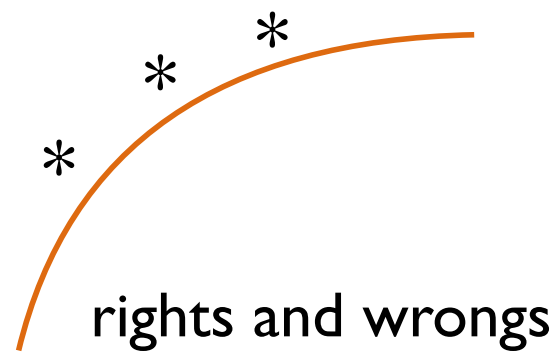
the road ahead

developing *iproperty*

looking for a fix

what are we talking about?

rights and wrongs



skin in the game?

who has their own ...

patents?

trademarks?

copyright?

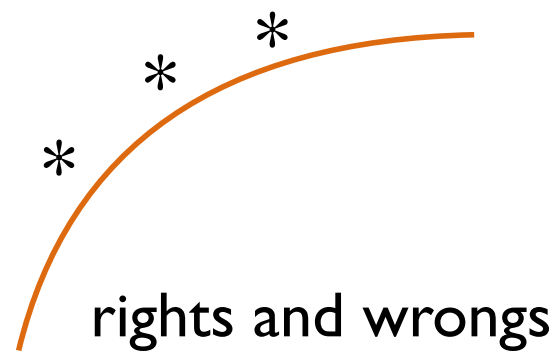
who has someone else's ...

software?

music or movie?

book, paper, etc?

and why/not?



skin in the game?

who has their own ...

patents?

trademarks?

copyright?

who has someone else's ...

software?

music or movie?

book, paper, etc?

and why/not?

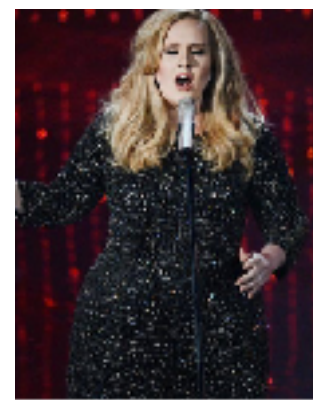
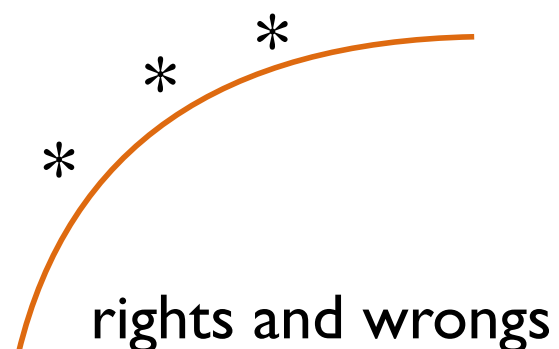
Self-Service Checkouts Can Turn Customers Into Shoplifters, Study Says

By CHRISTOPHER MILE AUG 10 2016



A self-service checkout machine at a supermarket on Long Island. Nicole Bonaparte/The New York Times

"shoppers may tell themselves that the store is overpriced ..."



unfair use?

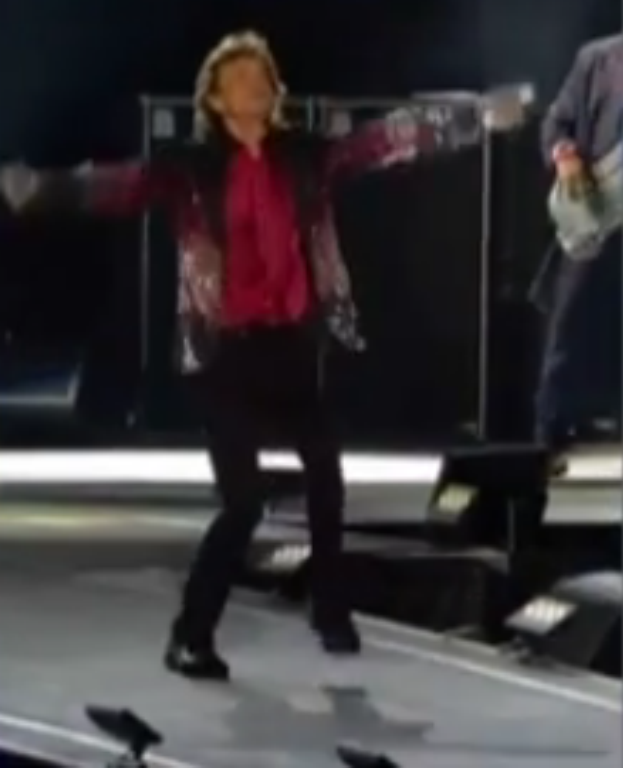
Dear Instructors,

We're writing with a request to you as an instructor participating in our Course Capture service this semester. We would like to ask that you not play copyrighted music through the audio system in the classroom or lecture hall.

It's not uncommon for instructors to play some music just before the start of class. We fully understand why this is helpful in allowing you to call the class to order when it's time for the lecture to begin. Unfortunately, our automated course capture system picks up the music in the recording. Due to an automated process for identifying copyrighted materials in YouTube videos, several recorded lectures this past semester have been flagged for containing as little as a half minute of copyrighted music. Flagged videos can be subjected to "muting" (audio turned off) or deletion by YouTube. It can be a lengthy process to override a flag. Your cooperation will help us reduce the number of flagged videos and keep content available for our students.

We are working with YouTube to better understand their system and hopefully prevent flags in the future. If you have any questions, please let us know.

Thank you,
Course Capture Team



Start me Up

fair use?



Dream On

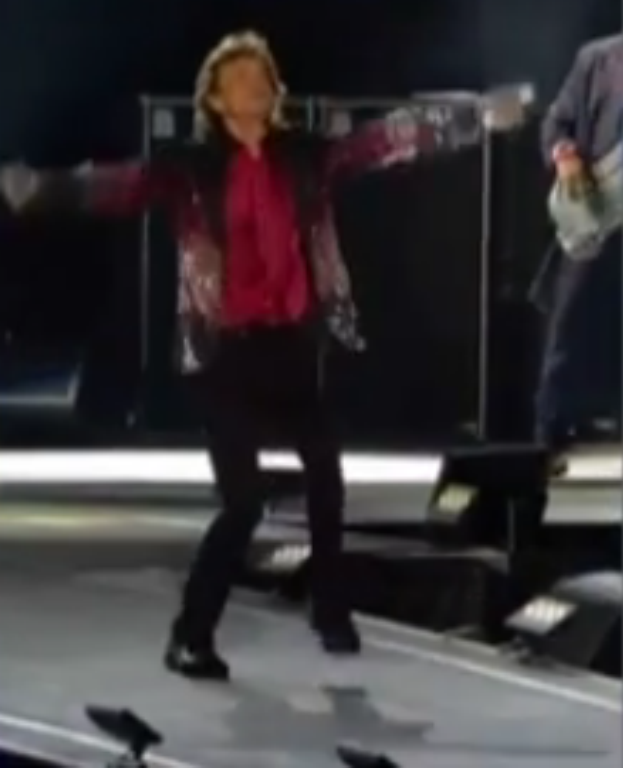
**Rockin' in the
Free World**



**The End of the
World as We Know It**

**Rolling in the
Deep**



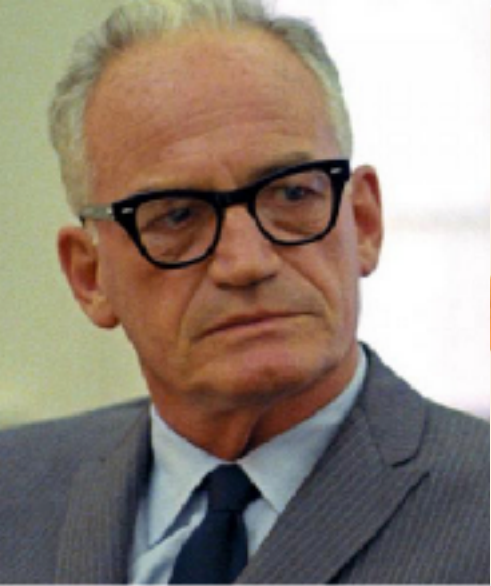


Start me Up



fair use?





Bernie Sanders Asked To Stop Using American Legion Emblem On Fliers

back and forth



"Politicians using songs by musicians who do not support them has been a thorny issue for decades, since Bruce Springsteen castigated President Reagan for planning to use Born in the USA as a backdrop for his 1984 re-election campaign. ... Technically, US copyright laws give politicians carte blanche to use recorded music at their rallies - as long as the venue has a public performance licence issued through a songwriters' association such as ASCAP or BMI (in the US) or PRS (in the UK)."

BBC



to live outside the law ...

2000

- April: Metallica sues Napster for copyright infringement. Yale and Indiana University ban service from campus.
- Dec: Napster sues an online clothes retailer for allegedly using its cat-like logo without permission on T-shirts and hats for sale.





April 23rd, 2009

Wikipedia Threatens Artists for Fair Use

Commentary by [Corynne McSherry](#)

Can a noncommercial critical website use the trademark of the entity it critiques in its domain name? Surprisingly, it appears that the usually open-minded folks at Wikipedia think not.

