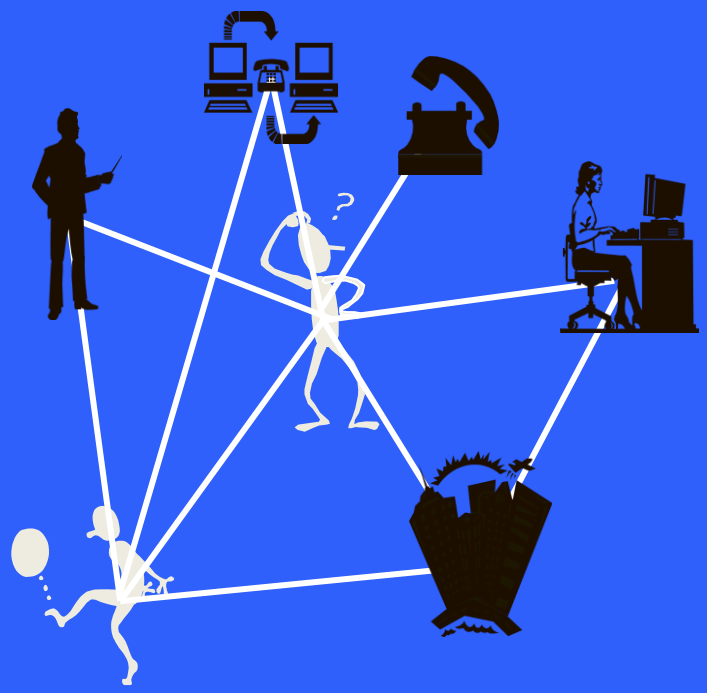
The Triple Revolution
How the Technical and the Social Are Leading to Networked Individualism



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Main Reading Room: New York Public Library

Candida Hofer, *Libraries* http://growinupfax.wordpress.com/2010/07/28/libraries/

