UC Berkeley School of Information

The Internet: Social Effects

History of Information 103

Geoff Nunberg

April 24, 2012

Itinerary, 4/24

The Internet and "virtual community"

Social life in a virtual world

Is the Internet a place?

The Internet as a political forum

Politics, porn, and pollution

The Internet: Social Consequences

Does the internet build communities or fragment them?

The Internet: Social Consequences

Does the internet build communities or fragment them?

Yes.

Kids today!

The New York Times
SundayReview | The Opinion Pages

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE H

The Flight From Conversation

Photographs by Peter DaSilva and Byron Smith, for The New York Times

By SHERRY TURKLE
Published: April 21, 2012

WE live in a technological universe in which we are always communicating. And yet we have sacrificed conversation for mere connection.

FACEBOOK
TWITTER
GOOGLE+
EMAIL
SHARE

At home, families sit together,

At home, families sit together, texting and reading e-mail. At work executives text during board meetings. We text (and shop and go on Facebook) during classes and when we're on dates. My students tell me about an important new skill: it involves maintaining eye contact with someone while you text someone else; it's hard, but it can be done…. We've become accustomed to a new way of being "alone together." Sherry Turkle

Social Life in a Virtual World

Predictions that Internet/Web will decentralize authority

permit ground-up social & political organization

Create "virtual communities"

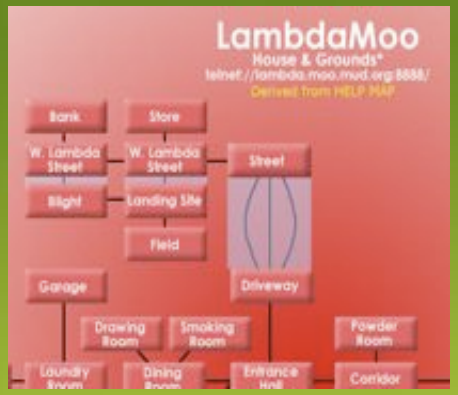
- Cf the "virtual corporation," "smart mobs," moveon.org, etc., which are said to facilitate direct democracy

What's Real and What is Not

When "virtual" = real…

Real	Not	??
banking	machine	museum
journal	keyboard	library
textbook	pets	community
	reality	
	house tour?	

The Rise of "Virtual Communities," I



1979 > Early BBS's (Bulletin Board services) allow users to connect via modem to a common server & post messages.

1980: USENET →"poor man's ARPANET" to allow users to exchange email & software.

1985: Stewart Brand & Larry Brilliant found the BBS The Well (Whole Earth 'Lectronic Link), which becomes an influential "virtual community" providing email, forums, etc.

1990: First MOOs ["MUD Object Oriented"] created at Xerox Palo Alto Research Center.

The birth of spam

Spam is the shadow history, the negative space, of the concept of community online" Finn Brunton

1971: sysadmin "abuses" MIT time-sharing system w/ "to all" msg:

THERE IS NO WAY TO PEACE. PEACE IS THE WAY."

5/1/1978: "Proto-Spam" message sent to 593 addresses on ARPAnet,

DIGITAL WILL BE GIVING A PRODUCT PRESENTATION OF THE NEWEST MEMBERS OF THE DECSYSTEM-20 FAMILY

Early 1980's: Users of BBS and MUDs take to repeating "spam" & bits of Monty Python routine to annoy other users or drive newbies out of the discussion.

1994: "Green Card spam" sent by Canter & Siegel law firm as bulk Usenet posting.

By mid-1990's, AOL is selling mailing list of 37m for $50k

Responses: harassment & vigilanteism, parliamentarianism, authoritarianism

The New Bestiary: Flamers, Trolls, Sock Puppets

New ways of acting out aggression… The "decline of civility"

The Rise of Incivility

Technological explanations

> ...because email is such a casual means of communication, it privileges those who prize informality. What happened to "Dear Sir", "Yours faithfully... They died, you reply, but nobody bothered to tell you, granddad. Stuart Jeffries, *The Guardian*
>
> ...maybe banging out an e-mail is just so easy, compared with all the necessary elements of writing a letter, that the id can send out a half-dozen e-mails before the superego can stop it. Michael Kinsley
>
> Flamers … belong to the growing uncommunity of people who now act with the protection of anonymity. Elllen Goodman 1999

Or is everybody just snarkier these days?

Technology always makes us ruder?

New ways of acting out aggression… The "decline of civility"

A history of technologically induced incivility:

- nosy telegraphists
- intrusive telephone calls, party line hogs…
- *The serenading troubadour can now thrum his throbbing guitar before the transmitter undisturbed by apprehensions of shotguns and bulldogs* (1884)
- Noisy transistor radios

Transistor Craze—
There's No Escape

by DAVID E. SCHERMAN

The Rise of Incivility

A New Phenomenon?

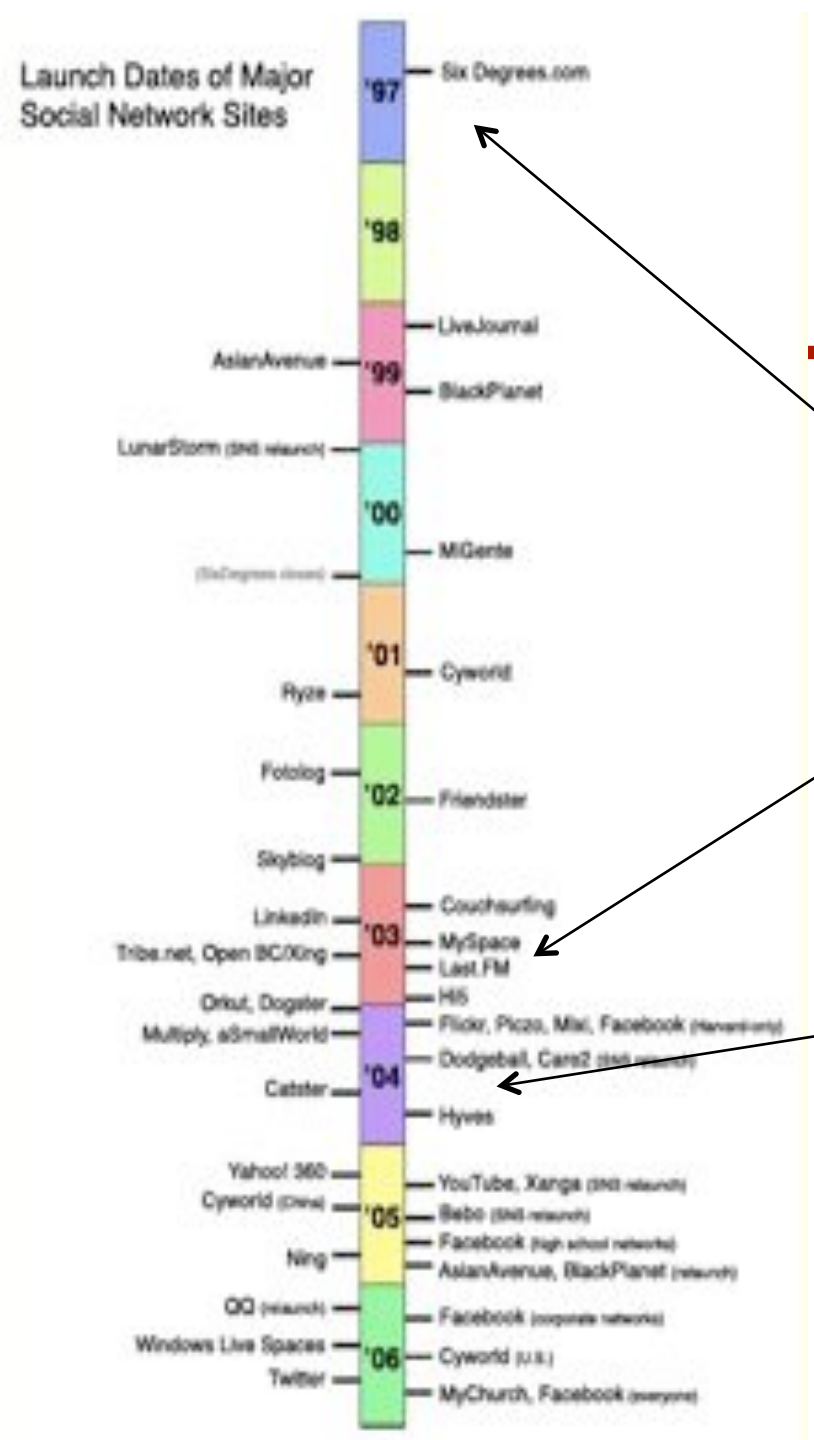
So where did all the civility go?... I keep coming back to my long-standing hunch that it all began to go bad around 1965.That was the year that America, suddenly, became postmodern. Many venerable American traditions -- some wonderful, some horrible -- all vanished at the same time.