Last February, a pair of artists, working with several collaborators, created a Wikipedia article and invited the general public to add to it, following Wikipedia's standards of credibility and verifiability. The work was intended to comment on the nature of art and Wikipedia. But Wikipedia editors did not take kindly to the project, and it was shut down within fifteen hours for being insufficiently "encyclopaedic."

Fast forward a couple of months. The artists, Scott Kildall and Nathaniel Stern, have created a noncommercial website that documents the project, called Wikipedia Art. The domain name for the project: wikipediaart.org.

Yep, they used the term "wikipedia" in their domain name. "Wikipedia" is a trademark owned by the Wikimedia Foundation. And



to live outside the law ...

2000

- April: Metallica sues Napster for copyright infringement. Yale and Indiana University ban service from campus.
- Dec: Napster sues an online clothes retailer for allegedly using its

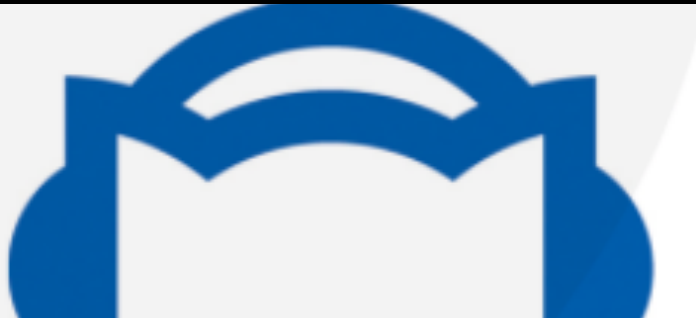




to live outside the law ...

2000

- April: Metallica sues Napster for copyright infringement. Yale and Indiana University ban service from campus.
- Dec: Napster sues an online clothes retailer for allegedly using its



April 23rd, 2009

Wikipedia Threatens Artists for Fa

Commentary by Corynne McSherry

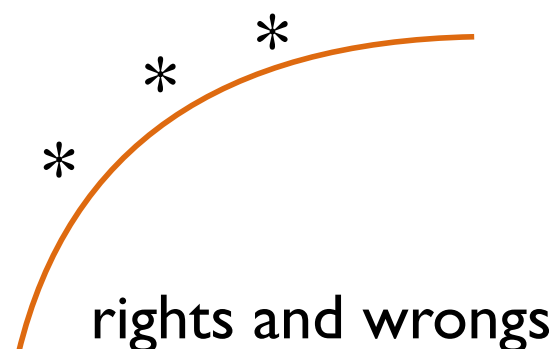
Can a noncommercial critical website use the trademark that the usually open-minded folks at Wikipedia think not

Last February, a pair of artists, working with several coll add to it, following Wikipedia's standards of credibility and end Wikipedia. But Wikipedia editors did not take kindly to

SFGATE NEWS SPORTS BUSINESS ENTERTAINMENT

Hells Angels sue Alexander McQueen, Saks, Zappos





skin in the game?

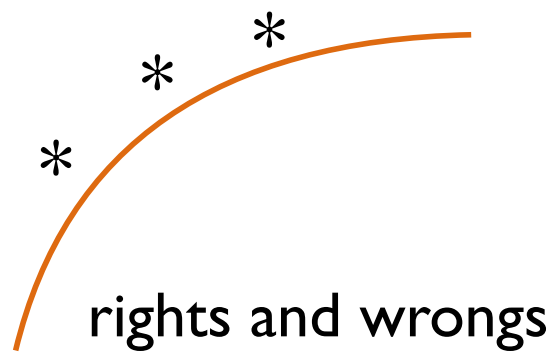
forget google (and Linux?) ...

```
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

_____)
UNIX SYSTEM LABORATORIES, INC.      )
                                     )
                                     )
Plaintiff,                          )
                                     )
vs.                                 )
                                     )
BERKELEY SOFTWARE DESIGN, INC.,    )
and certain named individuals in   )
their collective capacity as The    )
Regents of the University of       )
California,                        )
                                     )
Defendants.                          )
_____)

Civ. No. 92-1667
O P I N I O N
```

coming up:
Computer
March 21



skin in the game?

forget google (and Linux?) ...

OpenBSD 6.0



Released Sep 1, 2016

Copyright 1997-2016, Theo de Raadt.

ISBN 978-0-9881561-8-0

6.0 Songs: ["Another Smash of the Stack"](#), ["Black Hat"](#), ["Money"](#),
["Comfortably Dumb \(the misc song\)"](#), ["Mother"](#),
["Goodbye"](#).

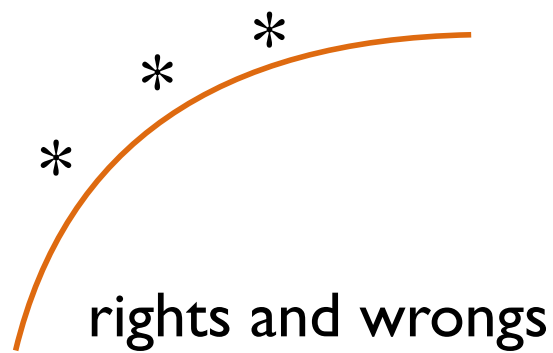
- Order a CDROM from our [ordering system](#).
- See the information on [the FTP page](#) for a list of mirror machines.
- Go to the [pub/OpenBSD/6.0/](#) directory on one of the mirror sites.
- Have a look at [the 6.0 errata page](#) for a list of bugs and workarounds.
- See a [detailed log of changes](#) between the 5.9 and 6.0 releases.

- [signify\(1\)](#) pubkeys for this release:

```
base: RWSHo3oKSqgLQy+NpIhFXZJDtKE65tzlmtC24mStf8DoJd2OPMgna4u  
fw:   RWRWf7GJKFvJTWEMiaw9wld0DujiqL1mlrC6HisE6i78C+2SRArV1Iy  
pkg:  RWQHIAjRlT2mX7tmRg6oN6mfJu3AgQ/TU38acrWABO8lz90dR3rNme
```

All applicable copyrights and credits are in the [src.tar.gz](#), [sys.tar.gz](#),
[xenocara.tar.gz](#), [ports.tar.gz](#) files, or in the files fetched via [ports.tar.gz](#).

coming up:
Computer
March 21



James Boyle, *Shamans, Software, & Spleens: Law and the Construction of the Information Society* (Cambridge, MA: Harvard University Press, 1996)

outside the law?

skin (and moore) in the game Mr Moore's spleen & 'human ingenuity'

United States Patent
Golde , et al.

4,438,032
March 20, 1984

Unique T-lymphocyte line and products derived therefrom

Abstract

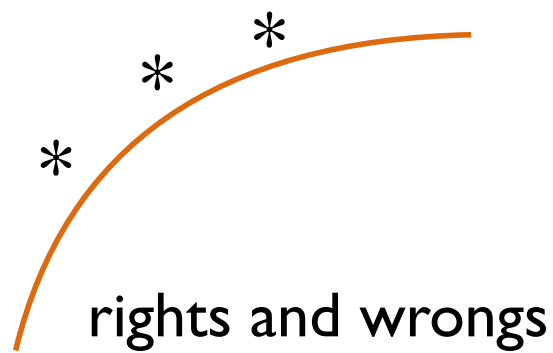
Human T-lymphoblast cell line, Proteinaceous products produced therefrom, messenger RNA and DNA expressing the proteinaceous products. A human T-lymphoblast cell line (Mo) maintained as a continuous culture constitutively produces proteins, including immune interferon, neutrophil migration inhibition factor, granulocyte-macrophage colony-stimulating activity and erythroid-potentiating activity, as well as other proteins produced by T-cells.

Inventors: **Golde; David W.** (Los Angeles, CA), **Quan; Shirley G.** (Los Angeles, CA)

Assignee: **The Regents of the University of California** (Berkeley, CA)

Appl. No.: **06/456,177**

Filed: **January 6, 1983**



James Boyle, *Shamans, Software, & Spleens: Law and the Construction of the Information Society* (Cambridge, MA: Harvard University Press, 1996)

outside the law?

skin (and moore) in the game Mr Moore's spleen & 'human ingenuity'

United States Patent
Golde , et al.

4,438,032
March 20, 1984

Unique T-lymphocyte line and products derived therefrom

Abstract

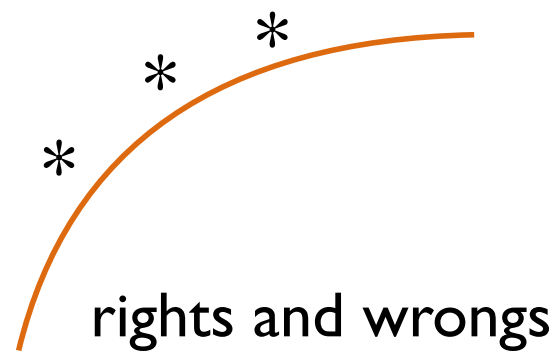
Human T-lymphoblast cell line, Proteinaceous products produced therefrom, messenger RNA and DNA expressing the proteinaceous products. A human T-lymphoblast cell line (Mo) maintained as a continuous culture constitutively produces proteins, including immune interferon, neutrophil migration inhibition factor, granulocyte-macrophage colony-stimulating activity and erythroid-potentiating activity, as well as other proteins produced by T-cells.

