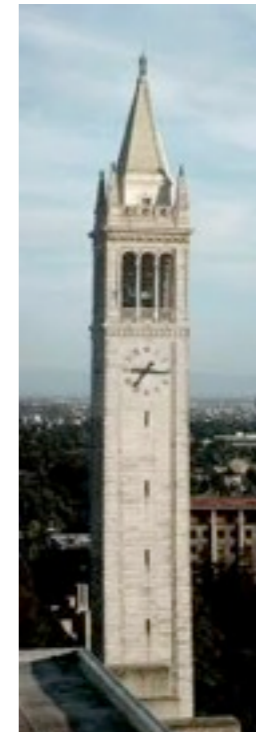


Social Implications

mysteries of the region

History of Information

April 19, 2012



exam

May 9

11:30 - 2:30

155 Kroeber

study sessions

Tuesday May 1 - Thursday May 3

9:30-11:00

"commodore ate the apple"

aob

Jack Tramiel, a Pioneer in Computers, Dies at 83

By DOUGLAS MARTIN
Published: April 10, 2012

Jack Tramiel, a hard-charging, cigar-chomping tycoon whose inexpensive, immensely popular Commodore computers helped ignite the personal computer industry the way Henry Ford's Model T kick-started the mass production of automobiles, died on Sunday in Palo Alto, Calif. He was 83.



[Enlarge This Image](#)



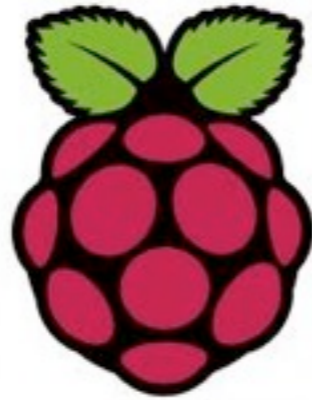
Marty Katz/baltimorephotographer.com

Jack Tramiel, president of Commodore International, with his computers at a 1984 consumer electronics show in Las Vegas.

The cause was heart failure, his son Sam said.

Commodore rose to prominence in the 1970s and '80s, producing the first computer to sell a million units. Another model, the Commodore 64, sold more than 20 million units — four times the sales of the Apple II, which is often said to have established the personal computer market. Sales of the 64 exceeded \$1 billion.

Mr. Tramiel's business model was ruthlessly efficient: he introduced a new product at the lowest price possible, and as the competition matched his price he went even lower. He did this by slashing costs, hiring top engineering talent, selling in mass-r and owning the suppliers of chips and other compone in an instant, going so far as to introduce a new prod an existing one. He liked to say that business is war.



who's blowing raspberries?

First Batch Of £16 Raspberry Pi PCs Arrives



Written by
[Desire Athow](#)

I have been musing and writing about technology since 1999 back in my native country Mauritius, dreaming back in 1997 of a world full of avatars...

13 April, 2012



9

[raspberry pi](#) [computer](#) [hardware](#)



And some lucky students got it for free

It seems fitting that the first batch of [Raspberry](#) Pi computers landed in the UK in the hands of school children based in Leeds as what many consider as another wave of grassroots computing revolution, another BBC Micro 2.0, begins.

The Raspberry Pi has been designed from scratch to get anyone interested in computer programming to do so without forking out much; the base unit can connect to a television like the Commodore C64 or the Sinclair ZX81.

According to the BBC, the first batch has been presented by Eben Upton today, the school project co-ordinator, in an event held at the Leeds offices of Premier Farnell, one of the official PI distributors.

overview

a little
learning

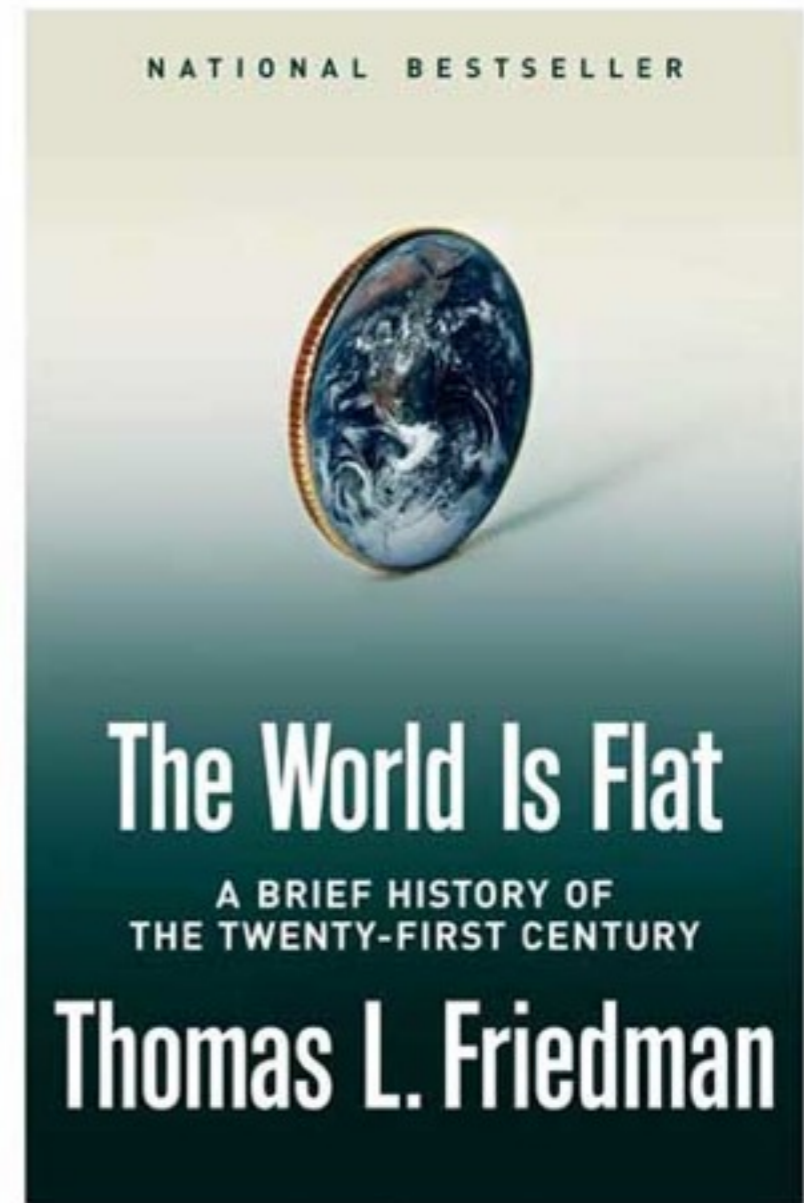
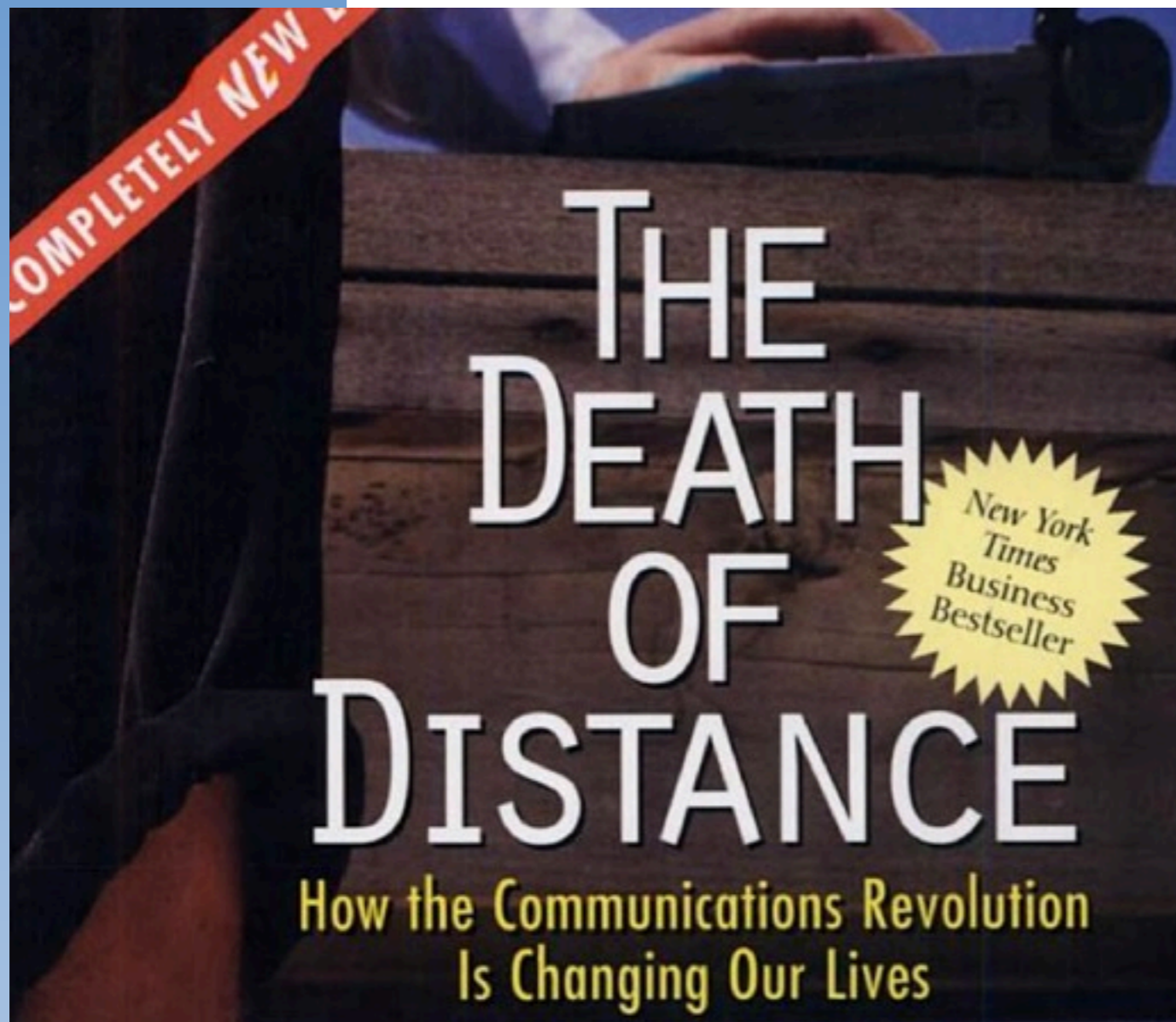
information
issues