Stephen Carter, *Civility: Manners, Morals, and the Etiquette of Democracy*

A more civil Internet?

Solutions to Internet "incivility":

- Moderation
- Requiring registration
- Filtering
- Public pressure…
- Legal constraints?



The Triumph of Social Networks

1997 Sixdegrees.com founded, social networking site that achieved 1m members and anticipated Friendster, MySpace, LinkedIn & FaceBook etc.

2003: myspace founded, rapidly becomes largest soc. networking site. Complaints about stalking, exploitation, spam, etc. lead some schools to block site.

2003: Second Life launched by Linden Labs.

2004: Facebook launched by Mark Zuckerberg.

2008: Helped by Facebook co-founder Chris Hughes,Obama campaign's use of new media ("MyBo") enables it to raise $200m by end of primary season and recruit numerous volunteers.

Oct 4, 2012 Facebook passes 1B user mark

Varieties of Online Community

Relation of online media to social groups

Supports Amplifies /extends Transforms Creates

Varieties of Online Community

high-school alums
Book History list
MeetUp
leukemia dl

Relation of online media to social groups

Supports Amplifies /extends Transforms Creates

Reinforcing Social Divisions

Stratification of social space

What distinguishes adoption of MySpace and Facebook among American teens is not cleanly about race or class, … The division can be seen through the lens of taste and aesthetics, two value-laden elements that are deeply entwined with race and class. It can also be seen through the network structures of teen friendship, which are also directly connected to race and class. And it can be seen through the language that teens – and adults – use to describe these sites….

danah boyd

Social wars

Cheesy or creative; classy or boring?

'MySpace is for the riff-raff and Facebook is for the landed gentry.'

'MySpace just seems like the other side of the tracks.'

Do social media always reproduce offline categories?

Assignment

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 context, 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?

Political Discourse Online

Claims about online political discourse

The internet

Broadens access to information

Broadens the opportunity to speak.

Increases the number of information sources, bypassing media "gatekeepers" or official censors.

Offers information about a wider range of topics, and more information and opinion on any given topic.

Provides more reliable ways of checking or interpreting information, and gives citizens more opportunity to verify information

Claims about online political discourse

The internet

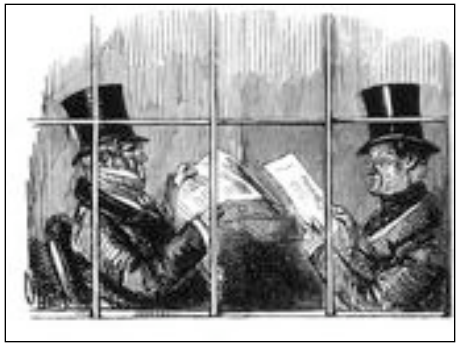
Restricts the exchange of information and opinion to a more closed, like-minded group (silo effect)

Exposes people to more information that is misleading, inaccurate, extreme, inflammatory, etc.;

Eliminates the guidance that the traditional media provided.

Widens the divisions between the informed and ill-informed sectors of the public.

Polarization and the "Siloing" of Political Discourse



Online discourse facilitates "siloing" of political discourse…

But siloing has independent offline roots

Polarization of political language on the Internet mirrors polarization of elite/activist views and the increasing importance of elective associations (geographical, occupational)

Number of Americans living in landslide counties:

1976: 26%

2008: 48%

Ruptured Discourses

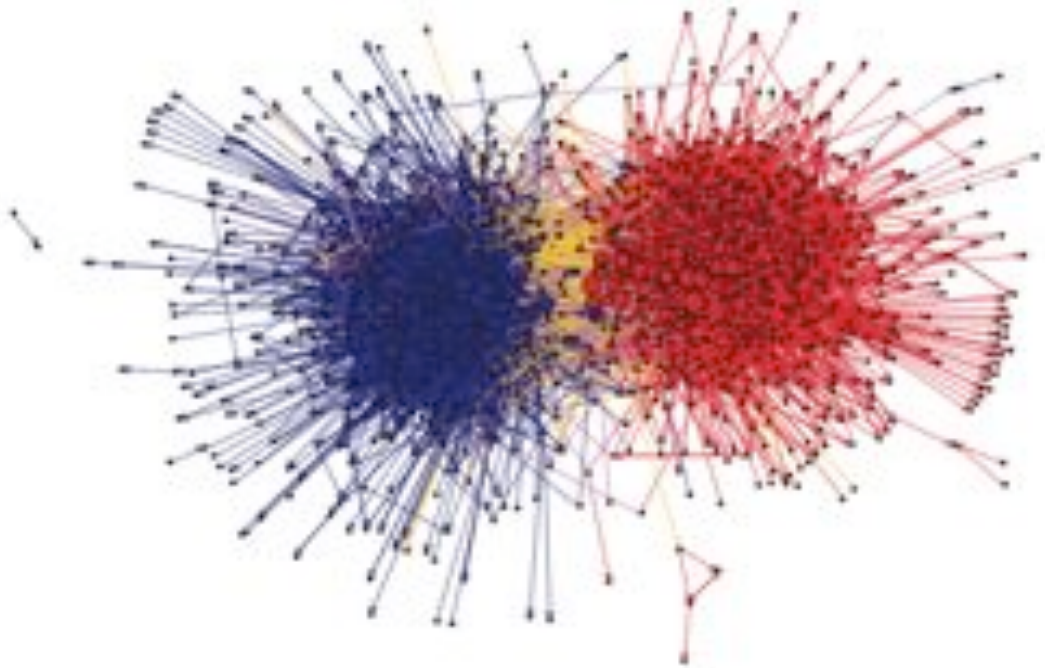


Figure 1: Community structure of political blogs (expanded set), shown using utilizing a GEM layout [11] in the GUESS[3] visualization and analysis tool. The colors reflect political orientation, red for conservative, and blue for liberal. Orange links go from liberal to conservative, and purple ones from conservative to liberal. The size of each blog reflects the number of other blogs that link to it.