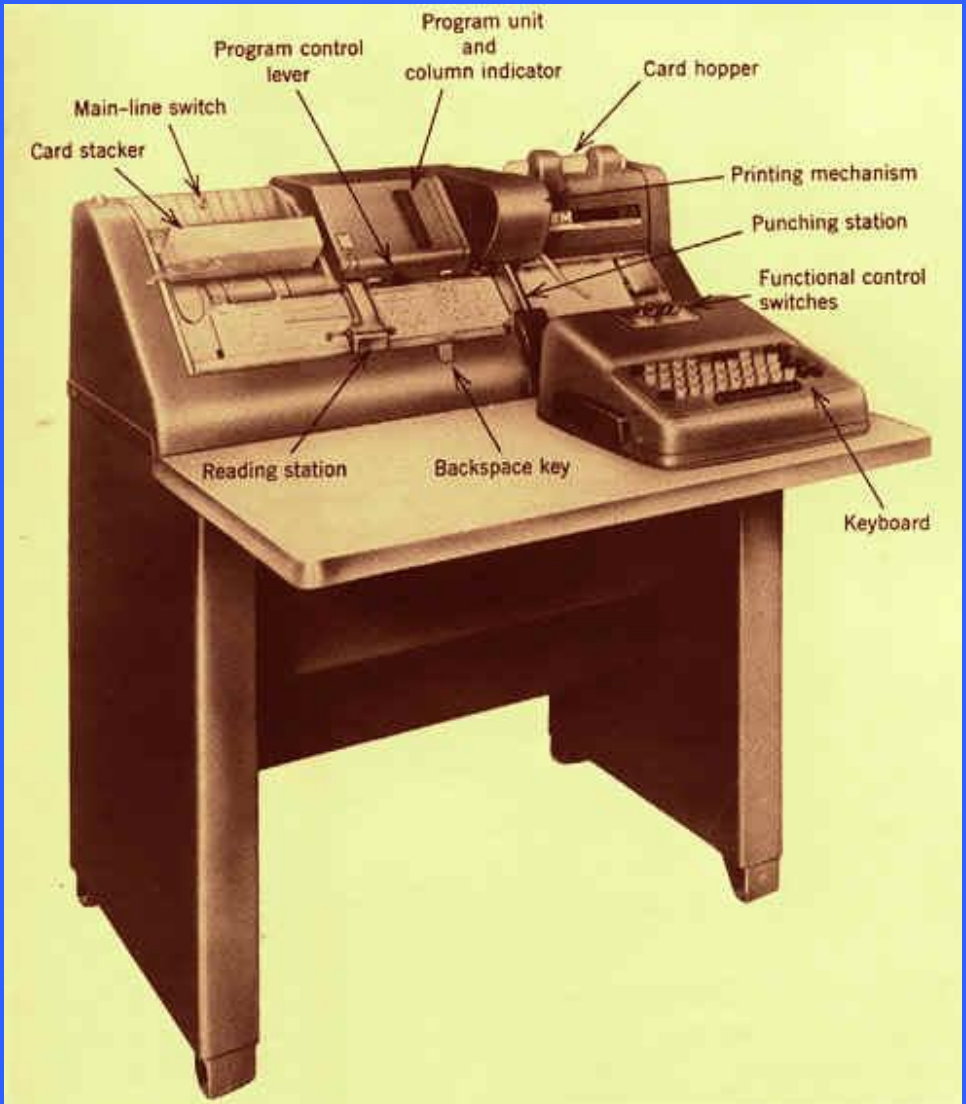


FIGURE 4.11 IBM 026 Keypunch (Courtesy IBM).

1965: Harvard Dept of Social Relations

There Comes a Time in
Every Person's Life
When S/He Stops Looking For
Significance Tests
And Starts Looking For
Significance !!

This is a Breadth Talk – And Not a Depth Talk
On the Interplay of Technology, Society & Documents

The Triple Revolution

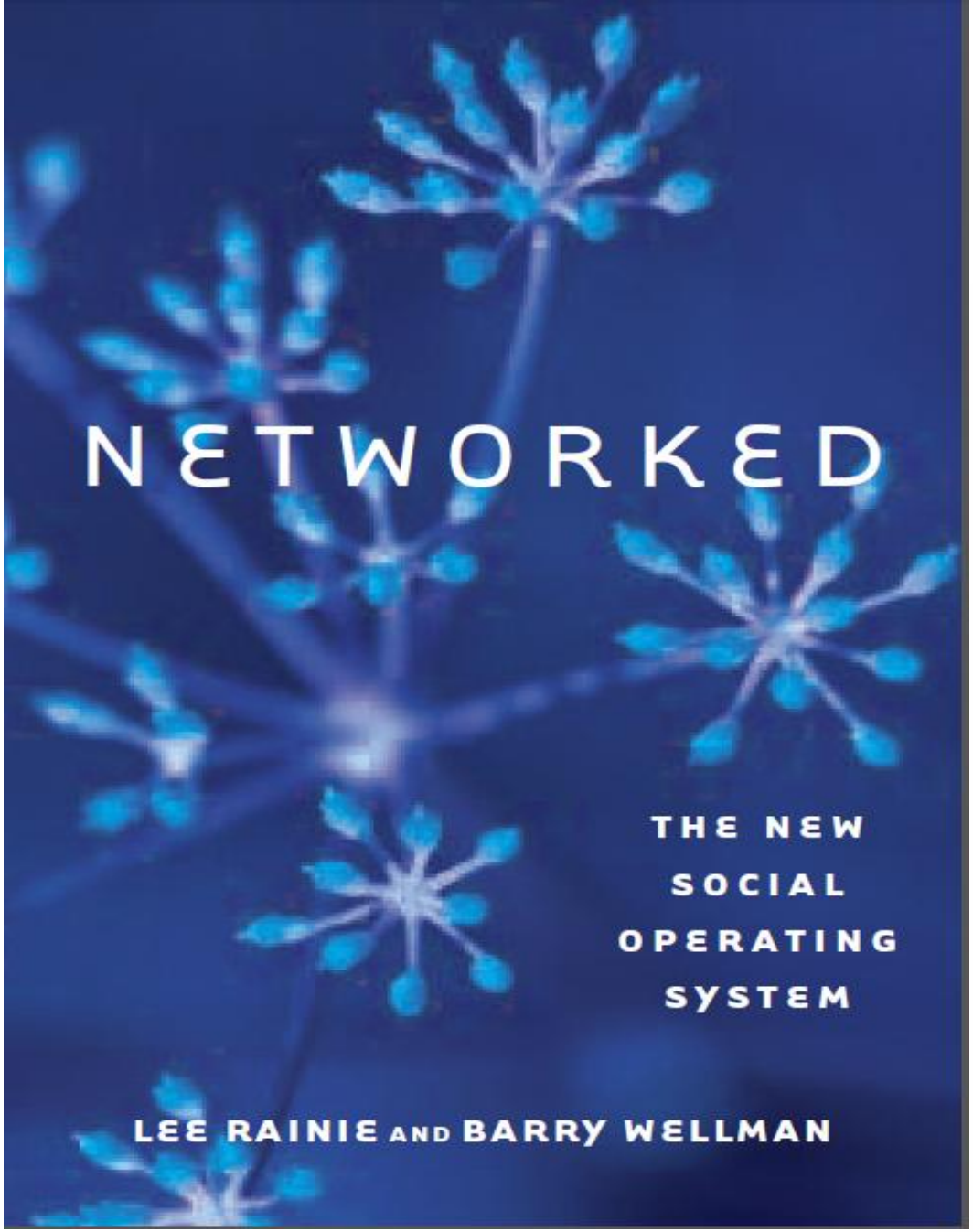
The Turn from Groups to ***Social Networks***