predictable
problems

some
doubts

death of
distance

which century?



trendspotting

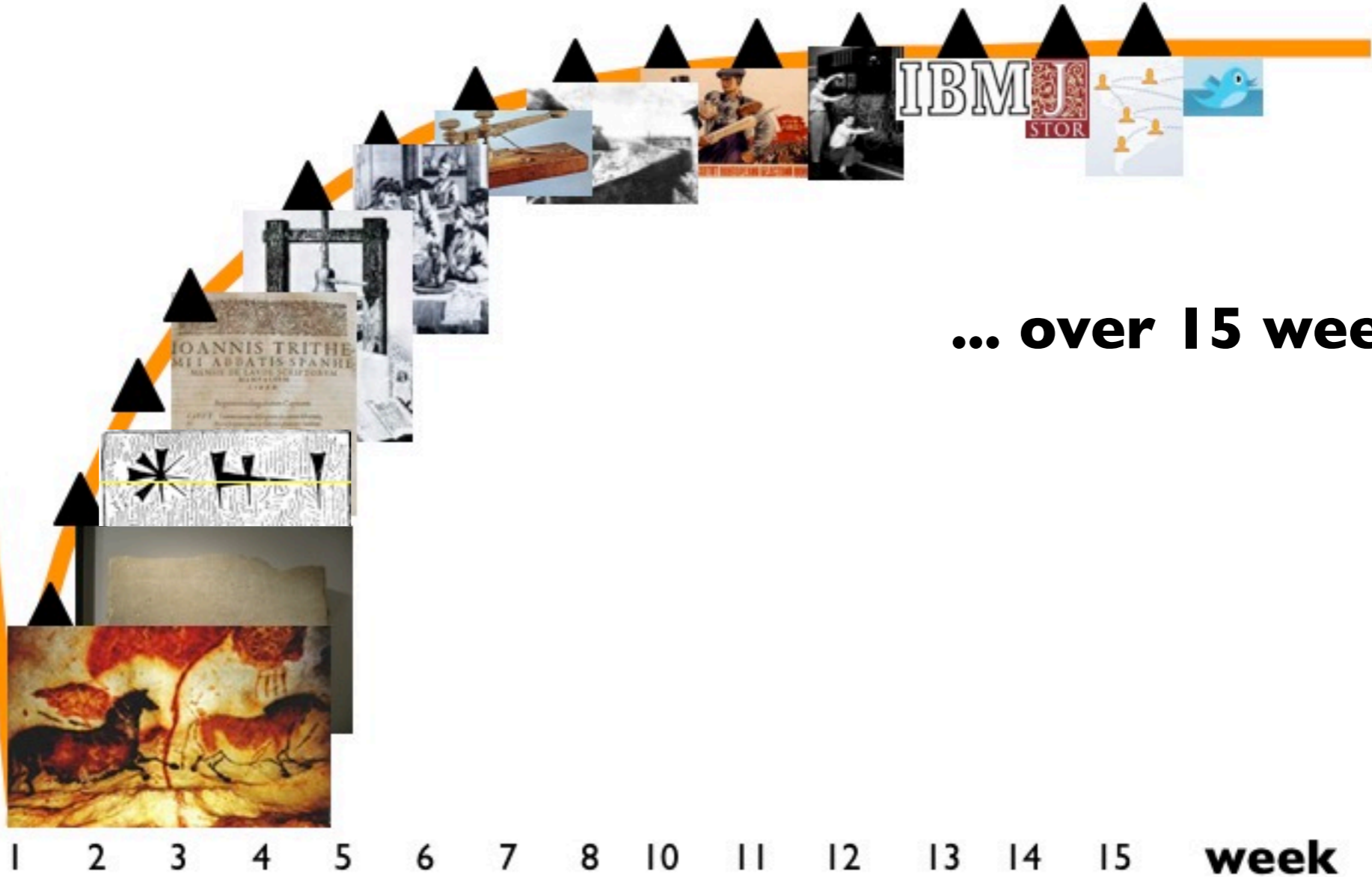
- 1. The Death of Distance.** Distance will no longer decide the cost of communicating electronically. Indeed, once investment has been made in a communications network, in buying a computer or telephone, or in setting up a Web site, the additional cost of sending or receiving an extra piece of information will be virtually zero.
- 2. The Fate of Location.** Companies will be free to locate many screen-based activities wherever they can find the best bargain of skills and productivity. Developing countries will increasingly perform on-line services – including monitoring security screens, inputting data from forms, running help-lines, and writing software code – and sell them to the rich industrial countries that generally produce such services domestically.
- 3. Improved Connections.** Most people on earth will eventually have access to networks that are all interactive and broadband. The Internet will continue to exist in its present form, but will also carry many other services, including telephone and television.
- 4. Increased Mobility.** Every form of communication will be available for mobile or remote use.
- 5. More Customized Networks.** The huge capacity of networks will enable individuals to order “content for one”: that is, individual consumers will receive (or send) exactly what they want to receive (or send), when and where they want it.
- 6. A Deluge of Information.** Because people’s capacity to absorb new information will not increase, they will need filters to sift, process, and edit it.
- 7. Increased Value of Brand.** Companies will want ways to push their information ahead of their competitors’. One of the most effective will be branding. What’s hot – whether a product, a personality, a sporting event, or the latest financial data – will attract the greatest rewards.
- 8. More Minnows, More Giants.** Many of the costs of starting a new business will fall and companies will more easily buy in services. So small companies will start up more readily, offering services that, in the past, only giants had the scale and scope to provide. If they can back creativity with competence and speed, they will compete effectively with larger firms. At the same time, communication amplifies the strength of brands and the power of networks. In industries where networks matter, concentration will increase.
- 9. More Competition.** More companies and customers will have access to accurate price information. In addition, some entry barriers will fall. The result will be greater competition in many markets, resulting in “profitless prosperity”: it will be easier to find buyers, but harder to make fat margins.



looking back

year

2012
1980
1950
1900
1800
1700
1600
1200
600
400
0
500
3000
5000
30,000
50,000



... over 15 weeks



300 years (or 25 classes)

"Ye Gods, annihilate but space and time,
And make two lovers happy."

1728





Claude Chappe
(1763–1805)

a single point

revolutionary ideas

"The establishment of the telegraph is ... the best response to the publicists who think that France is too large to form a Republic. The telegraph shortens distances and, in a way, brings an immense population together at a single point."

--Claude Chappe, 1793



one neighbourhood

"It is not visionary to suppose that it would not be long ere the whole surface of this country would be channelled for those nerves which are to diffuse, with the speed of thought, a knowledge of all that is occurring throughout the land; making one neighborhood of the whole country."