Lada Adamic & Nathalie Glance, 2005, "Divided They Blog"

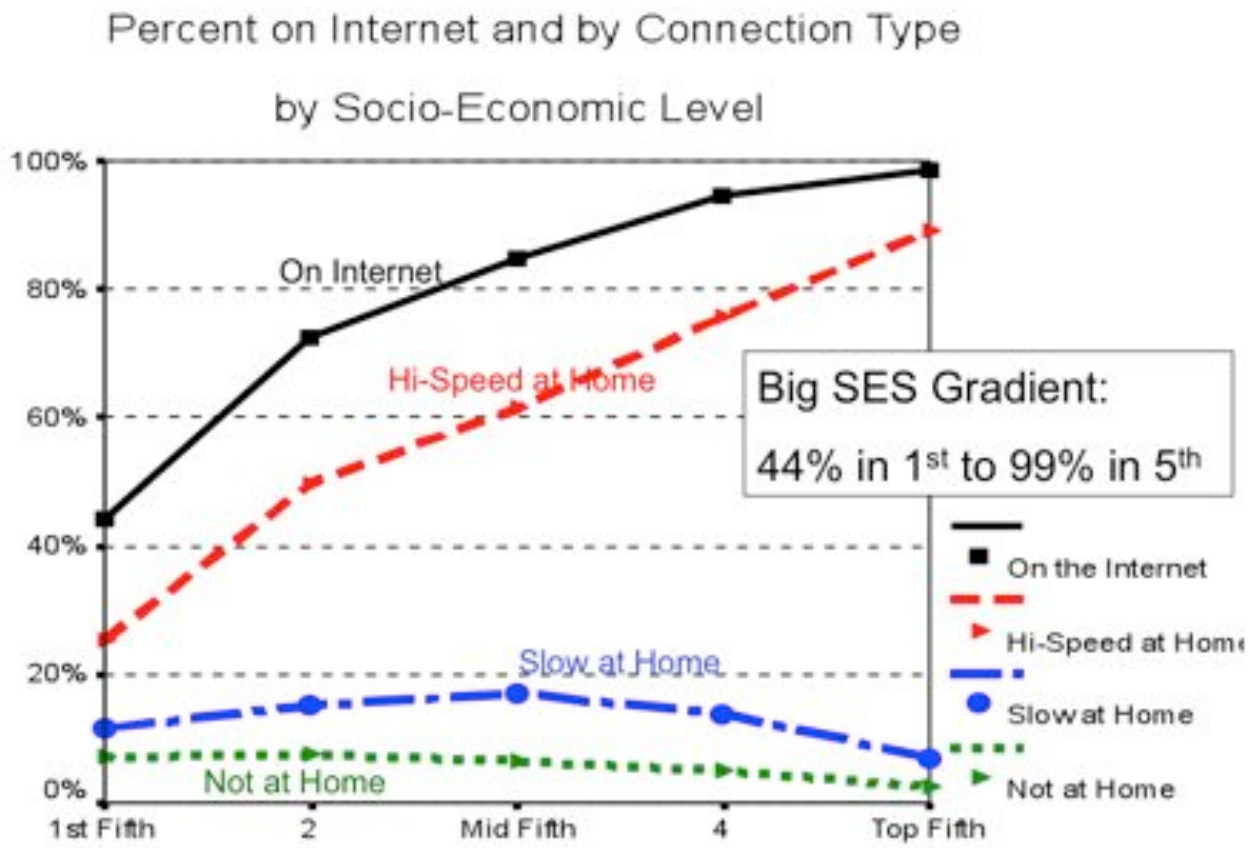
Effects of the Internet

The Internet potentially amplifies and enhances all forms of social organization

… But doesn't eliminate basic conflicts and oppositions…

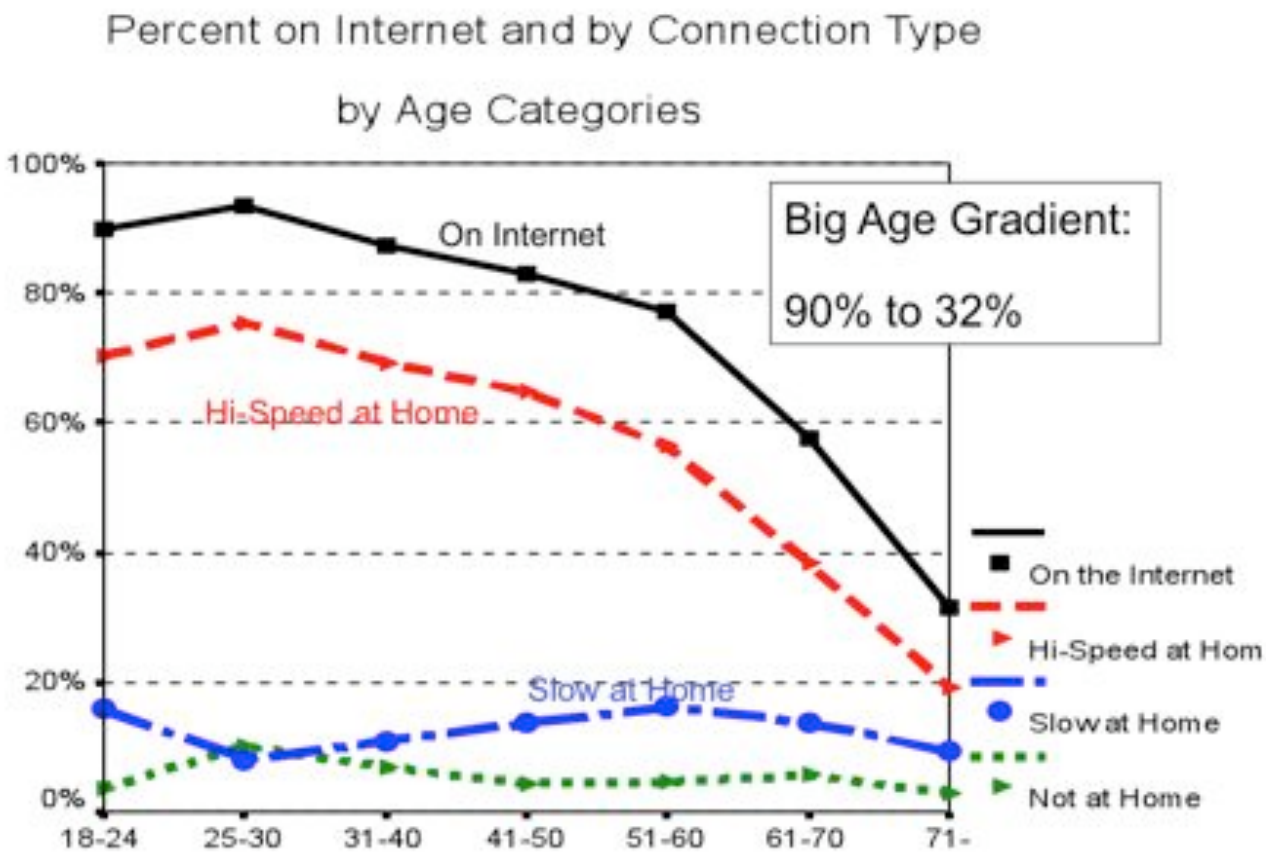
Participation in online political discourse