Inventors: **Golde: David W.** (Los Angeles, CA). **Quan: Shirlev G.** (Los Angeles, CA)

Assignee: **The Regents of the University of California** (Berkeley, CA)

Appl. No.: 06/456,177

Filed: **January 6, 1983**



contrasting views we have heard before?

"for wisdom, your pupils will have the reputation for it without the reality."

"to repair what is mutilated, to correct what is corrupted ... especially by the fault of those ... who reckon ... profit worth more than the whole realm of letters"

"They have labor'd to inlarge it, from being confin'd to the custody of a few; or from servitude to private interests."

Information
as
Property

the road ahead

developing *iproperty*

looking for a fix

what are we talking about?

rights and wrongs

*
*
*
what are we talking about?

so what are we talking about?



Jeremy Bentham
1748–1832

what *is* property?

"a curious spectacle ... multitudes of advocates and all the judges in and out of office talking about property in general, not one of them knowing what it was, nor how it was created; it was an assembly of blind men disputing about colours."

--Jeremy Bentham, *Manual of Political Economy*, 1794

in what way is *information* property?



properties of property

"No one shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation"

what is property?

what kinds of property ownership?

properties needed for private property?

limitations on property rights



properties of property

"No one shall be
... deprived of
life, liberty,
or property,
without due
process of law;
nor shall
private property
be taken for
public use,
without just
compensation"

what is property?

rules governing access to material goods

what kinds of property ownership?

properties needed for private property?

limitations on property rights

"a property right is a legally enforceable power to exclude others from using a resource, without need to contract with them."

— Landes & Posner, Economic Structure of Tort Law, 1987

*
*
* what are we talking about?

properties of property

"No one shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation"

what is property?

rules governing access to material goods

what kinds of property ownership?

properties needed for private property?

limitations on property rights

"a property right is a legally enforceable power to exclude others from using a resource, without need to contract with them."

— Landes & Posner, Economic Structure of Tort Law, 1987

*
*
* what are we talking about?

properties of property

"No one shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation"

what is property?

rules governing access to material goods

what kinds of property ownership?

common

collective

private

properties needed for private property?

limitations on property rights

"a property right is a legally enforceable power to exclude others from using a resource, without need to contract with them."

— Landes & Posner, Economic Structure of Tort Law, 1987

*
*
* what are we talking about?

properties of property

"No one shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation"

what is property?

rules governing access to material goods

what kinds of property ownership?

common

collective

private

properties needed for private property?

rivalrous

excludable

limitations on property rights

"a property right is a legally enforceable power to exclude others from using a resource, without need to contract with them."

— Landes & Posner, Economic Structure of Tort Law, 1987

*
*
* what are we talking about?

properties of property

"No one shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation"

what is property?

rules governing access to material goods

what kinds of property ownership?

common

collective

private

properties needed for private property?

rivalrous

excludable

limitations on property rights

how extensive

how many: one right--or a bundle?



Emperor Justinian
483–565

how acquired?

occupatio ... res nullius

--Codex Justinianus, 534

Blackstone's rules for property acquisition

descent, purchase, escheat, occupancy

prescription, forfeiture, alienation

—Blackstone, *Commentaries*, 1765-69.

which one for *iproperty*?



William Blackstone
1723–1780



*
*
*
what are we talking about?

i-property, i-problems

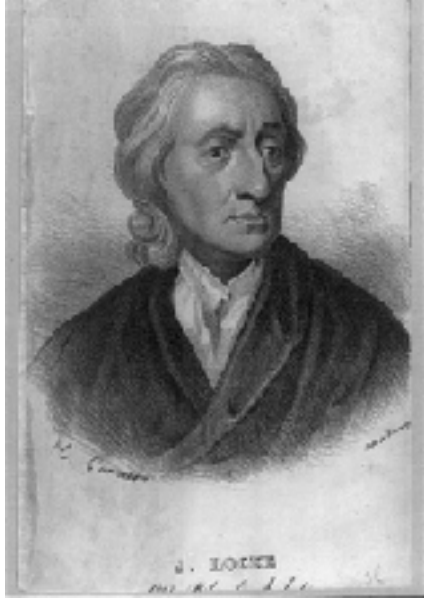
properties of information

rivalrous?

"... no one possesses the less because everyone possesses the whole of it. He who receives an idea from me receives [it] without lessening [me], as he who lights his [candle] at mine receives light without darkening me."

excludable?

if not, then "a public good"



John Locke
1632-1704

Terra Nullius?



uncommon?

Locke's view

"Though the Earth...be **common** to all Men, yet every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his Hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property. It being by him removed from the common state Nature placed it in, it hath by this labour something annexed to it, that excludes the common right of other Men."

--John Locke, *Two Treatises of Government*, 1689

rightful exclusion?

"There is no property in durable objects, such as lands or houses, ... but must, in some period, have been founded on fraud and injustice."

—David Hume, "Of the Original Contract," 1748



Noah Webster
1758-1841

American Dictionary
1827

same for i-property?

“Upon what principle, let me ask, can my fellow-citizens declare that the productions of the farmer & the artisan shall be protected by common law, or the principles of natural or social right, without a special statute, & without paying a premium for the enjoyment of their property; while they declare that I have only a temporary right to the fruits of my labor & this cannot be enjoyed without a premium? Are such principles as these consistent with the established doctrines of property & of moral right & wrong among an enlightened people? Are such principles consistent with the high & honorable notions of justice & equal privileges, which our citizens claim to entertain & to cherish, as characteristic of modern improvements in civil society?”

—Noah Webster to Daniel Webster, 1826

*
*
*
what are we talking about?

like fields, really?



Denis Diderot
1713–1784

"What form of wealth could belong to a man if not a work of the mind... if not his own thoughts .. What comparison could there be between .. the very substance of a man, his soul, and a field, a tree, a vine ... that an individual has only appropriated through cultivating it?"

--Denis Diderot,
Lettre Historique et Politique sure le Commerce de la Librarie, 1763



English Dictionary
1755

occupatio ... res nullius --Codex Justinianus, 534

rights vs consent

metaphysics vs consent

"There seems ... to be in authors a stronger right of property than by **occupancy**; a metaphysical right, a right, as it were of **creation**, which should from its nature be perpetual; but the consent of nations is against it, and indeed reason and the interests of learning are against it; for were it to be perpetual, no book, however useful, could be universally diffused amongst mankind, should the proprietor take it into his head to restrain circulation."

--Samuel Johnson, 1773

"a right, as it were of **creation**" —Johnson

*
*
* what are we talking about?

from fields to kids



Daniel Defoe
1660?–1731

"A Book is the Author's Property, 'tis the Child of his Inventions, the Brat of his Brains; 'tis as much his own , as his Wife and Children ... [but] these Children of our Heads are seiz'd, captivated, spirited away, and carry'd into Captivity."

--Daniel Defoe, *Review*, 1710

"a right, as it were of **creation**" —Johnson

*
*
* what are we talking about?

from fields to kids



Daniel Defoe
1660?–1731

"A Book is the Author's Property, 'tis the Child of his Inventions, the Brat of his Brains; 'tis as much his own , as his Wife and Children ... [but] these Children of our Heads are seiz'd, captivated, spirited away, and carry'd into Captivity."

--Daniel Defoe, *Review*, 1710

"blame Lysias, who is the father of the brat, and let us have no more of his progeny ..."

single parent?

* * *
what are we talking about?



Alexander Pope
1688–1744

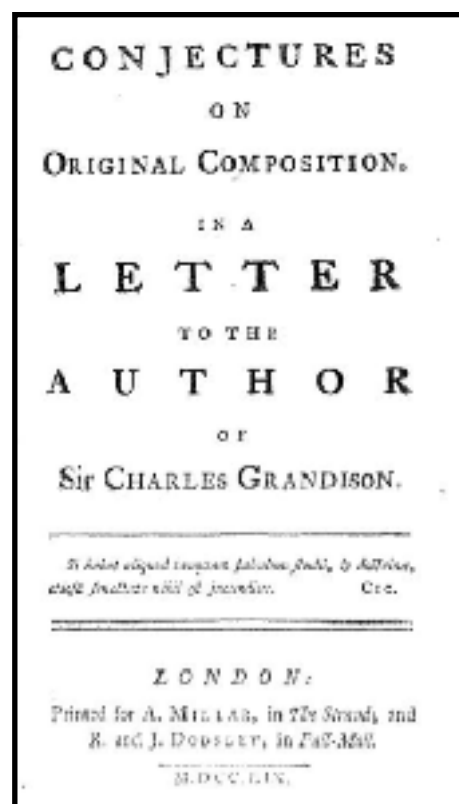
"Things unattempted yet in verse or rhyme"

-- John Milton,
Paradise Lost, 1708

"True Wit is Nature to advantage dress'd

What oft was thought, but ne'er so well express'd"

-- Alexander Pope,
"Essay on Criticism," 1708



Edward Young, 1759



what are we talking about?

theological views

Confucianism

"I transmit rather than create." --Confucius

Islam

Shari'a law against

"imposture" and "fraud" but not theft

Christianity

"Scientia Donum Dei Est

Unde Vendi non Potest"

--Canon Law

Information
as
Property

the road ahead

developing *iproperty*

looking for a fix

what are we talking about?

rights and wrongs



early print, property, and open source?