Morse to Congress, 1838

still going

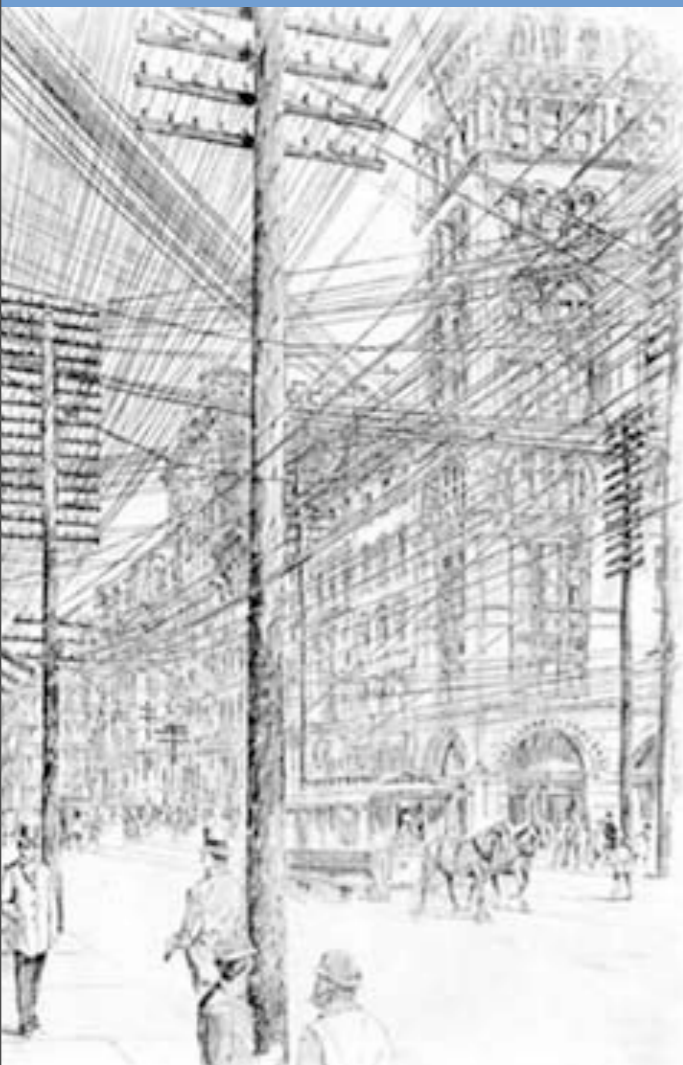
sea to shining sea



"the almost complete annihilation of time and space between the distant antipodal points of the American continent ... produced by the construction of the Pacific Railroad"

-- John Wesley Clampitt,
Echoes from the Rocky Mountains, 1888

going global

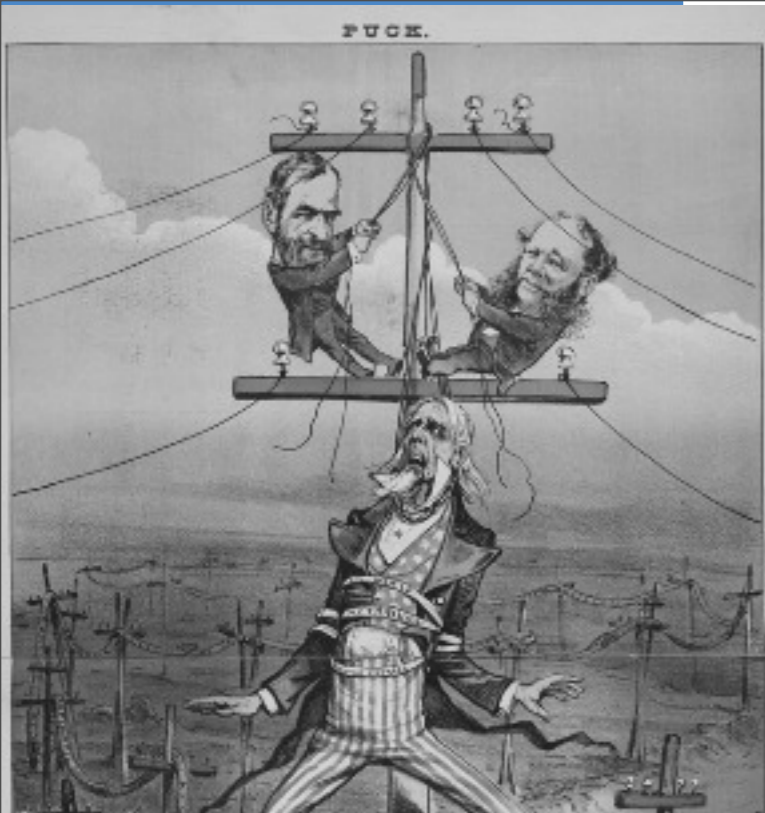


"A line of telegraph ... from London to Kurrachee, and from thence to every part of India, ... intelligence and commands be daily and hourly communicated with the speed of lightening ... in this **virtual annihilation of time and space** in the communications between England and her distant possessions will be more than realised"

--*Blackwood's Edinburgh Magazine*, 1857

Richard John, "Robber Barons Redux: Antimonopoly Reconsidered." *Enterprise & Society* (2012) 13(1) 1-38

(aside)

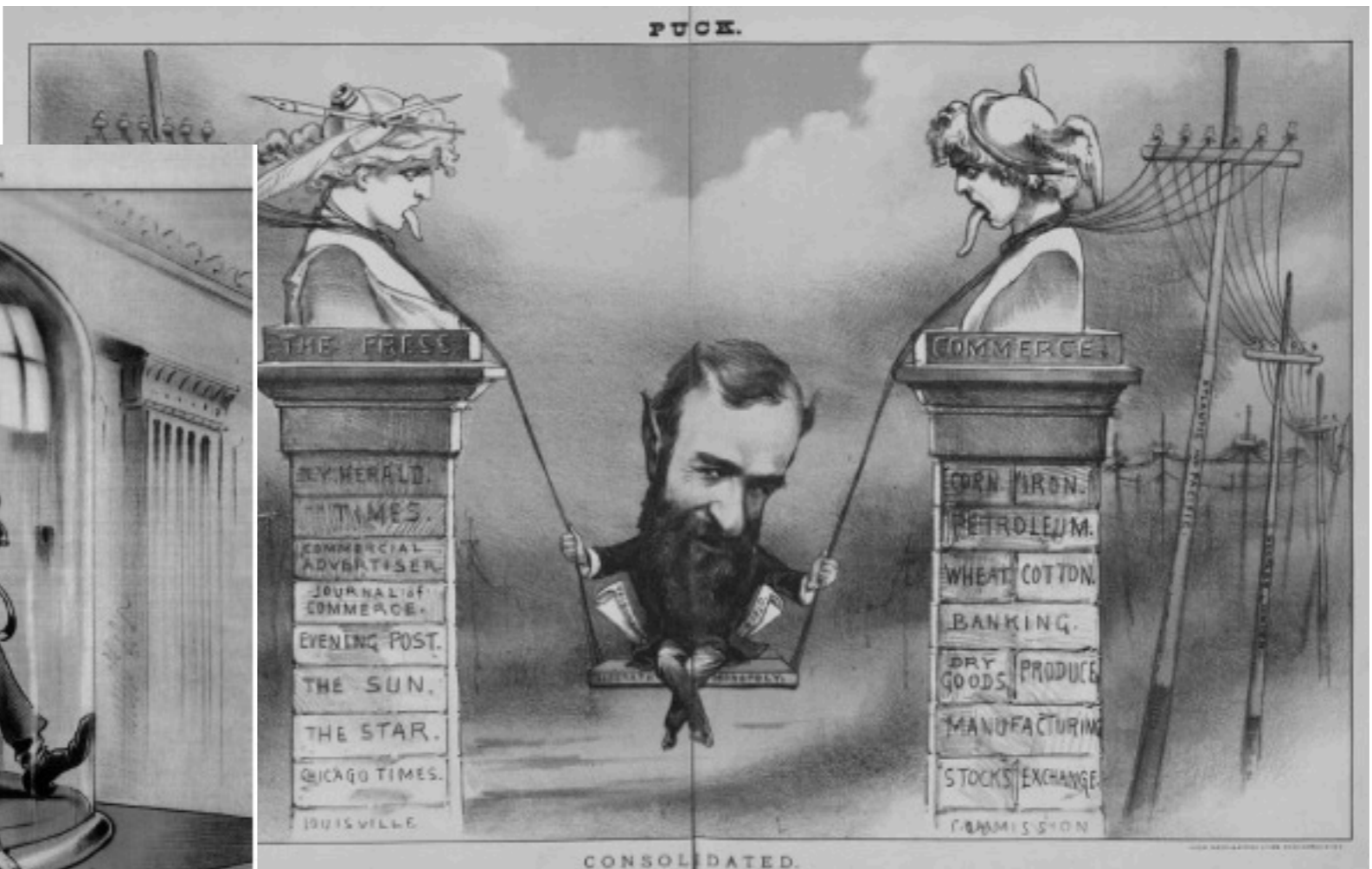


THE TWO PHILANTHROPISTS
"Don't the little ones, the big ones?"