Political Participation Online

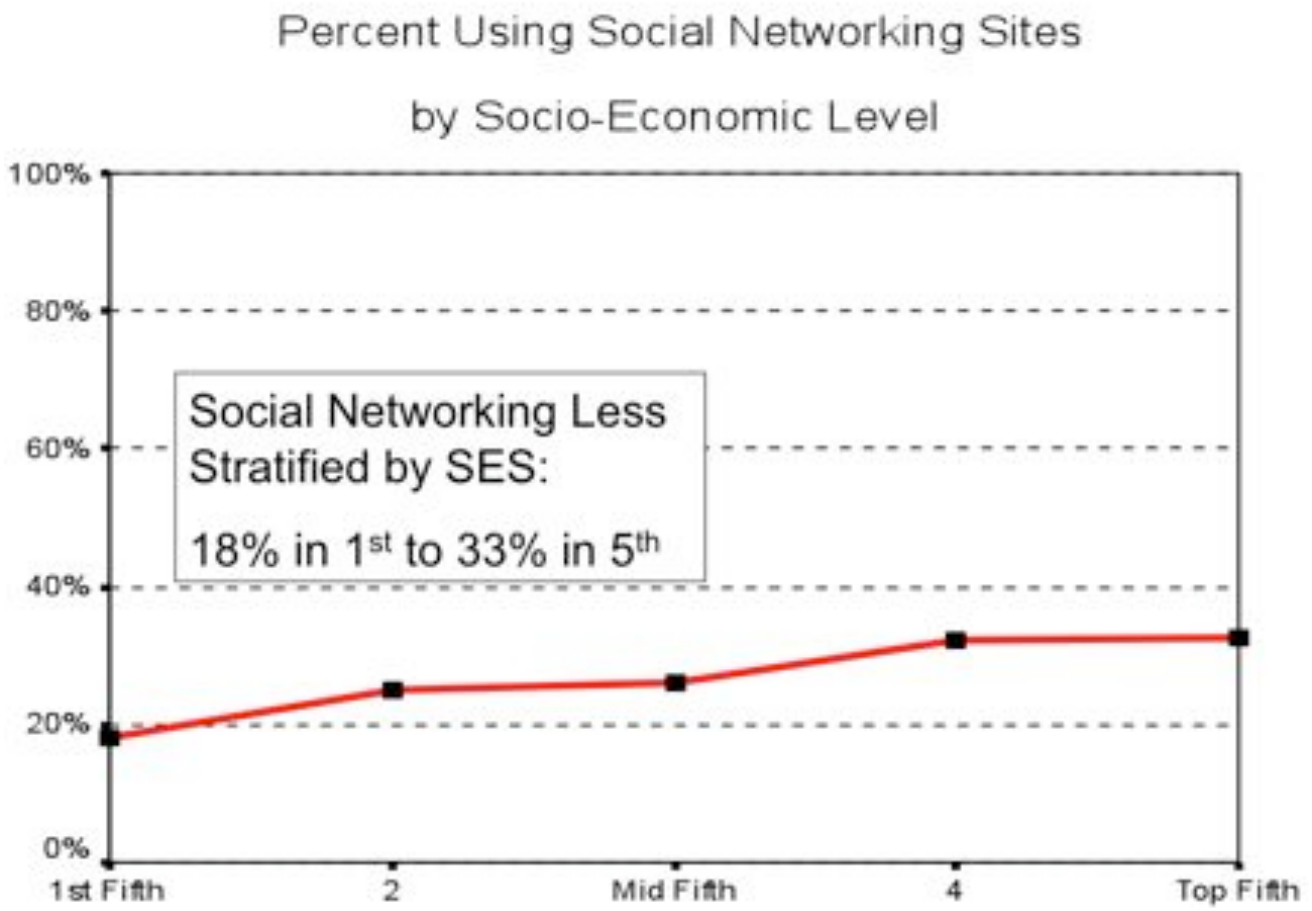


Courtesy of Henry Brady

Reinforcing Social Divisions



Political Participation Online



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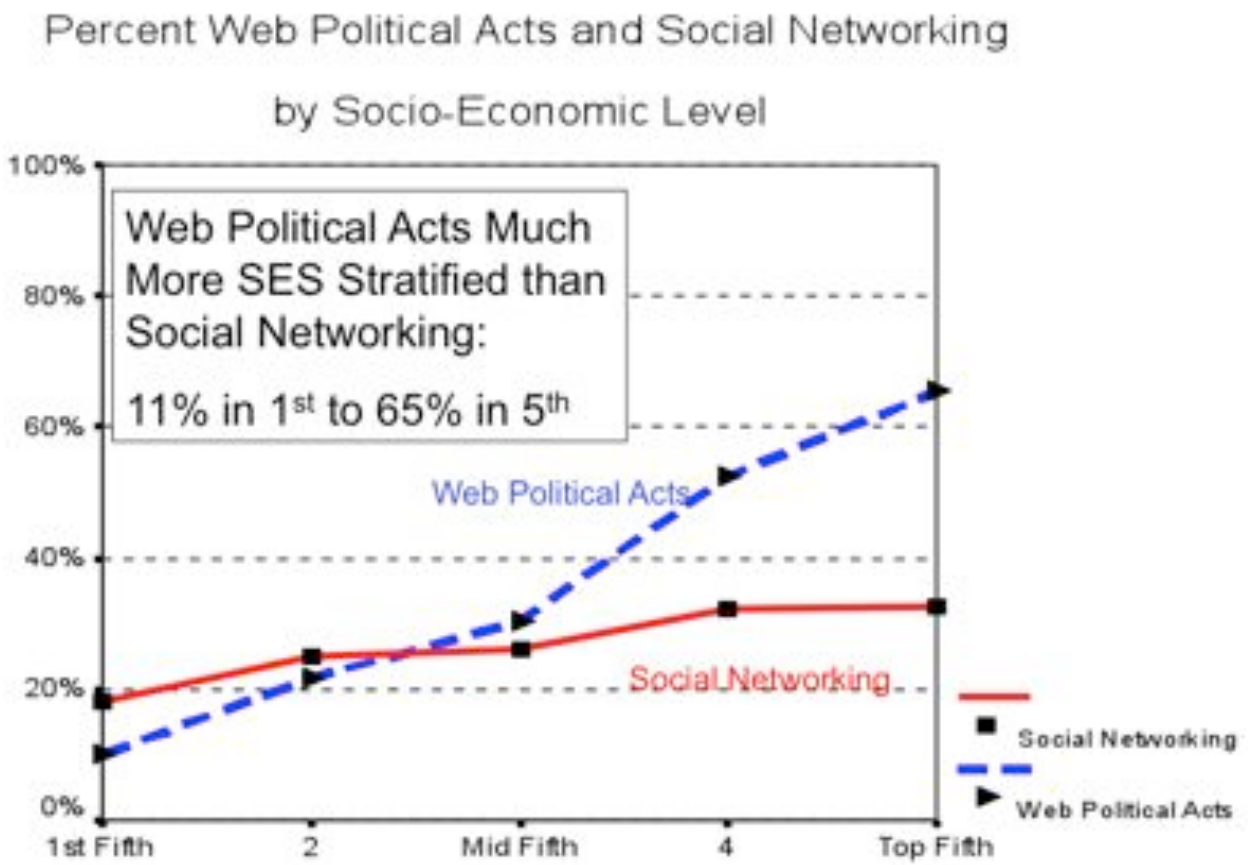

Virtual Pollution

Spatial Models of Electronic Discourse: "Cyberspace"

The New Jerusalem, ca. 1992

Cyberspace: A world in which the global traffic of knowledge, secrets, measurements, indicators, and alter-human agency takes on form: sights, sounds, presences never seen on the surface of the earth blossoming in a vast electronic night. . . . From vast databases that constitute the culture's deposited wealth, every document is available, every recording is playable, and every picture is viewable. The realm of pure information, filling like a lake.