IP or Open Source?

1486 Marcantonio Sabellico — privilegium [©]

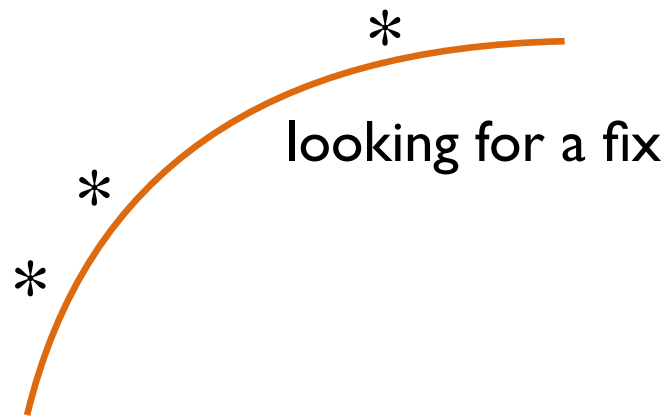
1496 Aldus Manutius — patent, Greek type

1498 Aldus - © Demosthenes, Plutarch, Xenophon ...

1501 Aldus Manutius — patent, Italic type

1507 Aldus - legal battles for control

1507 *Adagia* I: “Amicorum Communia Omnia”



guilds and mines?

"provided by law that no man should sew a shoe .. or make a cupboard, unless he has been approved by his trade **guild** ...

"Punishment ... for the man who sells cloth dyed in England from cloth dyed in Venice .. left free to profit from mere textual corruptions ... under the label of good authors" —Erasmus

"**Artificers** should reap the common crop of their Arts: but the **publick** should still have Title to the miraculous productions. It should be so appointed, as it is in the profits of mens Lands: where the Corn, and Grass, and Timber, and some courser Metals belong to the owner: But the **Royal Mines**, in whose ground soever they are discover'd, are no man's propriety, but still fall to the Crown.

—Sprat

"textual corruptions ... under the label of good
authors"
—Erasmus

looking for a fix

what's in a name?



"Who steals my purse steals trash. 'Tis something, nothing:
'Twas mine, 'tis his, and has been slave to thousands.

But he that **filches from me my good name**
Robs me of that which not enriches him
And makes me poor indeed.

...

Good name in man and woman, dear my lord,
Is the immediate jewel of their souls."

Shakespeare, *Othello*.



Durer's patent

1511



"provided by law that no man should sew a shoe ...
unless he has been approved by his trade guild" —Erasmus

going with guilds

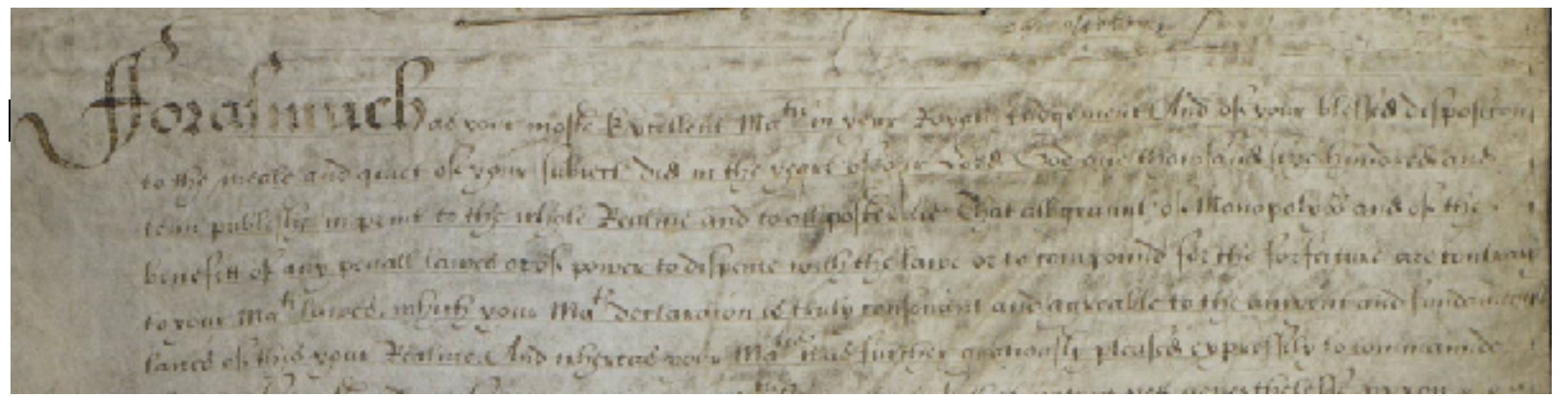


Mary I
1516–1558

Stationers' Company

"Know ye that we, considering and manifestly
perceiving that certain seditious and
heretical books rhymes and treatises are daily
published and printed by divers scandalous
malicious schismatical and heretical
persons ... wishing to provide a suitable
remedy ..."

— Stationers' Charter, 1557



alternative, free market visions

Statute of Monopolies

"All Monopolies and all Commissions, Grants, Licences, Charters and Letters Patent heretofore made or granted or hereafter to be made or granted to any Person or Persons, Bodies Politick or Corporate whatsoever, of, or for the sole Buying, Selling, Making, Working or Using any Thing within this Realm... or of any other Monopolies, or of Power, Liberty or Faculty... are altogether contrary to the Laws of this Realm, and so are and shall be utterly void and of none effect."

--Statute of Monopolies, England, 1624



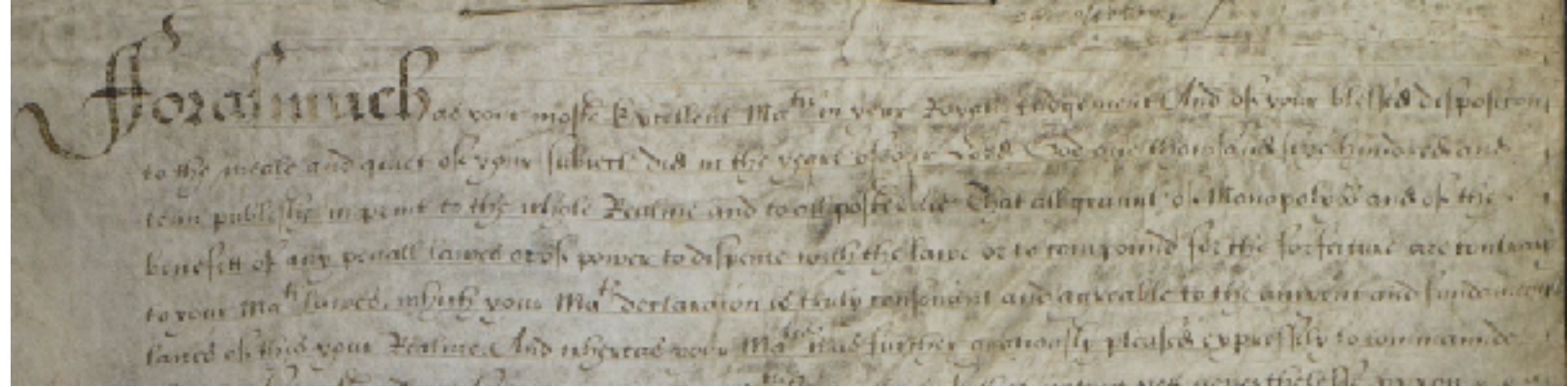
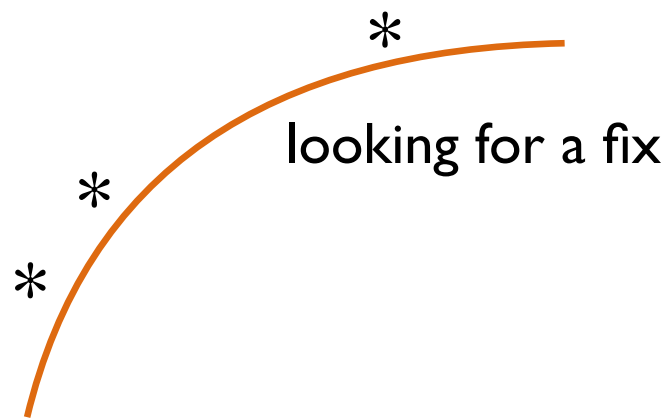
looking for a fix

"The Congress shall have power ... To promote the **Progress** of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"

patent exceptions

"Any Declaration before mentioned, shall not extend to any Letters Patents and Grants of Privilege for the Term of one and Twenty Years, or under, heretofore made of the sole Working or Making of any Manner of new Manufacture within this Realm, **to the first true Inventor or Inventors of such Manufactures.**"

--Statute of Monopolies, England, 1624



further exceptions

"Provided also that all lettres Patentes and grauntes heretofore made and hereafter to be made of the priviledg of the sole printing of the **Bible or booke of Common prayer or of the psalmes psalter** or anie other Bookes lawfully aucthorized and allowed, or to be soe aucthorized or allowed to be used in and for the publique divine service and worshipp of God or of anie bookes of the **Common lawes or Statutes of this Realme** or of anie proclamacion sett fourth or to be sett fourth by his Majestie his heires or successors or of **Jumus and Tremellius Bibles or of Lillies Grammar or of Prymers or Almanackes** shal be alsoe of such force as they were or should bee if this Act had never bene had or made and of none other, Provided alsoe that this act shall not extend to the Restraint or makeinge voyde of one **Patent of Priviledge for the sole printinge and selling of a Booke called the Theatre of Empire ...**"

Information
as
Property

the road ahead

towards *i*-property

looking for a fix

what are we talking about?

rights and wrongs



John Milton
1608-1674

"Amicorum Communia Omnia"

— Erasmus

"information wants to be free" — Stuart Brand

going open

civil war ends printing privileges

"the old patentees and monopolizers. ... We must not think to make a staple commodity of all the knowledge in the Land, to mark and licence it like our broad cloath, and our wool packs. And though all the winds of doctrine were let loose to play on the earth, so Truth be in the field, we do injuriously by licensing and prohibiting misdoubt her strength. Let her and Falsehood grapple; who ever knew Truth put to the worse in a free and open encounter?"