THE JUDGE

"I NEVER SPECULATE."—by Puck



PUCK.

THE PRESS
DAILY HERALD
"THE TIMES"
COMMERCIAL ADVERTISER
JOURNAL OF COMMERCE
EVENING POST
THE SUN
THE STAR
CHICAGO TIMES
LOUISVILLE

COMMERCE
CORN IRON
PETROLEUM
WHEAT COTTON
BANKING
DRY GOODS PRODUCE
MANUFACTURING
STOCKS EXCHANGE
BAMMIS SHON

CONSOLIDATED.



25. Global Peace. Democracy will continue to spread: people who live under dictatorial regimes will be more aware of their governments' failures. Democracies have always been more reluctant to fight than dictatorships. In addition, countries will grow yet more economically interdependent. People will communicate more freely with human beings on other parts of the globe. As a result, while wars will still be fought, the effect may be to foster world peace.

peace

"It is impossible that old prejudices and hostilities should longer exist, while such an instrument has been created for the exchange of thought between all the nations of the earth."

-- Charles Briggs & Augustus Maverick,
The Story of the Telegraph, 1858

"Steam was the first olive branch offered to us by science. Then came the still more effective olive branch--this wonderful electric telegraph, which enables any man who happens to be within reach of a wire to communicate instantaneously with his fellow men all over the world."

-- Ambassador Thornton, 1858

27-Hof112-SocImp-PD 18

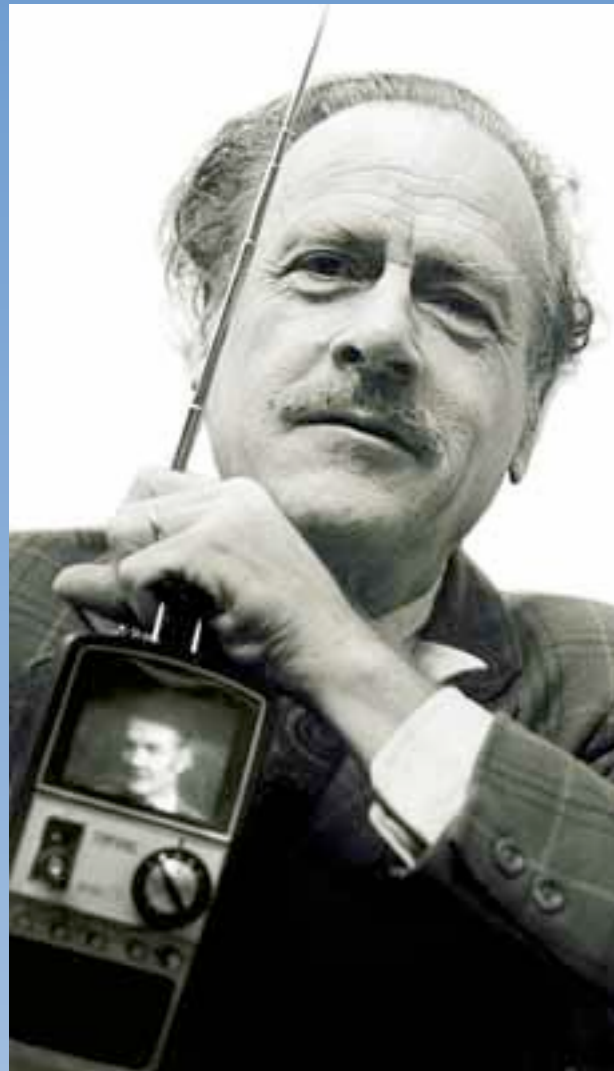


once again, one voice

"Someday we will build up a world telephone system, making necessary to all peoples the use of a common language or common understanding of languages, which will join all the people of the earth into one brotherhood. There will be heard throughout the earth a great voice coming out of the ether which will proclaim, 'Peace on earth, good will towards men.'"

--John J. Carty, AT&T, 1891

global village



"Electric circuitry has overthrown the regime of 'time' and 'space' and pours upon us instantly and continuously concerns of all other men. It has reconstituted dialogue on a global scale. Its message is Total Change, ending psychic, social, economic, and political parochialism... Ours is a brand-new world of allatonceness. 'Time' has ceased, 'space' has vanished. **We now live in a *global village* ... a simultaneous happening.**"

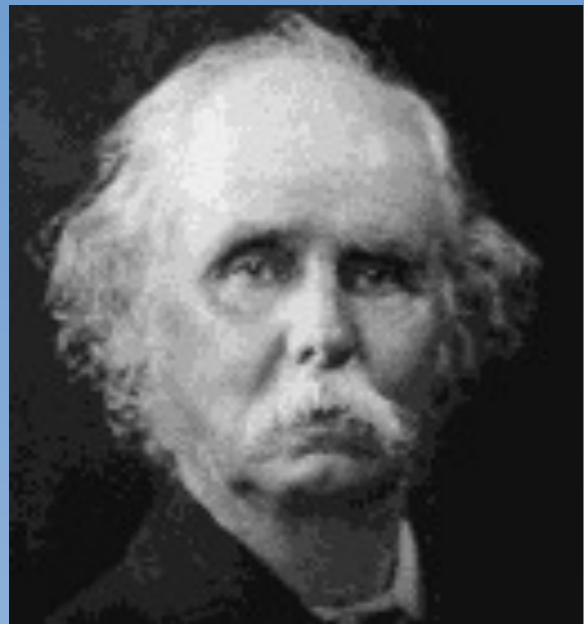
--McLuhan et al., *Medium is the Message*, 1967

"the *revolution* begins at last"

"This has been predicted before; the difference now is that it is actually starting to happen"



principled explanation?



Alfred Marshall
1842-1924

"Every cheapening of the means of communication, every new facility for the free interchange of ideas ... alters the action of the forces which tend to localize industries."

--Alfred Marshall,
Principles of Economics, 1920

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Apple's Supply-Chain Secret? Hoard Lasers

The iPhone maker spends lavishly on all stages of the manufacturing process, giving it a huge operations advantage



Illustration by Alex Eben Meyer


By Adam Satariano and Peter Burrows

 Recommend

480

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3,986

 Share

1,223

 +1

669

 E-mail

 Print

"He will go to the nearest shop for a trifling purpose, but for a more important purchase he will take the trouble of visiting any part of the town where he knows that there are specially good shops for his purpose."

--Alfred
Marshall,
*Principles of
Economics*, 1920

or integration?





The Conscience of a Liberal

PAUL KRUGMAN

both ways?

January 22, 2012, 5:36 PM

Apple And Agglomeration

The [big Times article on Apple](#) manufacturing was excellent, and I'll have more to say about it when I have the time. One thing worth noting right away, however, is that the piece is in large part an essay on the [economies of agglomeration](#) (pdf, wonkish):

"The entire supply chain is in China now," said another former high-ranking Apple executive. "You need a thousand rubber gaskets? That's the factory next door. You need a million screws? That factory is a block away. You need that screw made a little bit different? It will take three hours."

The point is that manufacturing plants don't exist in isolation; they benefit a lot from being part of a manufacturing cluster, with specialized suppliers and a large pool of workers with the right skills close at hand. This is the kind of stuff I emphasized in my own work on both trade and economic geography.

The policy implications aren't as clear as you might imagine. But more about that when I have time to do it right.

theory of the firm?