The Proliferation & Differentiation of the ***Personalized Internet***

The ***Personal Mobile Always-Accessibility***

Networked Individualism

MIT Press



Spring 2012

http://www.amazon.ca/Networked-New-Social-Operating-System/dp/0262017199

Networked: The New Social Operating System

Lee Rainie & Barry Wellman, MIT Press, Spring 2012

Part I: The Triple Revolution

- The Social Network Revolution
- The Internet Revolution
- The Mobile Revolution

Part II: The Triple Revolution in Practice

- Networked Relationships
- Networked Families
- Networked Work
- Networked Creators
- Networked Information

Part III: What Is – What Will Be

- Thriving with Networked Individualism
- The Future of the Triple Revolution

My coauthor Lee Rainie

Summary

- Old institutions and methods still work well
- New expectations: personalization, rapidity, availability, deliverability
- There are new pathways to your audience – and they have new pathways to you
- Attention & interaction is fickle & allocated many ways
- Any time, anywhere access means it's a 24/7 world for advocates in which to "prepare for their closeups"

The Triple Revolution -- Outline

- Three Phenomena Interwined
- 1. Turn Away from Groups:
  - More Multiplicity, Partial Attention, Less Boundaries
- 2. Internet: Personalization, Weakened Distance
- 3. Mobile-ization: Info & Communication
  - Accessible To You
  - Available To Others

Three revolutions have created this new world

Revolution 1

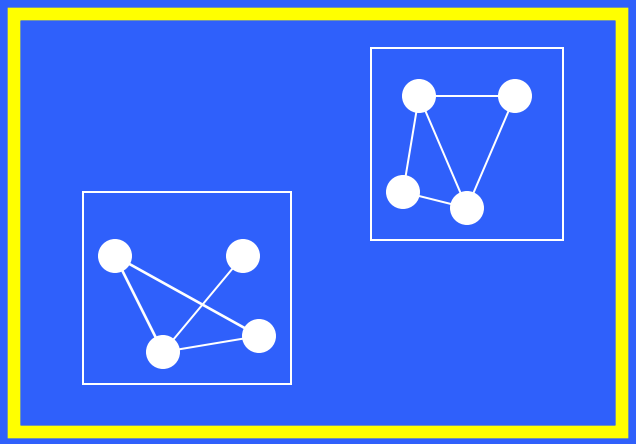
The Turn from Bounded Groups:

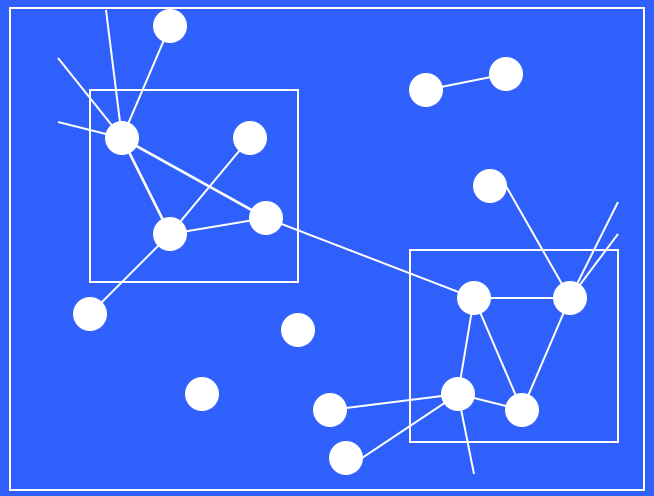
Place-Based, Densely-Knit Solidarities

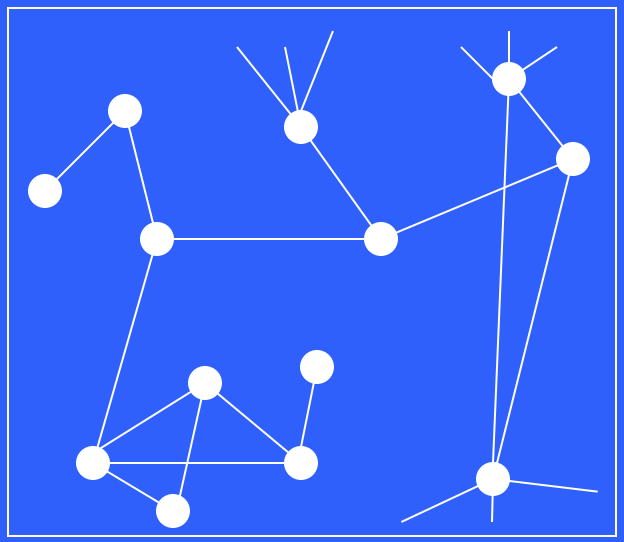
To Social Networks:

More Far-Flung, Sparsely-Knit, Multiple & Partial

Groups: Door to Door







Socially & Physically Bounded
Physically Contiguous
What Libraries Originally Served
Where Archives Got Their Material

Traditional Small Groups: Door-to-Door

- Old workgroups/ communities based on
  - proximity and kinship
- *Pre-industrial villages, wandering bands*
- All observe and interact with all
- Deal with only one group
- Knowledge comes only from within the group – and stays within the group
- Libraries often a key building – walk-in trade
- Archives tend to be local

Tuscan Village

Lower East Side, NYC, c 1900

http://brandavenue.typepad.com/brand_avenue/2007/03/index.html

Family Togetherness in the 1950s: Fun with Dick and Jane primer

Father Helps the Family

Mother said, "Oh, Father!
Will you do something for me?
Will you please help me?"

"I will see," said Father.
"I will see."

Jane said, "Look, Father.
Will you please help me?
You work for Mother.
Can you work for me, too?"

"I will see," said Father.

Recurrent Claims That Things Are Always Falling Apart

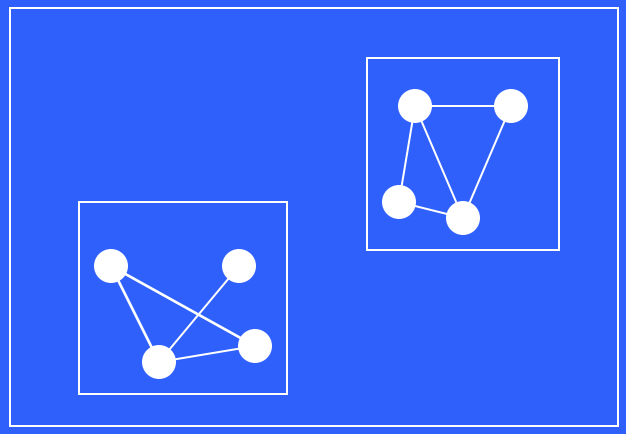
- From urbanization, bureaucratization, industrialization, capitalism/socialism & technological change – to the internet and mobile
- Thomas Jefferson "*The mobs of great cities add just so much to the support of pure government, as sores do to the strength of the human body*" (1784, p. 86).
- Ferdinand Tönnies *(Gemeinschaft und Gesellschaft,* 1887) thru Robert Putnam *(Bowling Alone,* 2000) to Sherry Turkle *(Alone Together,* 2010)