--John Milton, *Areopagitica*, 1644



Roger L'Estrange
1616–1704



English Civil War, 1642-1649

execution of Charles I

Commonwealth & Protectorate, 1649-1659

closing up again

1660: return of the king

1662: Licensing Act

1694/5: collapse of licensing acts

- scientific revolution
- "rise of literacy": the "reading nation"
- emergence of the "public sphere"
- the end of patronage
- competing monopolies: booksellers v printers

1710: Statute of Anne

"What a **revolution** they were making, what a power they were calling into existence."

-- Macaulay, *History of England*, 1848

Whereas your Majesty and
the Lords of the Council have
by several Statutes and
Orders made in this behalf
provided, that no person
should print or cause to be
printed any Book or Writing
without the License or
Special Privilege under the
Great Seal of Great Britain
first obtained, and that the
same should be printed
under the Authority of the
said Majesty and the said
Council, and that the
Printers and Booksellers
should be bound to
obtain the said License
and to keep the said
Books and Writings
in their Hands, and
not to lend or sell them
without the License of
the said Majesty and
the said Council, and
that the said License
should be obtained of
the High Court of Chancery,
and that the said Court
should have Power to
grant the said License
and to punish the
Persons who should
contravene the said
Statutes and Orders,
and that the said Court
should have Power to
make such Orders and
Regulations as should
be thought fit for
the better Execution
of the said Statutes
and Orders, and that
the said Court should
have Power to
appoint such Persons
as should be thought
fit to be the
Printers and
Booksellers of the
said Majesty and
the said Council,
and that the said
Court should have
Power to remove
the said Printers
and Booksellers
from their Office
if they should
be found to be
unfit for the
same, and that
the said Court
should have
Power to
make such
Orders and
Regulations
as should be
thought fit
for the
better
Execution
of the said
Statutes
and Orders,
and that the
said Court
should have
Power to
appoint
such
Persons
as should
be thought
fit to be
the
Printers
and
Booksellers
of the
said
Majesty
and the
said
Council,
and that the
said Court
should have
Power to
remove
the said
Printers
and
Booksellers
from their
Office if
they should
be found
to be
unfit for
the same,
and that
the said
Court
should have
Power to
make such
Orders and
Regulations
as should
be thought
fit for the
better
Execution
of the said
Statutes
and Orders,
and that the
said Court
should have
Power to
appoint
such
Persons
as should
be thought
fit to be
the
Printers
and
Booksellers
of the
said
Majesty
and the
said
Council,
and that the
said Court
should have
Power to
remove
the said
Printers
and
Booksellers
from their
Office if
they should
be found
to be
unfit for
the same,

author's due

not printers, nor booksellers

Whereas printers, booksellers and other persons have of late frequently taken the liberty of printing reprinting and publishing or causing to be printed reprinted and published Books and other writings without the consent of the authors or proprietors ... to their very great detriment. ...

For preventing therefore such practices for the future and **for the encouragement of learned men to compose and write useful books** ... That from and after the tenth day of April 1710...



i-property

whereas ...

"The clause in the law is a patent to the author and settles the propriety of the work wholly in himself, or in such to whom he shall assign it."

--Defoe,
*Essay on the Regulation
of the Press*

1710: statute of Anne

"any books or books already printed

"any book ... not printed ...

"nothing ... unless the title ... be ...

"if any Bookseller ... sell or expose to sell
any book ...

"provided that nine copies ..."

"nothing .. to Prohibit the Importation ..."

"A new law to give learned men property they had not had before." --Attorney General Thurlow

towards i-property

not a done deal until ...

ELEGANT EXTRACTS:

or useful and entertaining
PASSAGES in PROSE
(Selected for the)

IMPROVEMENT of SCHOLARS
at Classical & other Schools
in the
ART of SPEAKING,

in
Reading, Thinking, Composing;
and in the
CONDUCT of LIFE.



ΝΕΩΤΕΡΑ ΤΕ ΠΡΩΤΗ ΕΚΔΟΣΙΣ, ΝΕΩΤΕΡΑ ΤΕ ΕΒΔΟΜΗ.
A New Edition. ΠΟΛΙΣ:
LONDON: Printed by STEPHEN DILLI, 1784.

1774 Donaldson v Becket

limiting monopoly

"learning would be locked up in the hands of the Tonsons* and the Lintots of the age, till the public become as much their slaves, as their own hackney compilers are"

--Lord Camden

*the Tonson family held patents to Milton's poetry



metaphysics vs consent

"There seems ... to be in authors a stronger right of property than by occupancy; a metaphysical right, a right, as it were of creation, which should from its nature be perpetual; **but** the consent of nations is against it, and indeed reason and the interests of learning are against it; for were it to be perpetual, no book, however useful, could be universally diffused amongst mankind, should the proprietor take it into his head to restrain circulation."

--Samuel Johnson, 1773



1501.2.1.

P R E F A C E S,
B I O G R A P H I C A L
A N D
C R I T I C A L,
T O T H E
W O R K S
O F T H E
E N G L I S H P O E T S.

BY SAMUEL JOHNSON.

VOLUME THE FIRST.

L O N D O N:

PRINTED BY J. NICHOLS;

FOR C. BATHURST, J. BUCKLAND, W. STRAHAN, J. RIVINGTON AND SONS, T. DAVIES, T. PAYNE, L. DAVIS, W. OWEN, H. WHITE, S. CROWDER, T. CASLON, T. LONGMAN, B. LAW, E. AND C. DILLY, J. DODSLEY, M. BALDWIN, J. WILKIE, J. ROBSON, J. JOHNSON, T. LOWNDES, T. BECKET, G. ROBINSON, T. CADELL, W. DAVIS, J. NICHOLS, F. NEWBERRY, T. EVANS, J. RIDLEY, R. BALDWIN, G. NICOL, LEIGH AND SOTHERBY, J. SEW, N. CONANT, J. MURRAY, W. FOX, J. BOWEN.

M DCC LXXII.

consent

"There seems ... to be
property than by occupa-
as it were of creation
perpetual; **but** the con-
indeed reason and the
for were it to be per-
be universally diffused
proprietor take it in

ght of
t, a right,
ature be
t it, and
against it;
seful, could
the
rculation."
amuel Johnson, 1773



over here

-
- 1638:** first press in the US (patronized by MA government)
 - 1662:** licensing required
 - 1664:** monopoly grant to press
 - 1671:** "I thank God, there are no free schools nor printing, and I hope we shall not have these hundred years; for learning has brought disobedience" --Governor Berkeley, VA
 - 1672:** Usher's legal privilege (MA)
 - 1680s:** English restrictions on presses
 - 18c:** Stamp Acts
 - 1775:** 50 printing houses in the colonies



constitutional matter



SECTION 8. The Congress shall have Power

...

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;



national reaction

petitions

David Ramsay:

- The History of the American Revolution*
- The History of the Revolution of South Carolina from a British Province to an Independent State*

John Churchman (1753-1805)

"several different methods by which the principles of magnetic variation are so explained, that a latitude of a place being given, its longitude may be easily determined"

towards i-property

from petitions to statutes

124

FIRST CONGRESS. SESS. II. CH. 15. 1790.

STATUTE II.
May 31, 1790.

Repealed.
Act of April
29, 1802, ch. 36.
Act of Feb. 15,
1819, ch. 19. Act
of Feb. 3, 1831,
ch. 16. June 30,
1834, ch. 157.