Ronald Coase
1910

economic challenge

free-market theory

nature of the firm

make or buy

transaction costs



or theory of information?

staying close to the customer





April 17, 2012

Dishwashers

Celebrate Earth Day with a new energy efficient dishwasher

Tee Party

Look effortlessly cool in a t-shirt dress this spring

or theory of information?

staying close to the customer





April 17, 2012

Dishwashers

Celebrate Earth Day with a new energy efficient dishwasher

amazon Today's Deals | Gift

Shop by Department Search All

Instant Video MP3 Store Cloud Player Kindle

kindle fire

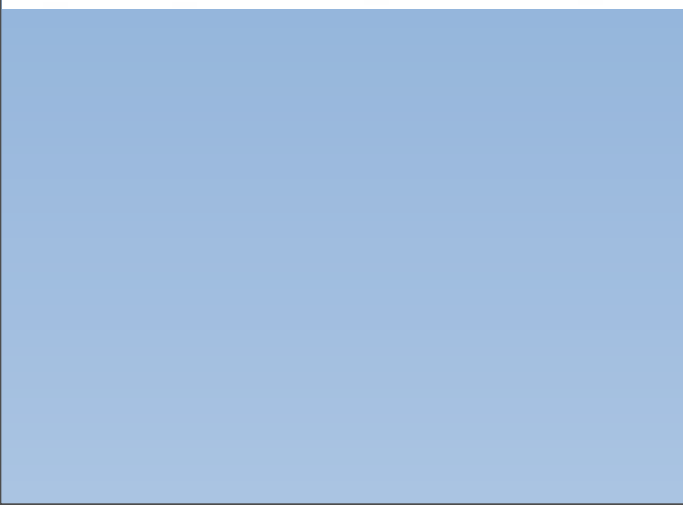
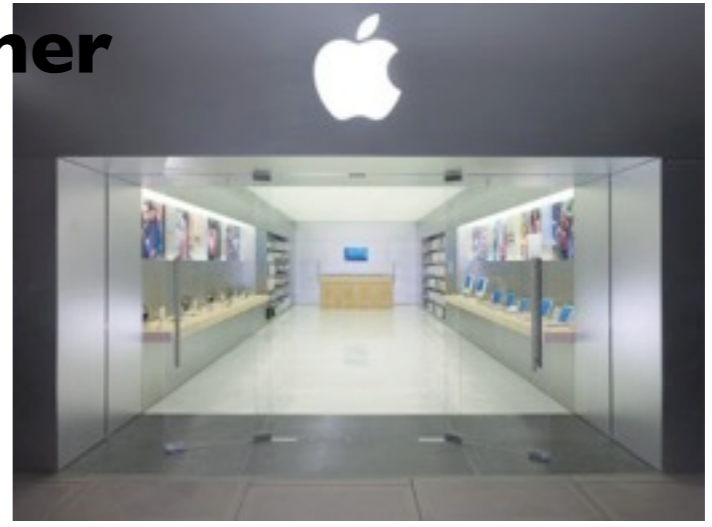
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Kindle e-Readers from \$79

or theory of information?

staying close to the customer





April 17, 2012

Dishwashers

Celebrate Earth Day with a new energy efficient dishwasher

amazon Today's Deals | Gift

Shop by Department Search All

Instant Video MP3 Store Cloud Player Kindle

kindle fire

The #1 best-selling product

\$199 > [Shop now](#)

Web Coupons Know Lots About You, and They Tell

STEPHANE CLIFFORD
Updated: April 16, 2012

For decades, shoppers have taken advantage of coupons. Now, the coupons are taking advantage of the shoppers.

Readers' Comments

Readers shared their thoughts on this article.
[Read All Comments \(64\)](#)

A new breed of coupon, printed from the Internet or sent to mobile phones, is packed with information about the customer who uses it. While the coupons look standard, their bar codes can be loaded with a startling amount of data, including identification about the customer, Internet address, Facebook page information and even the search terms the customer used to find the coupon in the first place.

And all that information follows that customer into the mall. For example, if a man walks into a Filene's Basement to buy a suit for his wedding and shows a coupon he retrieved online, the company's marketing agency can figure out whether he used the search terms "Hugo Boss suit" or "discount wedding clothes" to research his purchase (just don't tell his wife).

or theory of information?

staying close to the customer





April 17, 2012

Dishwashers

Celebrate Earth Day with a new energy efficient dishwasher



Today's Deals | Gift

Shop by Department

Search All

Instant Video MP3 Store Cloud Player Kindle

kindle fire

The #1 best-selling product

\$199 > Shop now

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or theory of information?

stayin

April 3, 2012, 8:00 PM

New Digital Magazine App Launches on Wednesday

Article

Comments

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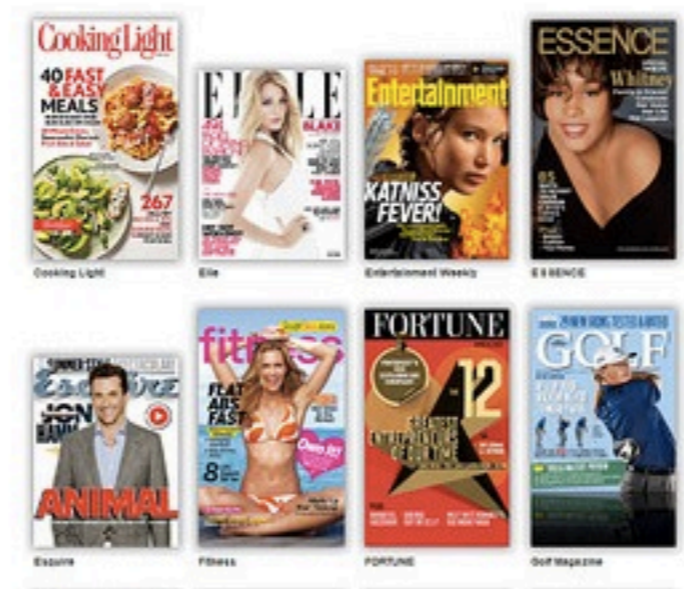


+ More

Text

By Russell Adams

Next Issue Media, the joint venture of five magazine and newspaper publishers to create a storefront for their tablet editions, will launch its long-awaited newsstand app on Wednesday.



The first version of the app will have 32 titles representing just under a quarter of the magazine market by circulation, though it will only be available on Android tablets. NIM decided some time ago to launch with Android in part because iPad maker Apple Inc. had tighter restrictions on how apps could be priced and sold. NIM will submit an app to Apple, which has since softened some of its rules, in the coming weeks.

more complications

if distance is dead ...



... why are they here?

"Every cheapening of the means of communication, every new facility for the free interchange of ideas ... alters the action of the forces which tend to localize industries."

--Alfred Marshall,
Principles of Economics, 1920

at the centre ...

... of cheapening communication



old connections?

These difficulties ...
Are however
being diminished
by the railway,
the printing
press and the
telegraph."

--Alfred
Marshall,
*Principles of
Economics*, 1920

The New York Times

Business Day
Technology

WORLD

U.S.

N.Y. / REGION

BUSINESS

TECHNOLOGY

SCIENCE

HEALTH

SPORTS

OPINION

Behind Instagram's Success, Networking the Old Way

By SOMINI SENGUPTA, NICOLE PERLROTH and JENNA WORTHAM
Published: April 13, 2012

SAN FRANCISCO — Past midnight, in a dimly lit warehouse jutting into the San Francisco Bay, Kevin Systrom and Mike Krieger introduced something they had been working on for weeks: a photo-sharing [iPhone](#) application called Instagram. What happened next was crazier than they could have imagined.

 Enlarge This Image




Peter DaSilva for The New York Times

Instagram's offices in San Francisco. From left, Shayne Sweeney, Mike Krieger, Josh Riedel and Kevin Systrom were at work on their app last May.

In a matter of hours, thousands downloaded it. The computer systems handling the photos kept crashing. Neither of them knew what to do.


"Who's, like, the smartest person I know who I can call up?" Mr. Systrom remembered thinking. He scrolled through his phone and found his man: Adam D'Angelo, a former chief technology officer at [Facebook](#). They had met at a party seven years earlier, over beers in red plastic cups, at the Sigma Nu fraternity at Stanford University. That night in October 2010, Mr. D'Angelo became Instagram's lifeline.

"Adam spent like 30 minutes on the phone with us," Mr. Systrom recalled, "walking us through the basic things we needed to do to get back up."

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VERSUS**
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Related