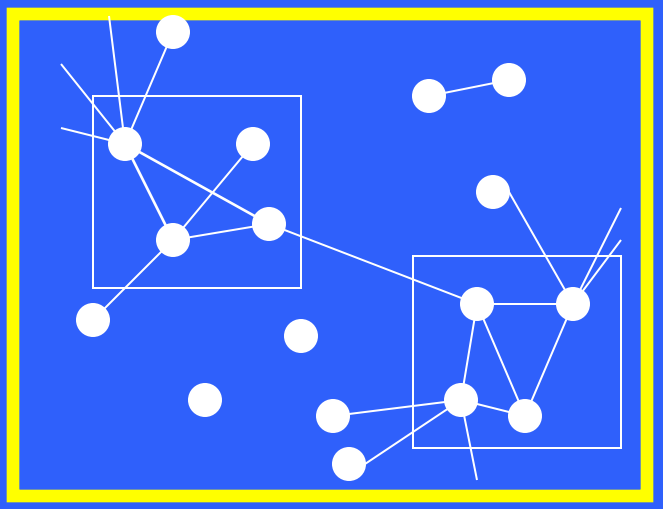
GloCalization: Place to Place

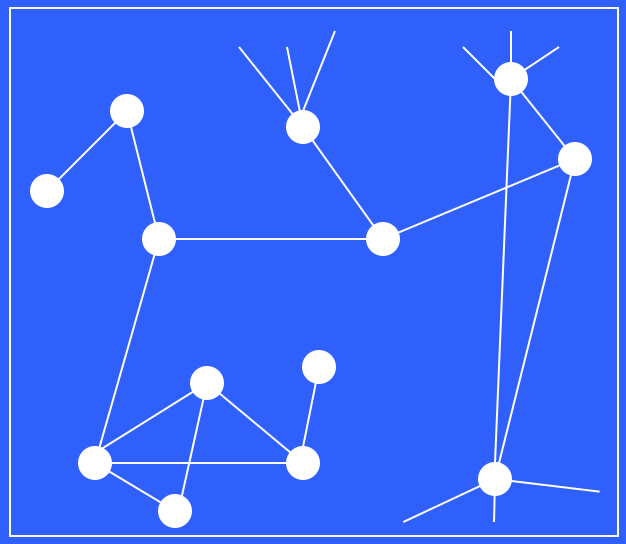
Phones, Networked PCs, Airplanes, Expressways, RR, Transit

- Home, office important contexts
  - *Not intervening space*
- Ramified & sparsely knit: not local solidarities
  - Not neighborhood-based
  - Not densely-knit
  - Less of a group feeling
- Domestication of socializing
- Partial membership in multiple communities
  - Often based on shared interest
- Connectivity beyond neighborhood, work site
- Household to household / work group to work group

GloCalization: Place-to-Place







Partial membership in Multiple groups
Different ties & clusters provide Specialized social capital
Local & long-distance