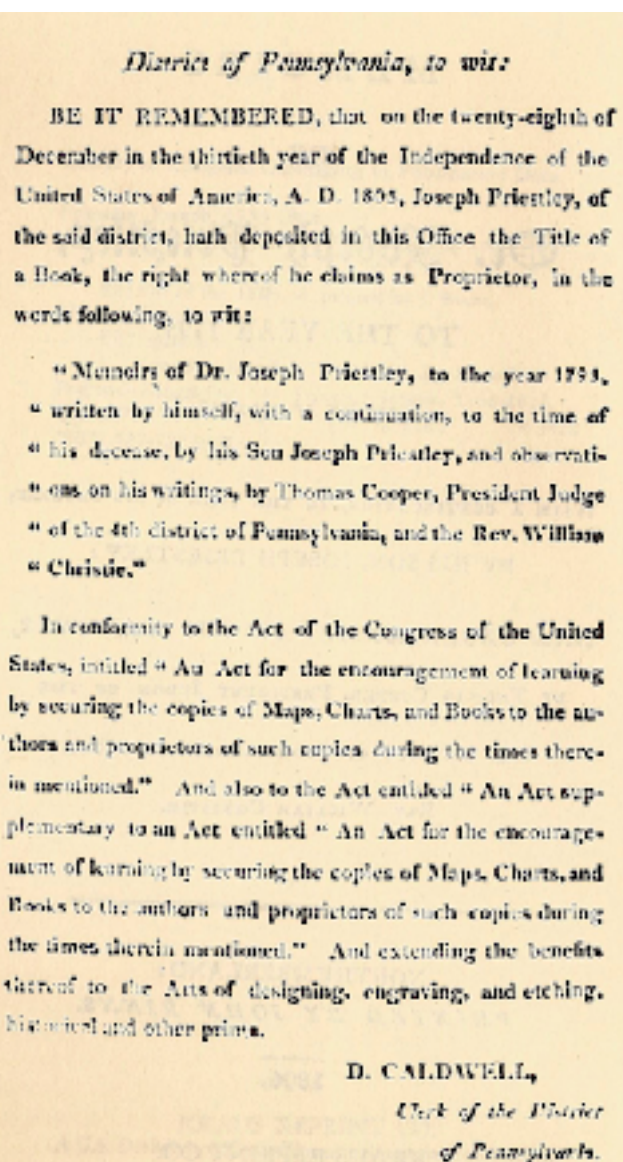
Authors of
maps, charts
and books;
and purchasers
from them, to
have the sole
right of publica-
tion for 14

CHAP. XV.—*An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned.*(a)

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That from and after the passing of this act, the author and authors of any map, chart, book or books already printed within these United States, being a citizen or citizens thereof, or resident within the same, his or their executors, administrators or assigns, who hath or have not transferred to any other person the copyright of such map, chart, book or books, share or shares thereof; and any other person or persons, being a citizen or citizens of these United States, or residents therein, his or their executors, administrators or assigns, who hath or have purchased or

towards i-property

changes



Joseph Priestley

1805

12-Hof113-IP-PD.2.23 44

"map, chart, book ...

"citizens thereof ...

"copyright ...

"recording in the clerk's office ...

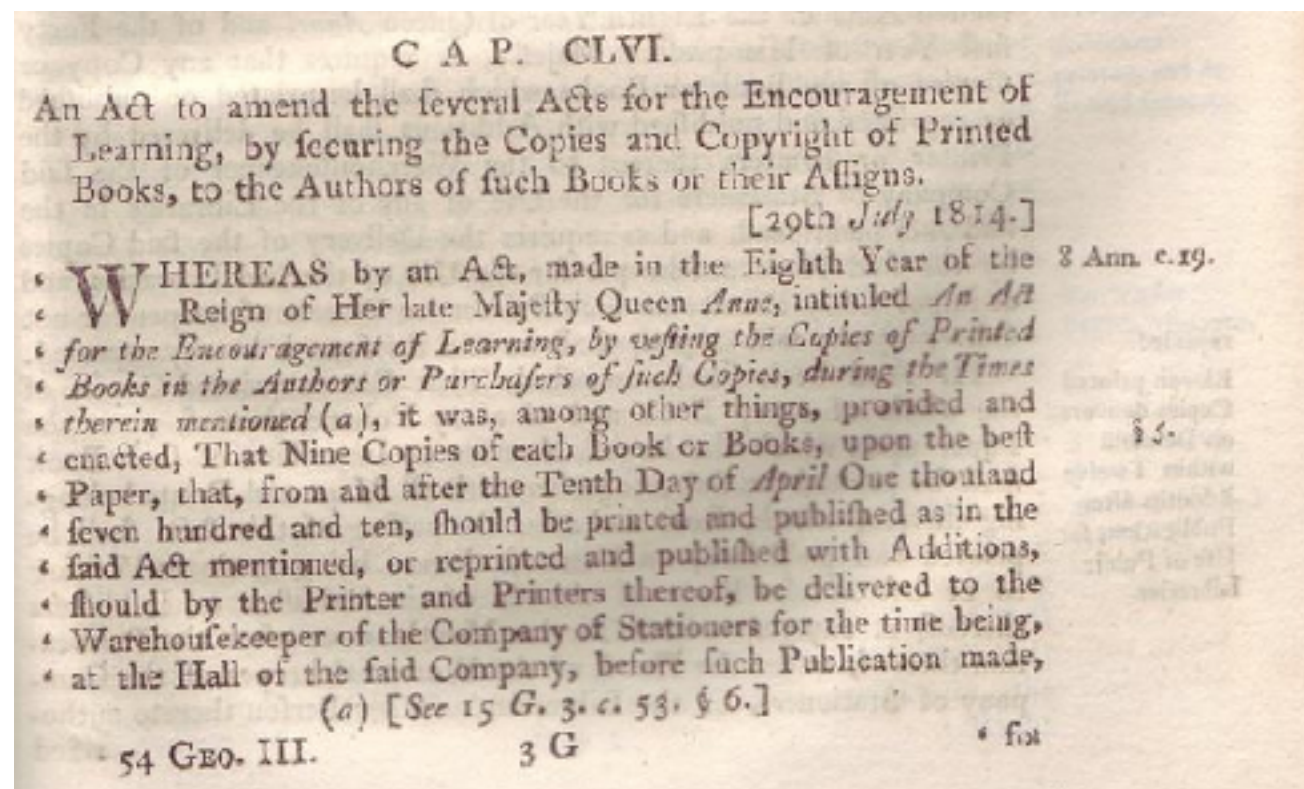
"shall print ... or import ...

"unless he shall first deposit ...

"nothing shall prohibit .. books ... by any person not a citizen ..."

towards i-property

from "encouragement" to Mickey Mouse?



"... sole Liberty of printing and reprinting for
the full term of Twenty-Eight Years ... and .. if
the Author shall be living at the End of that
Period, for the Residue of his natural Life



internationalization

UK

1838 International Copyright Act

1842 Copyright Act

1844 International Copyright Act

1851 Anglo-French Treaty

US

free market



HARPER'S NEW MONTHLY. The great attraction of Harper, at the present time, is "Bleak House," by Charles Dickens. The second part of this rich and entertaining story appears in the May number of Harper, and will appear in our paper of the two next weeks. We make no apology to our readers for devoting our fourth page to "Bleak House."

AMERICAN NOTES

FOR

GENERAL CIRCULATION.

By CHARLES DICKENS.

WITH A FRONTISPIECE BY C. STANFIELD, R.A.

LONDON:
CHAPMAN AND HALL, 193, PICCADILLY.
MDCCCL.

towards i-property

pirates turned police

March 3, 1891.

CHAP. 565.—An act to amend title sixty, chapter three, of the Revised Statutes of the United States, relating to copyrights.

Copyrights.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section forty-nine hundred and fifty-two of the Revised Statutes, be, and the same is hereby, amended so as to read as follows:

SEC. 10. That section forty-nine hundred and seventy-one of the Revised Statutes be, and the same is hereby, repealed.

Exclusion of aliens repealed.
R. S., sec. 4971, p. 960, repealed.

SEC. 11. That for the purpose of this act each volume of a book in two or more volumes, when such volumes are published separately and the first one shall not have been issued before this act shall take effect, and each number of a periodical shall be considered an independent publication, subject to the form of copyrighting as above.

Volumes separately copyrightable.

* * * towards i-property

meanwhile ...



Crystal Palace
1852

at the patent office

US patent law, 1790, revised, 1836

UK Patent Law Amendment Act, 1852,
Patent reform, 1883

France 1791, 1800, 1844

patent resistance & patent boom

*
*
* towards i-property

owning work



1800-1900

from the skill of the craftsman, the rights of "free labor"

(and the risk of enticement)

to trade secrets

"obligation to preserve such secrets must be implied"

non-compete clauses & work for hire

entrepreneurship vs corporate labs?



ds i-property

July 8, 1870. CHAP. CCXXX. — *An Act to revise, consolidate, and amend the Statutes relating to Patents and Copyrights.*

IV. Of Trade-Marks.

the third leg

"The Congress shall have power ... To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"

1870: revision of patent office registration of trademarks and the "second industrial revolution"

1879: the "trade-mark cases"

is it intellectual?
is it an invention?
is it progressive?

USSC: NO!