— Michael Benedikt, Introduction to Cyberspace, MIT Press, 1991

Visualizations of cyberspace

Cyberspace: The Morning After

The virtual Bowery

[The Internet is] a place where crime is rampant and every twisted urge can be satisfied. Thousands of virtual streets are lined with casinos, porn shops, and drug dealers. Scam artists and terrorists skulk behind seemingly lawful Web sites. And cops wander through once in a while, mostly looking lost. It's the Strip in Las Vegas, the Red Light district in Amsterdam, and New York's Times Square at its worst, all rolled into one -- and all easily accessible from your living room couch.

"The Underground Web," *Business Week*, 9/2/02

Magnifying Social Deviance

zhokhar Tsarnaev: Bombing Suspect Has Online Following

Sick Boston Marathon bombing game hits the Internet

April 24, 2013 by Tom Tillison 1 Comment

Well, that didn't take very long at all.

Just nine days after two bombs exploded at the finish line of the Boston Marathon, killing three and leaving scores injured, a **sick video game** based on the terror attack has been developed.

The game, "**The Boston Marathon: Terror on the Streets**," has emerged on the **internet**, according to the Daily Mail, with players taking on the role of a marathon runner attempting to jump over pressure cooker bombs. Dead and injured runners are seen in the street, splattered in blood.

What the Boston bombing taught us about Internet arrogance

BY FRANCISCO DAO
ON APRIL 23, 2013

Most of the tech industry, or at least the most vocal parts of it, have a prevailing belief that the Internet will solve everything while the government is little more than a parasite and obstacle that only serves to prevent the collective forces of the Web from solving all of the world's problems. While I think everyone can agree that the government does a lot of stupid things, the increasingly popular view that the government is unnecessary and/or evil and all we need is a bunch of entrepreneurs and the almighty Internet to fix everything is frankly asinine arrogance of the highest order.

Confusing… and Clarifying

Boston Marathon Bombing Rumors

Claim: Rumors and conspiracy theories associated with the Boston Mara

Origins: As is common after disasters in the Internet age (e.g., the Hurricane Katrina, the Sandy Hook shooting), the online word is abuzz w rumors and conspiracy theories related to that event. Below we attempt of the most prevalent items associated with the Boston Marathon bombi 2013:

- FBI Previous Investigation of Tamerlan Tsarnaev
- Suspects Became Citizens on 9/11
- 'Coexist' Bumper Sticker
- Pressure Cooker Ad
- Westboro Baptist Church
- Suspect/Backpack Photos
- "Early Creation" Facebook Pages
- Sandy Hook Child Killed in Bombing
- Martin Richard Photo
- Woman Killed Before Boyfriend's Proposal
- Boston Globe Tweet
- False Victim
- Sandy Hook Principal
- Man on the Roof
- Saudi Man
- Suspect Caught on CCTV

NATIONAL GEOGRAPHIC Daily News

Home Animals Ancient Energy Environment Travel/Cultures Space/Tech Water Weird

Social Media Shapes Boston Bombings Response

Twitter and Facebook created national response, may help authorities.

Uses and Abuses of Chatter

CNET › News › Internet & Media › Boston police turn to Twitter for tips after ...

Boston police turn to Twitter for tips after twin bombings

The Boston Police Department uses its official Twitter feed to disseminate information and gather potential evidence.

Social

Boston Marathon Bomb Photos Engulf Twitter

Boston Marathon bombing: Was Twitter for the birds or revolutionary?

By Joe Gandelman Syndicated columnist

Updated: 04/26/2013 06:11:07 PM MDT

Man on roof near Boston Marathon bombings sparks Twitter debate

Daily Mail Online
@MailOnline
Follow

Who is this person? Individual seen walking on roof directly overhead as bomb goes off at Boston Marathon. bit.ly/10YspoR

3:28 PM - 15 Apr 2013

Centering the periphery

Internet imams may have inspired Boston Marathon bombers

Comments 82 Email Share 32 Tweet 4 Recommend 28 +1 0

David Horsey / Los Angeles Times (April 25, 2013)

Follow @erinmcunningham

Boston bombing revives debate over online extremism

On the freewheeling net, extremists of all stripes are looking to radicalize, recruit, and disseminate propaganda among an infinitely wider audience.

npr news arts & life music listen

news ▸ u.s. ▸ explosions at boston marathon

Boston Bombing Sparks Firestorm Of Internet Hate

April 22, 2013 12:00 PM

Varieties of "Rotten Information"

Problems of authenticity: fakes, hoaxes, forgeries, plagiarism, etc.

Problems of quality: reliability and "authoritativeness"

Problems of "pollution": pornography, violence, racism & hate speech, predators, incivility, etc.

> Mary Douglas: "Dirt is matter out of place… Dirt then, is never a unique, isolated event. Where there is dirt there is a system. Dirt is the by-product of a systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements."
>
> How to tell pollution from the merely "unacceptable"?

A Racist Hoax

THE FRANKLIN PROPHECY
Recorded by Charles Coteworth Pinckney
Delegate to the Constitutional Convention of 1787

"I fully agree with General Washington, that we must protect this young nation from an insidious influence and impenetration. The menace, gentlemen, is the Jews.

"In whatever country Jews have settled in any great number, they have lowered its moral tone; depreciated its commercial integrity; have segregated themselves and have not been assimilated; have sneered at and tried to undermine the Christian religion upon which that nation is founded....

. If you do not exclude them from these United States, in their Constitution, in less than 200 years they will have swarmed here in such great numbers that they will dominate and devour the land and change our form of government...