Place-to-Place Connectivity

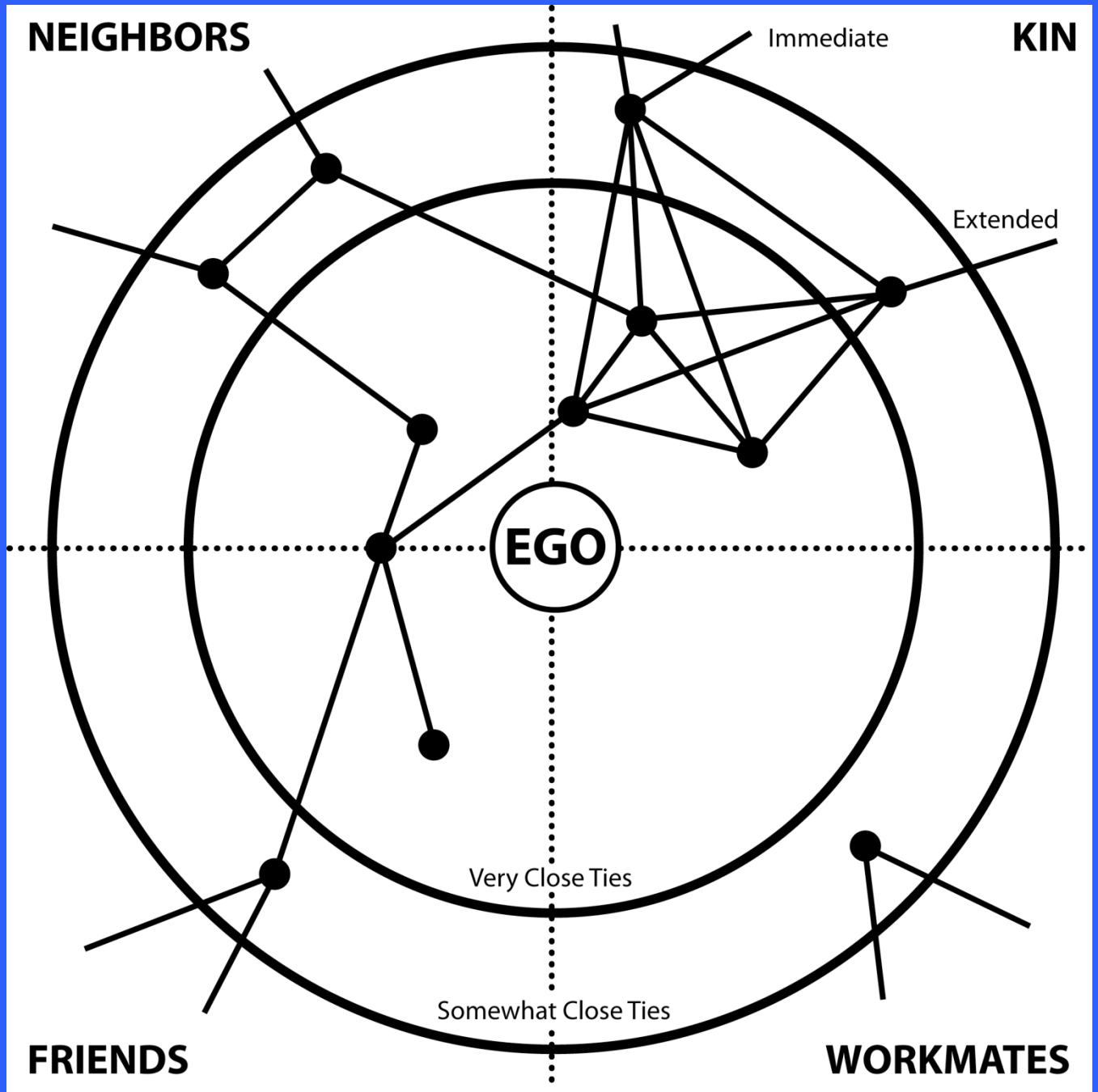
Elvis & Entourage Boarding

http://www.elvis.com.au/presley/pictures/lisa_marie_convair_880_jet_inside.html

Highway 401, Toronto

http://www.google.ca/imgres?q=traffic+toronto+401&num=10&hl=en&client=firefox-a&rls=org.mozilla:en-US:official&biw=1600&bih=818&tbm=isch&tbnid=i6EbXQhzzKhVJM:&imgrefurl=http://www.visualphotos.com/image/2x2547524/highway_traffic_in_rain_highway_401_toronto&docid=POME64SGOTOEvM&imgurl=http://www.visualphotos.com/photo/2x2547524/highway_traffic_in_rain_highway_401_toronto_600-00076030.jpg&w=550&h=387&ei=-vWtTrDSMsPL0QHHpcm4Dw&zoom=1

Personal Network: Close Ties



Scholars Have Shown Repeatedly That People Have Sizeable Sets of Close and Not-So-Close Ties