1881-1906: foreign treaty and indian tribes

1906: commerce clause





prior art

neglected firstborn of Anglo-American registration

CA, 1863

OR, 1864

NV, 1864-5

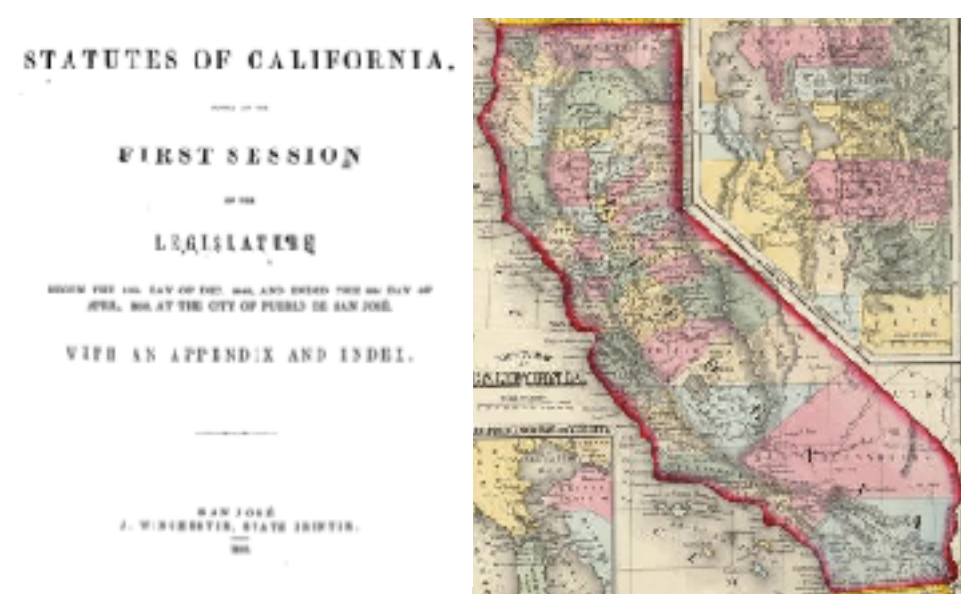
KA, 1866

MO, 1866

US, 1870

UK, 1875

industrial powerhouses?



89. marks and brands
101. marks and brands
117. incorp. of colleges
123. State assayer

our heritage?

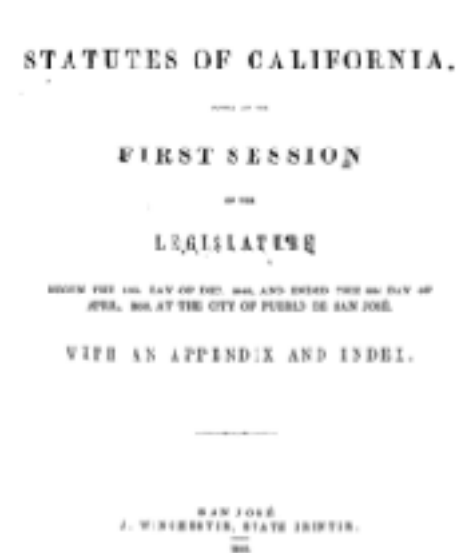
LAWS OF THE STATE OF CALIFORNIA.

Chap. 123.

AN ACT creating the office of State Assayer, Melter, and Refiner of Gold, and defining his Duties.
Passed April 20, 1850.

Other duties of state assayer.

§ 9. The State Assayer shall regularly number and stamp upon the ingots or bars thus made, the true value in dollars and cents, and the correct weight and carat fineness thereof, in accordance with the United States Mint standard : also the letters "Cal.," the date, and his own initials in plain letters over the words "State Assayer," and upon each end and side of any ingot and bar so issued, some uniform stamp or impression ; and shall, as soon as thus prepared, place it in the hands of the Director, taking his receipt in a book kept by the Assayer for that purpose, and the Director shall hand it over to the depositor, if demanded, within four days after the deposit of the dust, unless the time shall be prolonged by the depositor by a written agreement, when the weight given shall be returned to the Director, who shall cancel and keep the same.



89. marks and brands
101. marks and brands
117. incorp. of colleges
123. State assayer



our heritage?

LAWS OF THE STATE OF CALIFORNIA.

Chap. 123.

AN ACT creating the office of State Assayer, Melter, and Refiner of Gold, and defining his Duties.
Passed April 20, 1850.

Other duties of
state assayer.

§ 9. The State Assayer shall regularly number and stamp upon the ingots or bars thus made, the true value in dollars and cents, and the correct weight and carat fineness thereof, in accordance with the United States Mint standard : also the letters "Cal," the date, and his own initials in plain letters over the words "State Assayer," and upon each end and side of any ingot and bar so issued, some uniform stamp or impression ; and shall, as soon as thus prepared, place it in the hands of the Director, taking his receipt in a book kept by the Assayer for that purpose, and the Director shall hand it over to the depositor, if demanded, within four days after the deposit of the dust, unless the time shall be prolonged by the depositor by a written agreement, when the weight given shall be returned to the Director, who shall cancel and keep the same.



dialectics?

"Let us consider the matter in this way: If the wise man or any other man wants to distinguish the true physician from the false, how will he proceed?"

... He will consider whether what [the physician] says is true, and whether what he does is right, in relation to health and disease? ... But can any one attain the knowledge of either unless he have a knowledge of medicine?

... No one at all, it would seem, except the physician can have this knowledge; and therefore not the wise man; he would have to be a physician as well as a wise man."

—Plato, *Charmides*

your gold?

June 1996, Volume 23, Issue 2, pp 119–120

The economics of information: An exposition



ECONOMY

Kenneth Arrow, Nobel-Winning Economist Whose Influence Spanned Decades, Dies at 95

By MICHAEL M. WEINSTEIN FEB. 21, 2017



Kenneth J. Arrow receiving the Nobel Memorial Prize in Economic Science in Stockholm in 1972. Associated Press

Kenneth J. Arrow, one of the most brilliant economic minds of the 20th

"I have so far brought out one implication of the presence of information which reduces uncertainty, the economic relevance of nonprice signals ...the economic agent is willing to pay for information, for signals ...the educational system has become, partly inadvertently, an industry which sells signals for individuals to emit to the world. . . . this creates an incentive for the student to continue his education" —Arrow



dialectics?

"Let us consider the matter in this way: If the wise man or any other man wants to distinguish the true physician from the false, how will he proceed?"

... He will consider whether what [the physician] says is true, and whether what he does is right, in relation to health and disease? ... But can any one attain the knowledge of either unless he have a knowledge of medicine?

... No one at all, it would seem, except the physician can have this knowledge; and therefore not the wise man; he would have to be a physician as well as a wise man."

—Plato, *Charmides*



your gold?

June 1996, Volume 23, Issue 2, pp 119-120

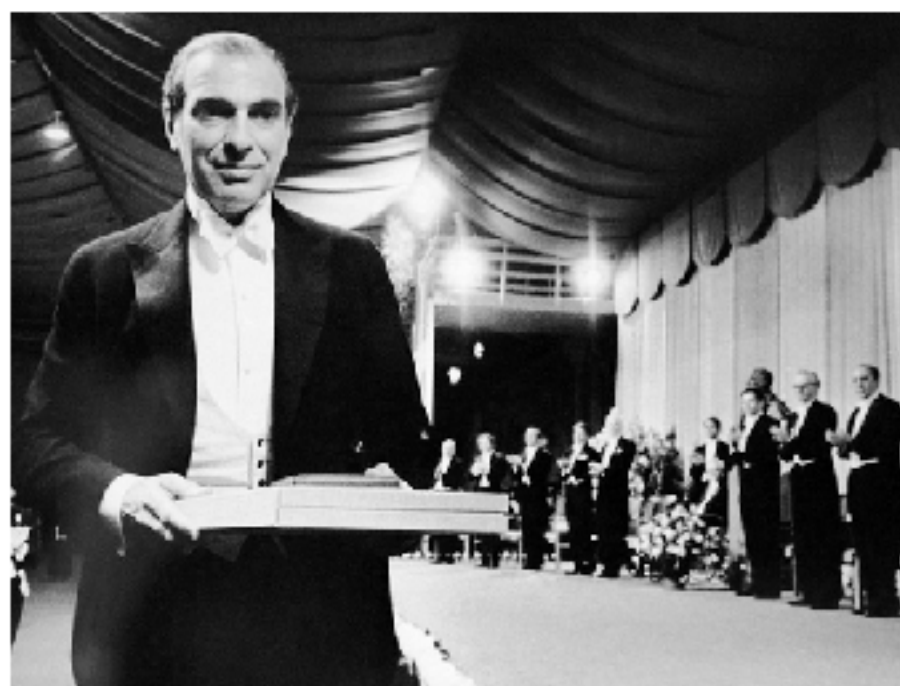
The economics of information: An exposition



ECONOMY

Kenneth Arrow, Nobel-Winning Economist Whose Influence Spanned Decades, Dies at 95

By MICHAEL M. WEINSTEIN FEB. 21, 2017



Kenneth J. Arrow receiving the Nobel Memorial Prize in Economic Science in Stockholm in 1972. Associated Press

Kenneth J. Arrow, one of the most brilliant economic minds of the 20th

"I have so far brought out one implication of the presence of information which reduces uncertainty, the economic relevance of nonprice signals ...the economic agent is willing to pay for information, for signals ...the educational system has become, partly inadvertently, an industry which sells signals for individuals to emit to the world. . . . this creates an incentive for the student to continue his education" —Arrow



"FRESNO BUSINESS COLLEGE".

ereby files and records the same in the office of the Hon.
tary of State of the State of California, pursuant to Sec-
3197 and 3198 and 3199 of the Political Code of the State
lifornia.