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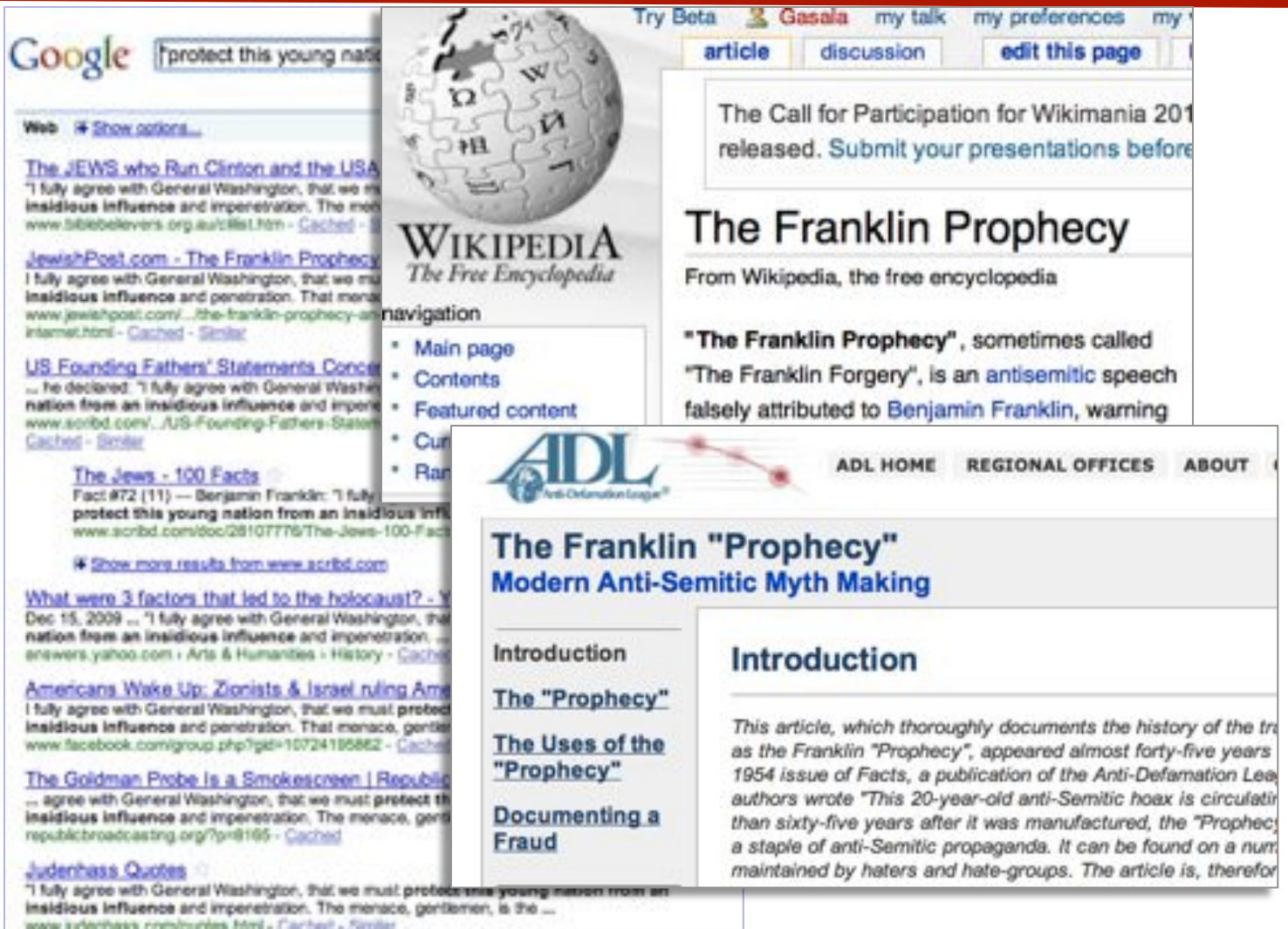
dominate and devour the land and change our form of government...

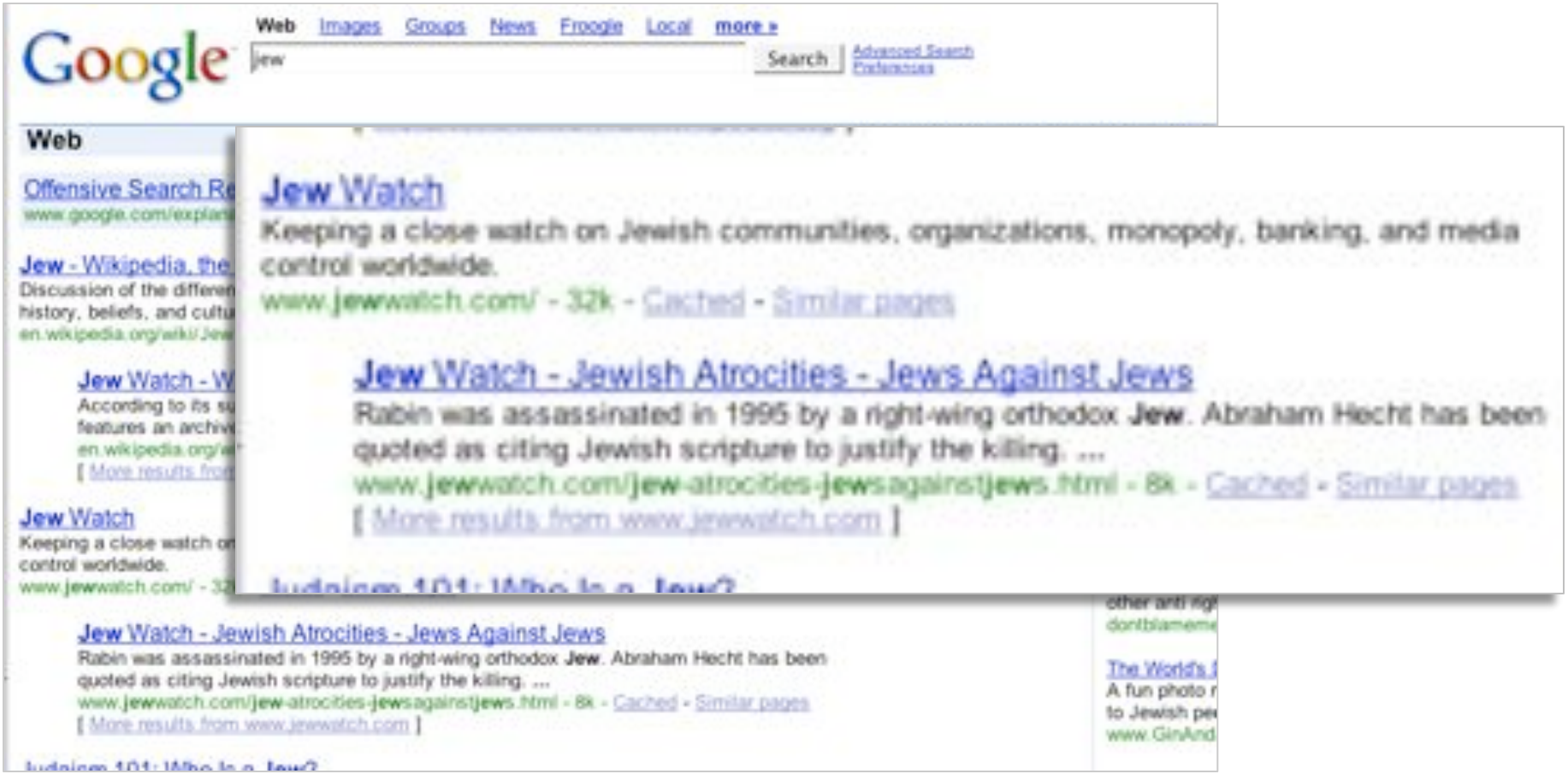
"I cannot find a single original source that gives the slightest justification for believing that the Prophecy is anything more than a barefaced forgery. Not a word have I discovered in Franklin's letters and papers expressing any such sentiments against the Jews as are ascribed to him by the Nazis — American and German." Charles Beard, *NY Times*, March 10, 1937.