10. **Increased Value of Niches.** The power of the computer to search, identify, and classify people according to similar needs and tastes will create sustainable markets for many niche products. One of the most valuable improvements will be in the ability of people to locate things that have hitherto been hard to find: from friends with similar tastes to specialized services.
11. **Communities of Practice.** The horizontal bonds among people performing the same job or speaking the same language in different parts of the world will strengthen. Common interests, experiences, and pursuits, rather than proximity, will bind communities together.
12. **The Loose-Knit Corporation.** Culture and communications networks, rather than rigid management structures, will hold companies together. Vertically integrated companies that do the costs of dealing with arm's-length suppliers and partners. Alliances will bond companies together at many levels.
13. **Openness as a Strategy.** Loyalty, trust, and open communications will reshape the nature of supplier and customer contacts. Suppliers will draw directly on their customers' databases, working as closely and seamlessly as an in-house supplier does now. Customers will be able to manage and track their orders through the production process.
14. **Manufacturers as Service Providers.** Companies will tailor their products more precisely to a customer's tastes and needs. Some will retain lasting links with their products: car companies, for instance, will continue electronically to track, monitor, and learn about their vehicles throughout the product's life cycle. New opportunities to build links with customers will emerge as a result.
15. **The Inversion of Home and Office.** The line between home and work will blur. People will increasingly work from home and shop from work. The office will become a place for the social aspects of work such as networking, brainstorming, lunching, and gossiping. More people will work on the move: from their cars, from hotel rooms, from airport departure lounges. Home design will change: new homes will routinely have home offices.
16. **The Proliferation of Ideas.** New ideas and information will travel faster to the remotest corners of the world. Developing countries will acquire more rapidly access to the industrial world's knowledge and ideas. That will help many developing countries to grow more quickly and even to narrow the gap with the rich world.
17. **The Decline of National Authority.** Governments will find national legislation and censorship inadequate for regulating the global flow of information.
18. **Loss of Privacy.** Protecting privacy will be difficult, as it was in the villages of past centuries. Governments and companies will easily monitor people's movements. Machines will recognize physical attributes such as a voice or fingerprint. Civil libertarians will worry, but others will rationalize the loss as a fair exchange for the reduction of crime, including fraud and illegal immigration. In the electronic village, there will be little true privacy – and little unsolved crime.
19. **A Global Premium for Skills.** Pay differentials will continue to widen, as companies fight for the scarce talents of well educated workers. Managerial and professional jobs will be less vulnerable to competition from automation than jobs requiring relatively little skill. In addition, the Internet enhances the value of creative use of information. On-line recruitment will make the job market more global and efficient. As a result, highly skilled people will earn broadly similar amounts, wherever they live in the world.
20. **Rebirth of Cities.** As individuals spend less time in the office and more time working from home or on the road, cities will change from concentrations of office employment to centers of entertainment and culture. They will become places where people congregate to visit museums and galleries, attend live performances of all kinds, participate in civic events, and dine in good restaurants. Some poor countries will use low-cost communications to stem the flight from the countryside by providing rural areas with better medical services, jobs, education, and entertainment.

playing both ways? ...

home work?

percentage of home workers in population

1960	1970	1980	1990	1999	2005
0.025	0.013	0.0095	0.014	0.034	0.039

Inc.  Payroll, benefit
What a drag.

▶ START-UP ▶ RUNNING A BUSINESS ▶ FINANCE ▶ LEADERSHIP & MANAGING ▶ SALES & MAF

Archives >

April 2010



Inc. How to Sell Anything
COVER STORY
The Case, and the Plan, for the Virtual
Company

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"Ceci tuera ..."

proclaiming supersession

the new vs the old

There are persons who can write not illegibly in pencil, but are as enigmatical as Rufus Choate or Horace Greeley when they take up the pen. There are persons too lazy to resort to ink and pen who can conquer their besetting sin enough to make a few dabs with a pencil. Living must have been more laborious before the pencil age. Blue pencil, red pencil, what should we do without them? Yet writing with one's own hand seems to be disappearing, and the universal typewriter may swallow all. Librarians of a century or two hence may be searching for the last reference to pencils.

New York Times
1938



59.4% - **Bicycle**



2

35



nunberg error



The front cover of the second issue of *Eagle* magazine (1950); from the book under review

Behold the Computer Revolution

By PETER T. WHITE National Geographic Staff

Illustrations by National Geographic Photographers
BRUCE DALE and EMORY KRISTOF

MY WIFE IS MAD AT COMPUTERS. "Those awful machines," she calls them. "How they mess up our credit card accounts! Imagine sending a bill for \$232.24 every month for four months after you've paid it!"

But I'm not mad. That mixup was settled after five months; and we never did feel as computer-harassed as some Americans, notably the Kansan repeatedly reminded that his department store bill was "overdue in the amount of \$00.00." At last he too managed to pacify the computer—with a check for \$00.00.

In a way, though, my wife is right. After a year of looking closely at computers—at what they are doing all over the country, what they are likely to do before long, and what their effects are expected to be upon us all and upon our descendants—I must say that these machines are indeed awful, in just about every sense the dictionaries assign to that word: inspiring dread, appalling, objectionable; solemnly impressive; commanding reverential fear or profound respect; sublimely majestic.

In the end I found my own ways of



At the consoles of such electronic wonders as this IBM 370, man achieves the power to master information on a scale that profoundly influences the course of science, business, government—even the arts. © N.G.S.

"Perhaps someday the desk worker fed up with traffic jams in the city will do his job at a computer input-output station at home: If he wants to see documents from company files, he punches his keyboard and they appear on his display screen. ... To dictate a letter, he punches up his secretary, at her office desk or at her terminal in her home. She'll type it on her keyboard—and the text will emerge in the downtown office, to go into the files and into the mail. Or she'll send electronic impulses directly to the company addressed—into their computer....

--National Geographic, 1970

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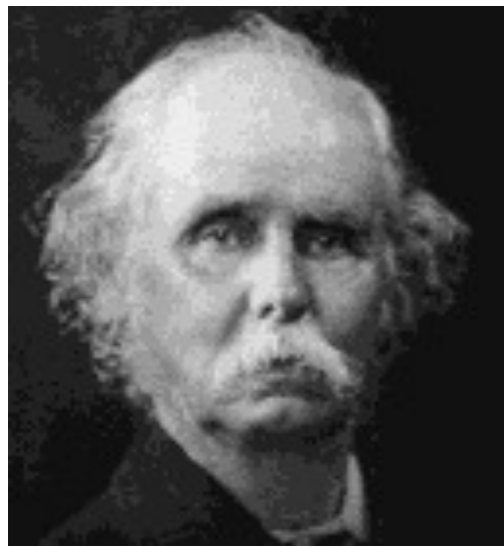
death of
distance



diffuse information

"The accumulation of many large manufacturing establishments in the same district has a tendency to bring together purchasers or their agents from great distances, and thus to cause the institution of a public mart or exchange. **This contributes to diffuse information** relative to the supply of raw materials, and the state of demand for their produce, with which it is necessary manufacturers should be well acquainted. The very circumstance of collecting periodically, at one place, a large number both of those who supply the market and of those who require its produce, tends strongly to check the accidental fluctuations to which a small market is always subject, as well as to render the average of the prices much more uniform."

--Charles Babbage



more than information

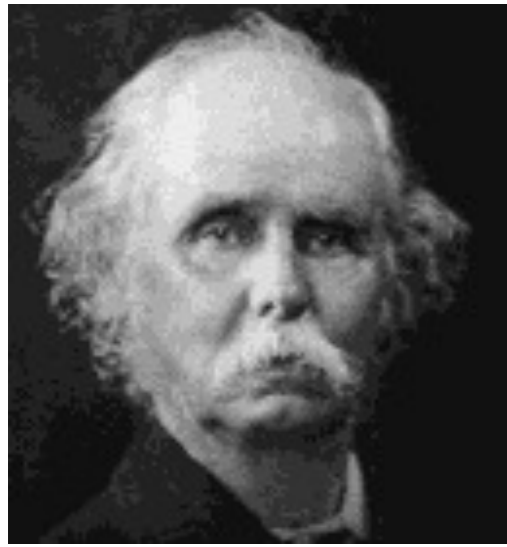
When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. **The mysteries of the trade become no mysteries;** but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material.

moving information

information/knowledge management

the HP conundrum

sticky or leaky?