W.C. Ramsey

Claimant.

KNOW ALL MEN BY THESE PRESENTS:

That I, JOSEPH H. GOLDMAN, of the City and County of San Francisco, State of California, have adopted, and claim the sole and exclusive ownership of, the trade-name "PROFESSOR J. S. BEECH," and claim the sole and exclusive right to do business under said trade-name.

Dated at San Francisco, California, October 18th, 1901.

Joseph H. Goldman

alchemical alternative?

STATE OF CALIFORNIA,
City and County of San Francisco,)
: ss.

JOSEPH H. GOLDMAN, being first duly sworn, says: I have adopted, and am the sole and exclusive owner of, the trade-name "PROFESSOR J. S. BEECH," referred to and described in the foregoing claim of ownership.

Joseph H. Goldman

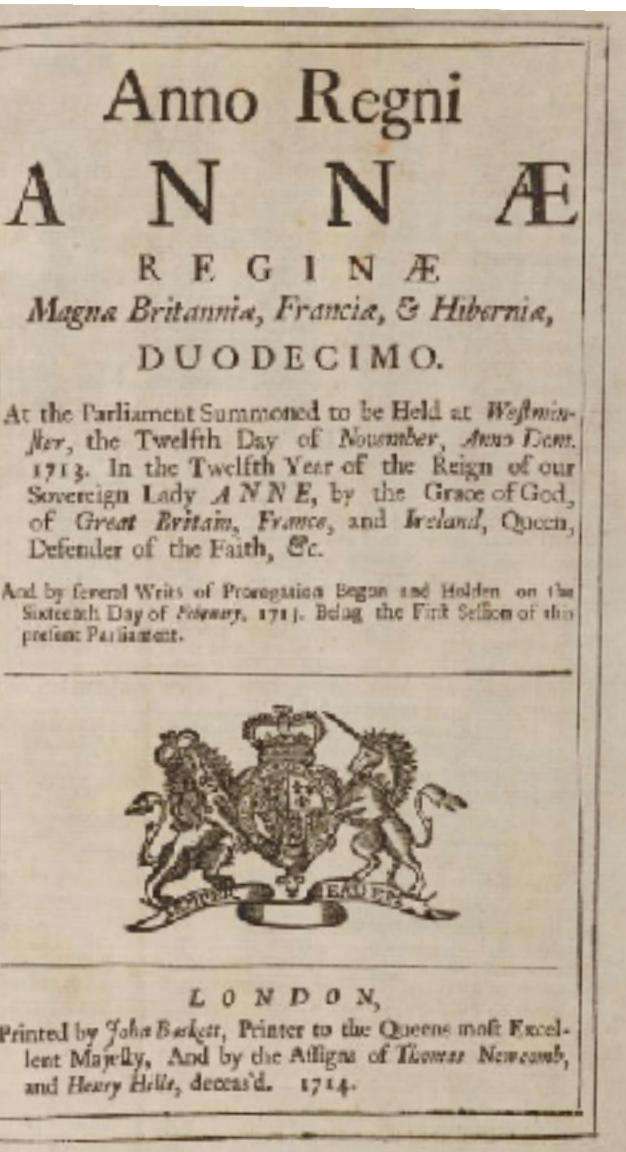
Subscribed and sworn to before me
this 18 day of October, 1901.

R. B. Lusk

Notary Public in and for the City and County of
San Francisco, State of California.

towards i-property

other alternatives ahead



Harrison



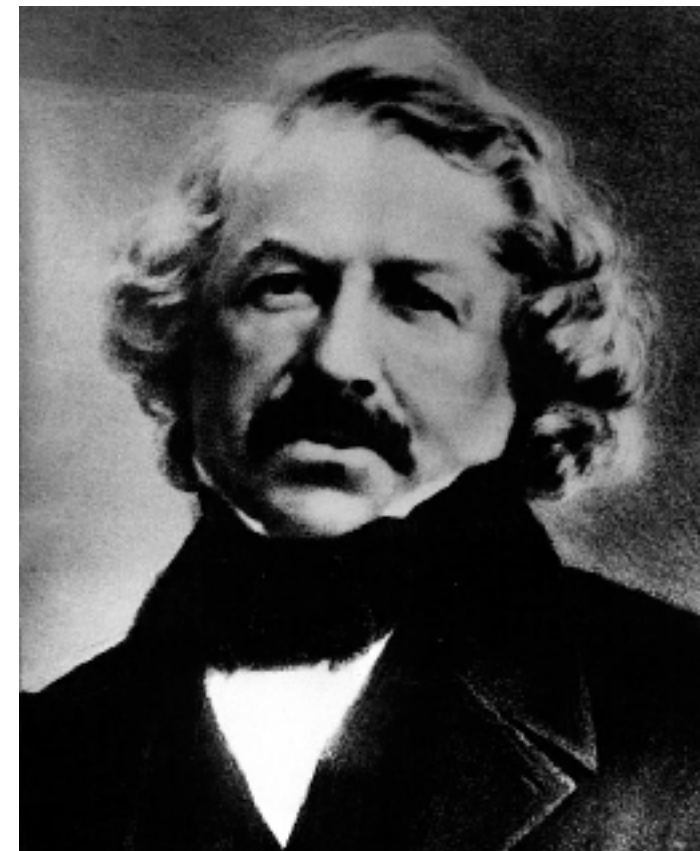
Time & Space

Joseph Henry

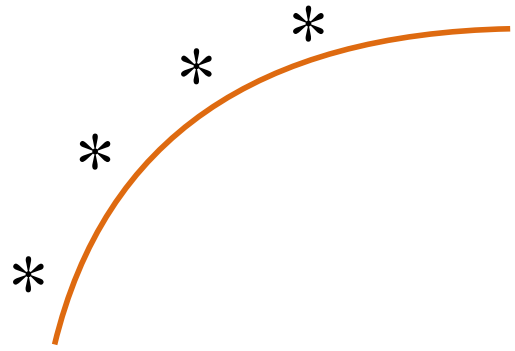


Communications

Daguerre



Photography



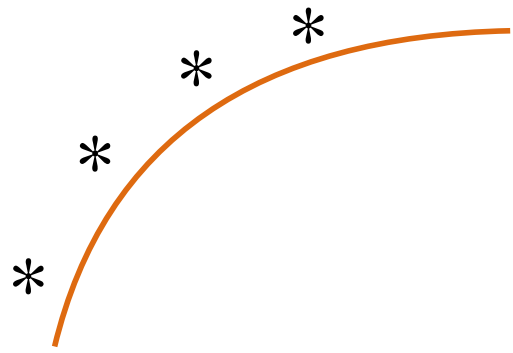
in sum

property a problematic category

tensions between common, collective, & private

tensions between private rights, incentives, and public interest

information property far more problematic



coming up

28 Feb: Unnoticed Revolutions? Time, Space and Money

Writing, print, science, and literacy are generally recognized for their transformational contributions to modern society. But in acknowledging them what might we be overlooking? This class will look at the less-heralded informational contributions of numeracy, and in particular of regularized time, mapped space, and financial accounting. The readings look at what a “Young Man” in Eighteenth Century America hoping to take control of his life by becoming a farmer or a businessman would be expected to know about these issues of time, space, and money.

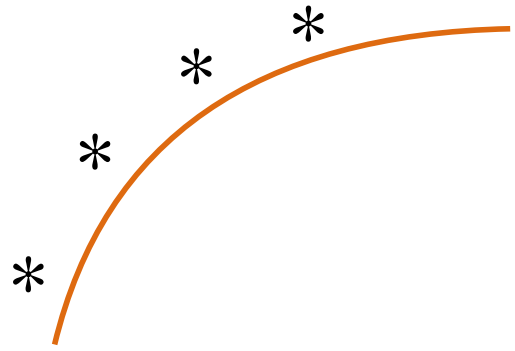
Required Readings

Fisher, George. 1748. *The American Instructor or Young Man's Best Companion* Ninth Edition. Philadelphia.

Read the title page and the concluding section, “Advice to a young tradesman, written by an old one” (pp. 375-377). Then scan the sections on “Bookkeeping” (i.e. the management of money, pp. 153-162) and “Land Measure” (i.e., the measurement of space, pp. 208-211) [you can find these pages extracted [here](#) in a pdf or see the whole book online at Eighteenth Century Collections [here](#)]

Mather, William. 1775. *The Young Man's Companion*. 24th Edition. London

Scan “Chronology” (i.e. the measurement of time, pp. 255-265). [you can find this extract [here](#) in a pdf or see the whole book online at Eighteenth Century Collections [here](#)]



assignment

The American Instructor and *The Young Man's Companion* suggest that by controlling the technology of the day that deals with time ("Chronology"), space ("Land Measure"), and money ("Book-keeping") a "Young Man" [sic] will form "a mind for business" and as a result be able to take control of his life. Yet since the 18th century, others have suggested that such technologies are as likely to lead to our lives being controlled. Using an example from Fisher or Mather and its present day equivalent, argue whether, then and now, such technologies tend to give us freedom or to submit us to social or technological control. Find support for your claim about the modern device.