Pervasiveness of Hate Speech

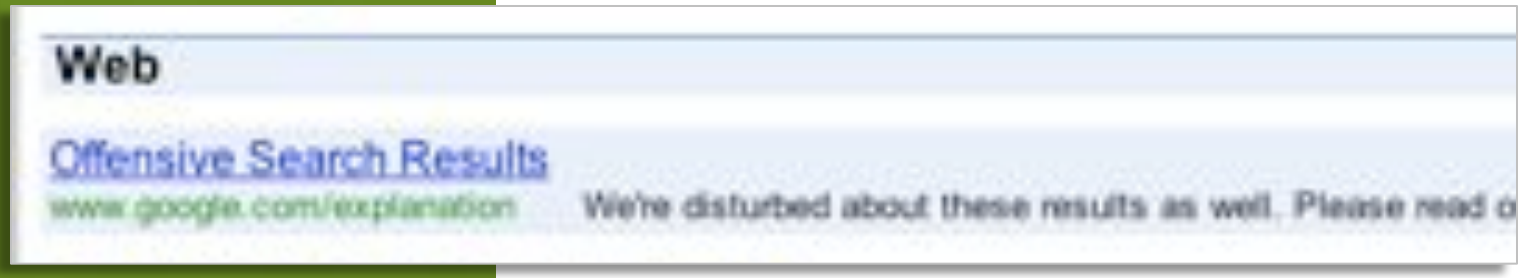
Pervasiveness of Hate Speech



An Awkward Search Result



Google's Explanation



If you recently used Google to search for the word "Jew," you may have seen results that were very disturbing. We assure you that the views expressed by the sites in your results are not in any way endorsed by Google. .... A site's ranking in Google's search results relies heavily on computer algorithms using thousands of factors to calculate a page's relevance to a given query. Sometimes subtleties of language cause anomalies to appear that cannot be predicted. …

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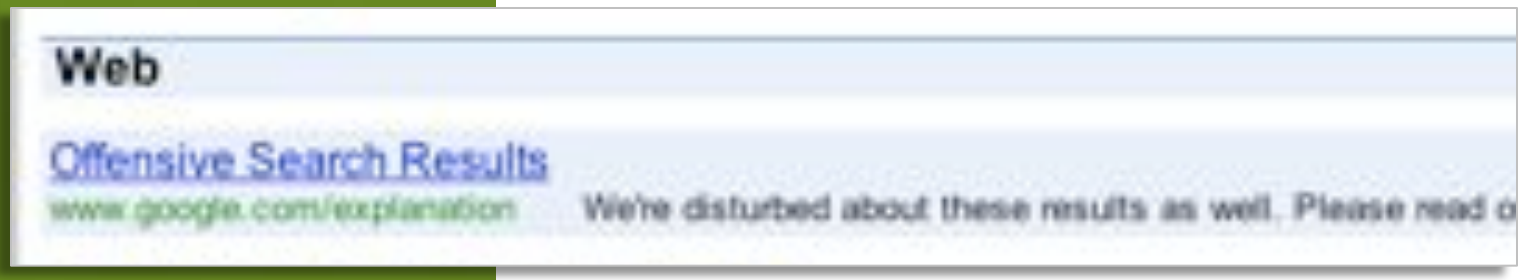

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What would you tell Google to do?

Why is racist speech a problem?

How concerned should we be about racist speech?

Is there more racist speech than before?...

Or is it just more visible – like bad spelling?

The Menace of Porn

NEW YORK POST

Last Updated:Wed., Apr. 27, 2011, 07:45pm

City libraries say 'checking out' porn protected by First Amendment

By DOUGLAS MONTERO and BOB FREDERICKS

Last Updated: 9:03 AM, April 25, 2011

Posted: 1:54 AM, April 25, 2011

Like 2,583 people like this. Be the first of your friends.

Tweet 203 More Print

Shakespeare's plays, Einstein's theories -- and porn queen Jenna Jameson's steamy onl sexcapades.

New Yorkers can take their pick at the city's public libraries, thanks to a policy that gives a the most uncensored access to extreme, hard-core Internet smut this side of the old Time Square.

on of the First

"What they're doing is publicly funding an appetite for the most debased fare available," said **Catholic League** President Bill Donohue. "It's not like a Playboy centerfold anymore -- it's far worse."

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Internet porn a First Amendment right at Chicago libraries

libraries

Porn on L.A. Library Public Terminals Gets Serious Debate in City Hall

By Dennis Romero, Wed., Apr. 13 2011 @ 7:03AM

Categories: libraries

Share Like 1 Submit 2 0 Digg

Ah, L.A. City Hall, always tackling the Big Issue. Like cat declawing and an Arizona business boycott that has no teeth.

And now the accidental, over-the-shoulder viewing of internet porn at public libraries is a matter of serious inquiry among city officials.

Yes, this was actually a major topic of discussion at the Arts, Parks, Health and Aging Committee meeting this week.

And what was done about it?

Not an L.A. library branch (but

The profusion of pornography

Whereas pornography was once furtively glimpsed at dimly lighted newsstands or seedy adult theaters, today it is everywhere. It pours in over the Internet, sometimes uninvited, sometimes via eagerly forwarded links…

…Whereas children used to supplement sex education by tearing through *National Geographic* in search of naked aboriginals … today many are confronted by pornographic images on a daily basis. In a 2001 poll by the Kaiser Family Foundation, 70% of 15-to 17-year-olds said they had accidentally come across pornography online.

Time, January 19, 2004

Dimensions(?) of the Problem

The Washington Times

Originally published 04:45 a.m., September 29, 2009, updated 07:25 a.m., September 29, 2009

EXCLUSIVE: Porn surfing rampant at U.S. science foundation

Jim McElhatt

Washington Takes Break From Porn Surfing to Bailout Wall Street

by Ann Coulter

04/28/2010

Democrats have decided that in order to prevent Wall Street from starti meltdowns, wrecking the economy and leaving the American taxpayer we need to give more oversight authority to the same government emp busy surfing Internet porn as private investors frantically tried to warn

GOP ramps up attacks on SEC over porn surfing

AP Associated Press

By DANIEL WAGNER, AP Business Writer – Fri Apr 23, 12:14 pm ET

WASHINGTON – Republicans are stepping up their criticism of the Securities and Exchange Commission following reports that senior agency staffers spent hours surfing pornographic websites on government-issued computers while they were supposed to be policing the nation's financial system.

"More than 4 million Web sites worldwide show images of children being sexually exploited, said the U.N. investigator on the sale of children, child prostitution and child pornography… "

It is estimated that 100,000 sites contain child pornography."

"A total of 4.2 million websites econtain pornography."

< 1% of Websites contain porn. Philip B. Stark. UCB, 2006 (100-200m sites in all)

… But what do the numbers really mean?

How Porn Sites are Used : An Exception to "Winner Take All"

Distribution of User Volume Among Sites

% of Sites	% of traffic
	All Sites
.01	32.36
1	55.63
5	74.81
10	82.26
50	94.92

Adamic & Huberman, 2000

How Porn Sites are Used : An Exception to "Winner Take All"

Distribution of User Volume Among Sites

% of Sites	% of traffic	
	All Sites	Porn Sites
.01	32.36	1.4
1	55.63	15.83
5	74.81	41.75
10	82.26	59.29
50	94.92	90.76