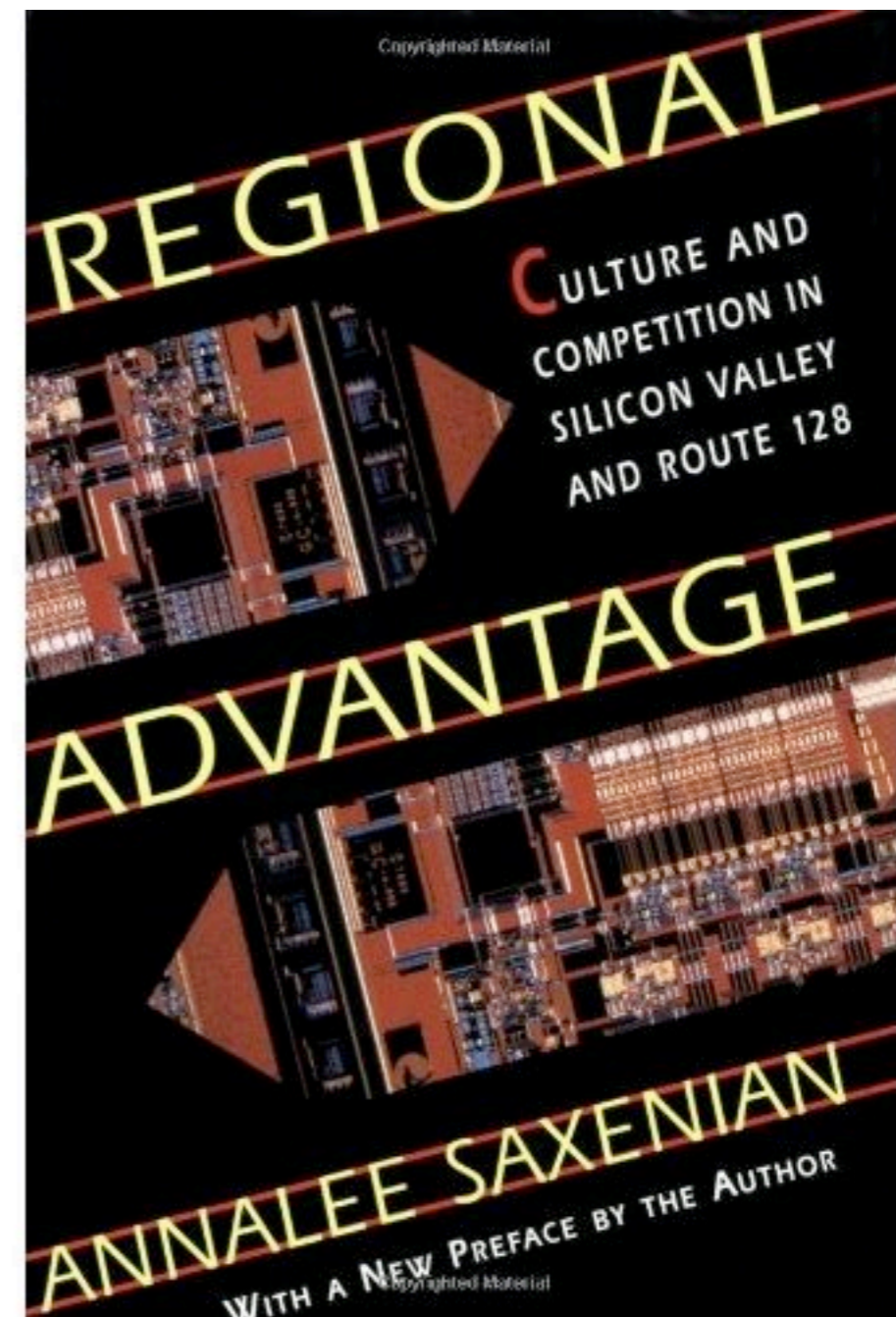


what moves?

goods or people?

Every cheapening of the means of communication ... alters the action of the forces which tend to localize industries. Speaking generally we must say that a lowering of tariffs, or of freights for the transport of goods, tends to make each locality buy more largely from a distance what it requires; and thus tends to concentrate particular industries in special localities: but on the other hand everything that increases people's readiness to migrate from one place to another tends to bring skilled artisans to ply their crafts near to the consumers who will purchase their wares. **These two opposing tendencies** are well illustrated by the recent history of the English people.

east is east and ...



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problems

some
doubts

death of
distance

that's why they are here



... but why are we here?

airy visions

"Children in the public schools will be taught practically everything by moving pictures. Certainly they will never be obliged to read history again"

--D.W. Griffith





alternatives?

"The people's University of the Air will have a greater student body than all of our universities put together." --RCA, 1932

coming up:
social implications



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distant antecedents?

university extension

19c London to the world

Marshall and the limits to extension

Open University (1969)

early morning television

more distant?

Early Modern Textbook?



going digital

PLATO

(Programmed Logic for Automated Teaching Operations)

"One can predict that in a few more years, millions of schoolchildren will have the personal services of a tutor as well-informed as Aristotle."

--Patrick Suppes,
Scientific American, 1966.



free market



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Bolt

Leibniz

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avg. speed = $\frac{\Delta \text{distance}}{\Delta \text{time}} = \frac{\Delta y}{\Delta x} = \frac{100 \text{ m}}{9.58 \text{ s}}$

100m
dist

$\Delta y = 100 \text{ m}$

9.58

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"The people's University of the Air will have a greater student body than all of our universities put together." --RCA, 1932

going global

the "mega universities"

(John Daniels)

Indira Gandhi (New Delhi) : 3.5 million

Allama Iqbal (Islamabad) : 1.8 million

Islamic Azad (Tehran) : 1.5 million

Andolou University (Turkey): 1.04 million

Bangladesh National: 800,000

Allama Iqbal Open University
* Anadolu University
* Athabasca University
* Bangladesh Open University
* China Central Radio & TV University
* City College of San Francisco
* Fern University in Hagen
* Indira Gandhi National Open University
* Indonesian Open Learning University
* Instituto Tecnológico Autónomo de México
* Payame Noor University
* Korea National Open University
* Sukhothai Thammathirat Open University
* The Open University, U.K.
* Universidad Nacional de Educación a Distancia
* University of Maryland University College
* University of South Africa
* University of Phoenix
* Universidad Nacional Autónoma de México
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- * Kaplan Higher Education
- * Massachusetts Institute of Technology
- * Michigan State University
- * Open Institute of law, Int.
- * Tufts University
- * UC Berkeley
- * University of Alaska Fairbanks
- * University of California, Irvine
- * University of Massachusetts Boston
- * University of Michigan
- * University of Notre Dame
- * University of Utah
- * University of Wisconsin- Eau Claire
- * Utah State University
- * Utah Valley State College
- * Weber State University
- * Western Governors University
- * Wheelock College

other alternatives

Cognitive Science C103, 001 - Spring 2012
GEOFFREY D. NUNBERG, PAUL DUGUID

History of Information - This course explores the history of information and associated technologies, uncovering why we think of ours as "the information age." We will select moments in the evolution of production, recording, and storage from the earliest writing systems to the world of Short Message Service (SMS) and blogs. [read more](#)



YouTube
VIDEO

iTunes U
AUDIO | VIDEO

History C192, 001 - Spring 2012
GEOFFREY D. NUNBERG, PAUL DUGUID

History of Information - This course explores the history of information and associated technologies, uncovering why we think of ours as "the information age." We will select moments in the evolution of production, recording, and storage from the earliest writing systems to the world of Short Message Service (SMS) and blogs. [read more](#)

Information C103, 001 - Spring 2012
GEOFFREY D. NUNBERG, PAUL DUGUID

History of Information - This course explores the history of information and associated technologies, uncovering why we think of ours as "the information age." We will select moments in the evolution of production, recording, and storage from the earliest writing systems to the world of Short Message Service (SMS) and blogs. [read more](#)

more alternatives

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SATURDAY, JANUARY 2, 2010

Online Course 12 - InfoSys C103 History of Information

InfoSys C103 History of Information
http://webcast.berkeley.edu/course_details.php?seriesid=1906978352

History of Information
Posted by English I at 6:07 PM

the end of the university?

a "stagnant" sector --William Baumol

against stagnation

Alvin Toffler

Peter Drucker

John Chambers

Bill Gates

small planet?



Grandfather:
Well, I finally finished my
doctoral thesis.



Woman:
Way to go, Gramps.



Grandfather:
Did my research at
Indiana University.

Woman:
Indiana?



Grandfather:
Yup. IBM took the
school's library...and
digitized it. So I could
access it over the Internet.

*She cocks her ear to take
this all in.*



Grandfather:
You know... It's a great time
to be alive.



Tag:
IBM. Solutions for
a small planet.

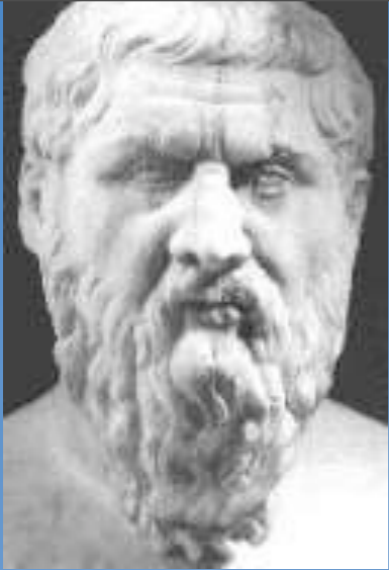


Vicesimus Knox
1752-1821

another opinion

"But though books are easily procured, yet, even in **this age of information**, there are thousands in the lower classes that cannot read. Besides, it is a well-known truth, that the same precepts inculcated by a living instructor, adorned by a proper oratory, enforced by a serious and authoritative manner, produce a powerful effect, not to be experienced in solitary retirement."

-- Vicesimus Knox,
Essays Moral and Literary, 1778



Plato
427–347 bce

ancient history?


"Those who acquire [writing] will cease to exercise their memory and become forgetful; they will rely on writing to bring things to their remembrance by external signs instead of on their own internal resources. ...your pupils will have the reputation for [wisdom] without the reality; they will receive a quantity of information without proper instruction, and in consequence be thought very knowledgeable when they are for the most part quite ignorant."