Adamic & Huberman, 2000

Responses to Rotten Information

Institutional & organizational adaptations

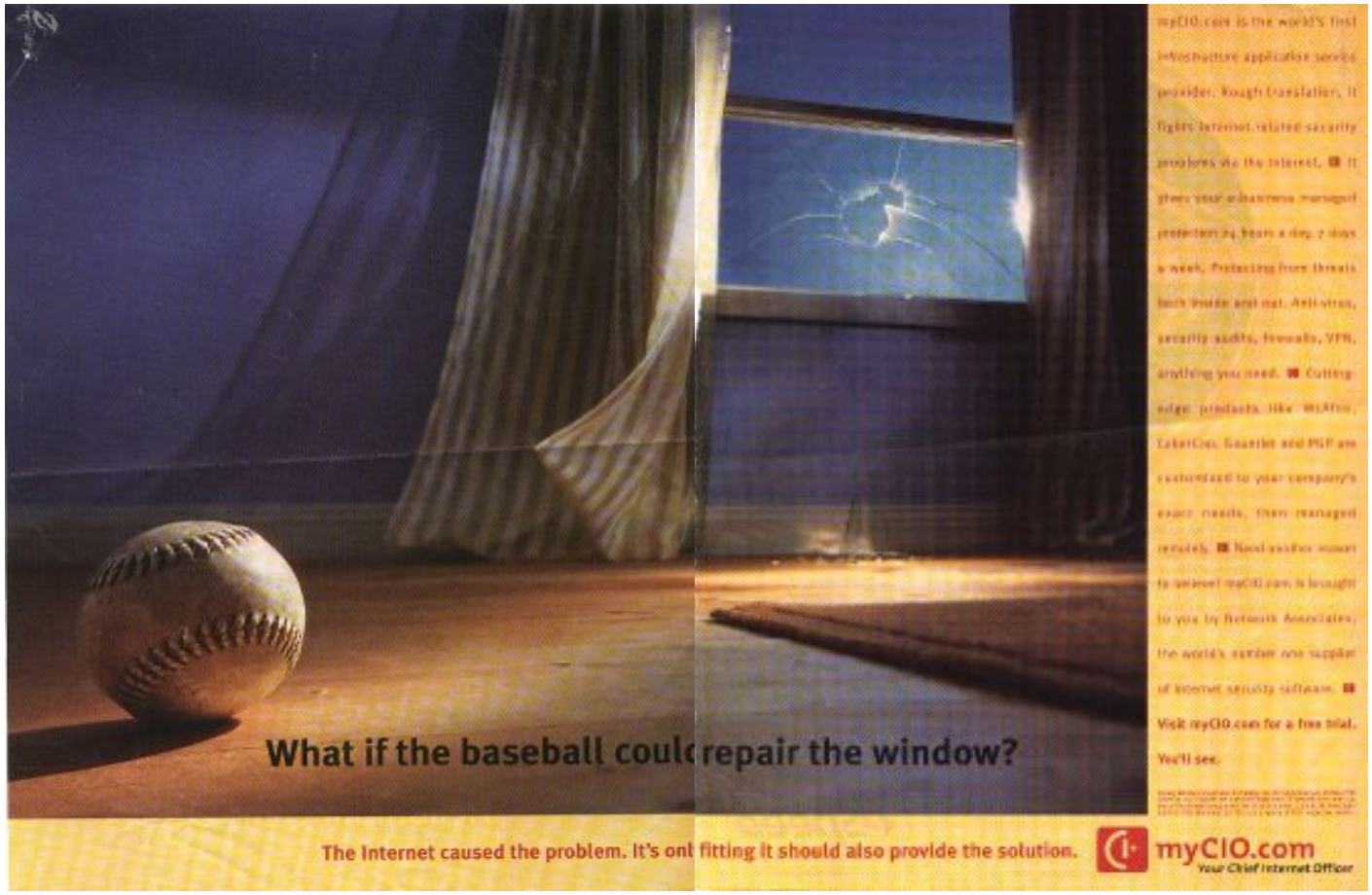
Social change

Appeals to market forces

Legislative and legal remedies

Technological solutions

Technology to the rescue?



Filtering Frenzy

RemoteWebGuard
We'll help you help yourself.

April 25, 2011 13:44 ET

Addicts Seek Help as US Internet Porn Addiction Rates Reach Alarming Heights

New Web-Based Services Like RemoteWebGuard Help Addicts by Monitoring Online Behavior and Blocking Tempting Sites

Ad for McAfee's GuardDog software

Legal Solutions

Children's Internet Protection Act:

Passed in 2001 -- 3rd attempt to regulate online porn

Limits of Text Blocking

Text unavailable (imaged, etc.)

Confusion with innocent text (cf site on St. Augustine)

Need to block IP numbers – collateral damage due to virtual hosting

"Loophole" sites: translation sites, anonymizer sites, Google cache & images (classified as "pornography" by N2H2)

Inherent trade-offs of precision and recall

Limits of Image Classification

Images found "Probably Obectionable" by WIPE (Wavelet Image Pornography Elimination / Detection).

Social, Economic & Institutional Responses to Internet Pornography

Libraries can regulate use by means of use policies, training and guidance, monitoring of logs, tap-on-the-shoulder policies, etc.

Rights of other patrons can be protected by privacy screens, etc.

Parents can assume responsibility for monitoring kids' surfing.

Providers can offer "greenspace" browsers for kids.

Social & Institutional Responses

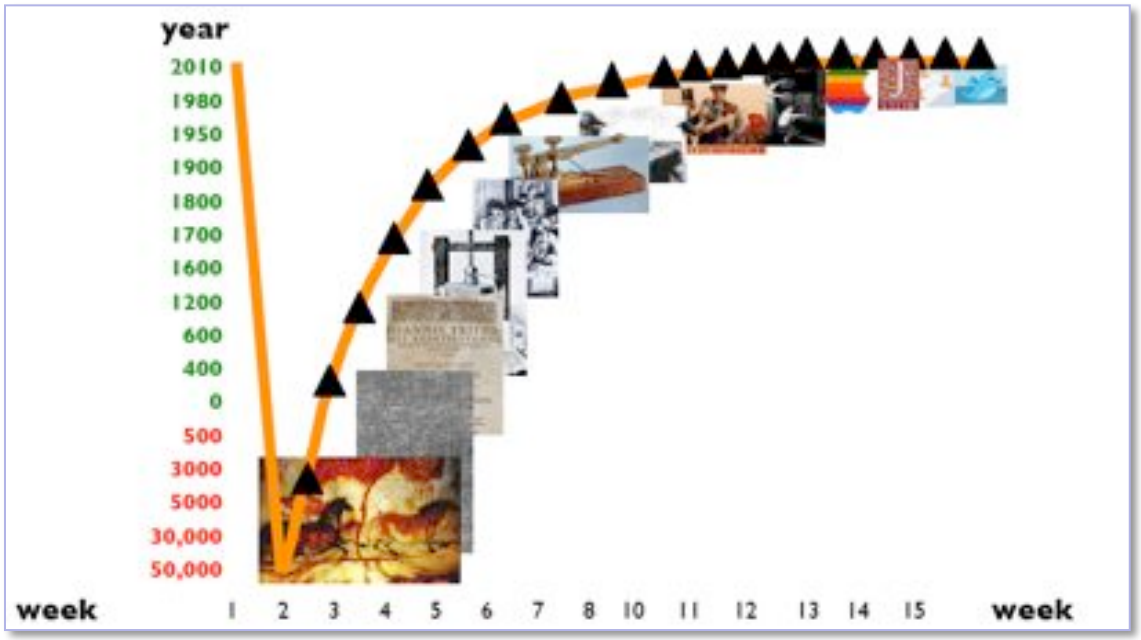
Even porn can get old…

We've been here before

Where else has technology interacted with social, political, and economic forces to produce outcome?

We've been here before

- Writing
- Print
- Telegraph & telephone
- Newspapers
- Advertising
- Propaganda
- Photography
- Radio & TV
- Computers
- Search
- Internet…

Where else has technology interacted with social, political, and economic forces to produce outcome?

Where hasn't it?