-- Plato, *Phaedrus*, c. 370 bc

don't lecture me

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The TOMORROW'S COLLEGE series

DON'T LECTURE ME

by Emily Hanford

Rethinking the Way College Students Learn

College students spend a lot of time listening to lectures. But research shows there are better ways to learn. And experts say students need to learn better because the 21st century economy demands more well-educated workers.

limited learning

Among the authors' findings: 32 per cent of the students whom they followed in an average semester did not take any courses that assigned more than 40 pages of reading per week. Half did not take any courses in which more than 20 pages of writing were assigned throughout the entire term. Furthermore, 35 per cent of the students sampled spent five hours or less a week studying alone.

Typical students spent about 16 per cent of their time on academic pursuits, and were "academically engaged," write the authors, less than 30 hours a week. After two years in college, 45 per cent of students showed no significant gains in learning; after four years, 36 per cent showed little change. And the students who did show improvement only logged very modest gains. Students spent 50 per cent less time studying compared with students a few decades ago.

--Richard Arum, Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses*, 2010

forgotten factors?

kinds of distance

geographical
social

disciplines or discipline?

Stephen Cameron, "The nonequivalence of high school equivalents," 1993

signalling

January 8, 2012

'Badges' Earned Online Pose Challenge to Traditional College Diplomas



Photo illustration by Bob McGrath for The Chronicle

[Enlarge Image](#)

By Jeffrey R. Young

The spread of a seemingly playful alternative to traditional diplomas, inspired by Boy Scout achievement patches and video-game power-ups, suggests that the standard certification system no longer works in today's fast-changing job market.

Educational upstarts across the Web are adopting systems of "badges" to certify skills and abilities. If scouting focuses on outdoorsy skills like tying knots, these badges denote

areas employers might look for, like mentorship or digital video editing. Many of the new digital badges are easy to attain—intentionally so—to keep students motivated, while others signal mastery of fine-grained skills that are not formally recognized in a traditional classroom.

At the free online-education provider Khan Academy, for instance, students get a "Great Listener" badge for watching 30 minutes of videos from its collection of thousands of short educational clips. With enough of those badges, paired with badges earned for passing standardized tests administered on the site, users can earn the distinction of "Master of Algebra" or other "Challenge



Nullius in Verba?

going closed?

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*

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George Akerlof Wins Nobel Prize in Economics

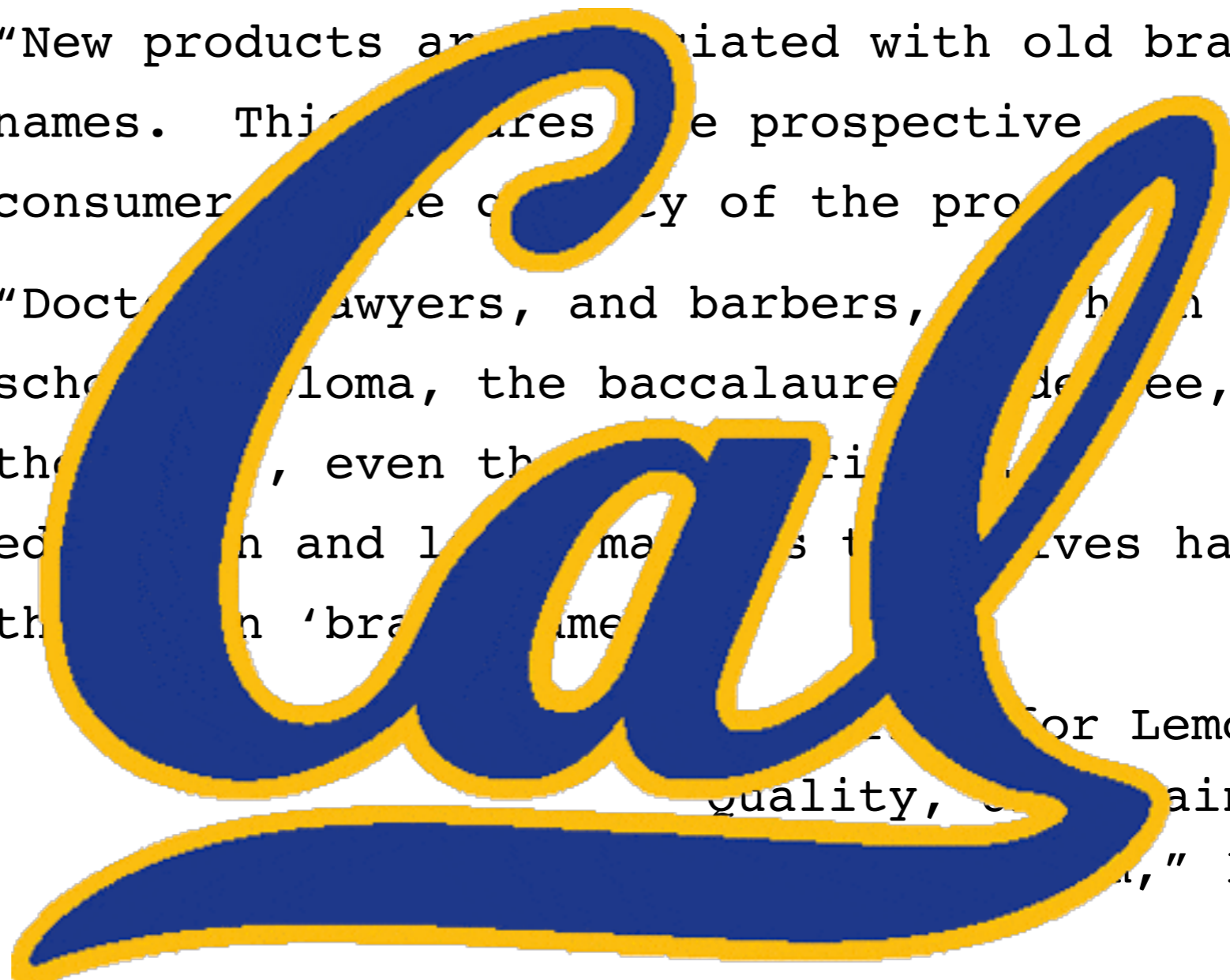
Nobel coverage: [Slide Show](#) | [Downloadable photos](#) | [Interview videos](#) | [Prize lecture video](#) | [Interview with fellow laureates video](#) | [Related information](#)

BERKELEY — George A. Akerlof, an economics professor at the University of California, Berkeley, was named the 2001 co-winner of the Nobel Prize in economic sciences today (10/10/01). It is the second consecutive year in which the Nobel has gone to a UC Berkeley economist.

still local?

"New products are associated with old brand names. This assures the prospective consumer the quality of the product."

"Doctors, lawyers, and barbers, who have a school diploma, the baccalaureate degree, the doctorate, even the Ph.D., have the same education and licenses as the ones who have the same 'brand name'."



For Lemons: quality, quantity, and uncertainty," 1970

before you graduate

Week 15

24 Apr: Social Implications of the Internet II

Required reading:

- Boyd, Danah. (Forthcoming). "[White Flight in Networked Publics? How Race and Class Shaped American Teen Engagement with MySpace and Facebook.](#)" In *Digital Race Anthology* (Eds. Lisa Nakamura and Peter Chow-White). Routledge.
- Smith, Zadie. "[Generation Why,](#)" (review of *The Social Network* and *You Are Not a Gadget*, by Jason Lanier) *The New York Review of Books*, Nov. 25, 2010.
- Sunstein, Cass R. 2007. "[The Polarization of Extremes.](#)" *The Chronicle Review*, Dec. 14.

26 Apr: Wrap

boyd writes:

In some senses, the division in the perception and use of MySpace and Facebook seems obvious given that we know that online environments are a reflection of everyday life. Yet, the fact that such statements are controversial highlights a widespread techno-utopian belief that the internet will once and for all eradicate inequality and social divisions.

In a different contexts, Zadie Smith writes:

Shouldn't we struggle against Facebook? Everything in it is reduced to the size of its founder. Blue, because it turns out Zuckerberg is red-green color-blind. "Blue is the richest color for me—I can see all of blue." Poking, because that's what shy boys do to girls they are scared to talk to. Preoccupied with personal trivia, because Mark Zuckerberg thinks the exchange of personal trivia is what "friendship" is. A Mark Zuckerberg Production indeed! We were going to live online. It was going to be extraordinary. Yet what kind of living is this? Step back from your Facebook Wall for a moment: Doesn't it, suddenly, look a little ridiculous? Your life in this format?

On the whole, would you say that your social networking experience is more like an extension of your everyday life, as boyd suggests, or that it's a bleached or distorted version of it?