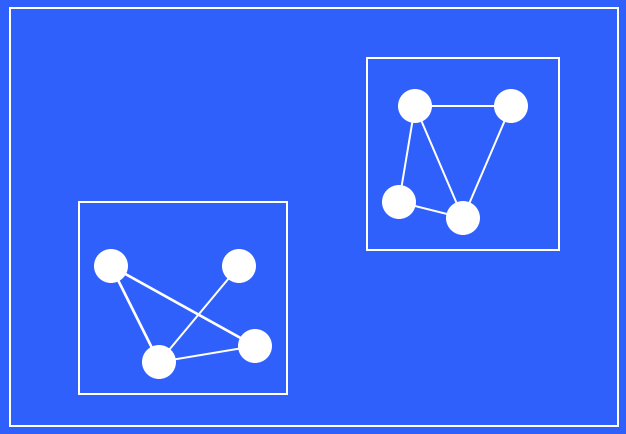
Yet the Claim Keeps Getting Made That Community is Shrinking And Things are Falling Apart e.g., Robert Putnam, 2000

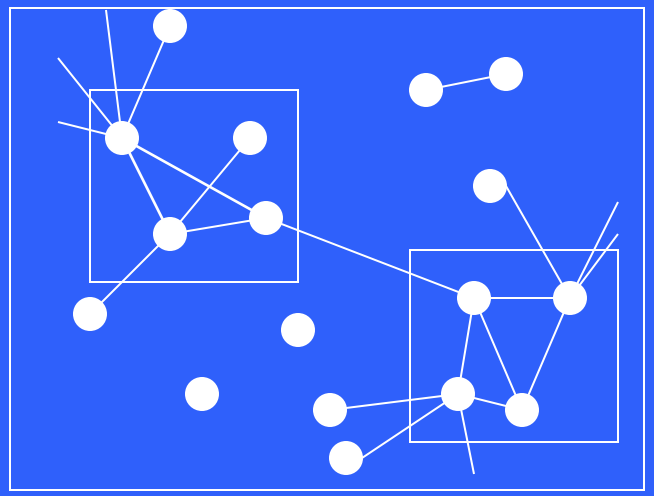
http://us.123rf.com/400wm/400/400/lawren/lawren1110/lawren111000006/10769745-social-network-people-in-drawing-net-on-blackboard.jpg

Person To Person: Networked Individualism

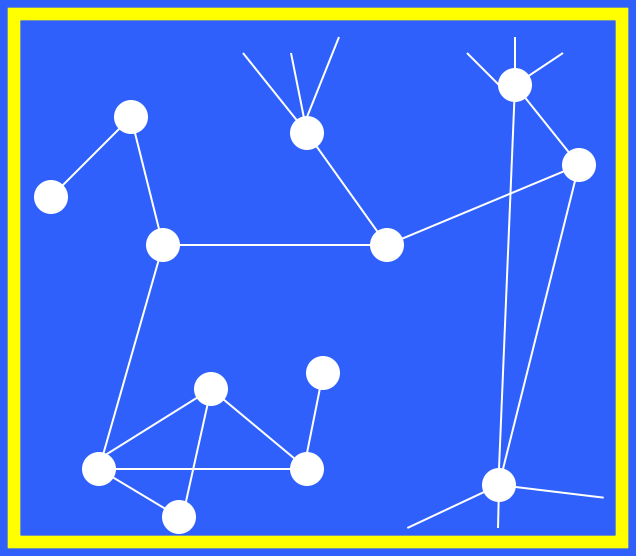
Mobile Phones, Portable Computing, Easy Travel

- Little awareness of context
- Individual, not household or work group
- Personalized networking
- Tailored media interactions
- Private concerns replace public civility
- Move from small towns to cities, suburbs
  - Less face to face surveillance
  - More electronic coveillance (Facebook)
  - More electronic surveillance (government, Facebook Google
- Online interactions linked with offline





Networked Individualism:
Person-to-Person



Structural Changes
Linked as Individuals
Less Groupiness
More Agency
Less Place Bound
More Achieved, Less Ascribed
Things Come to You

People Function More as Networked Individuals

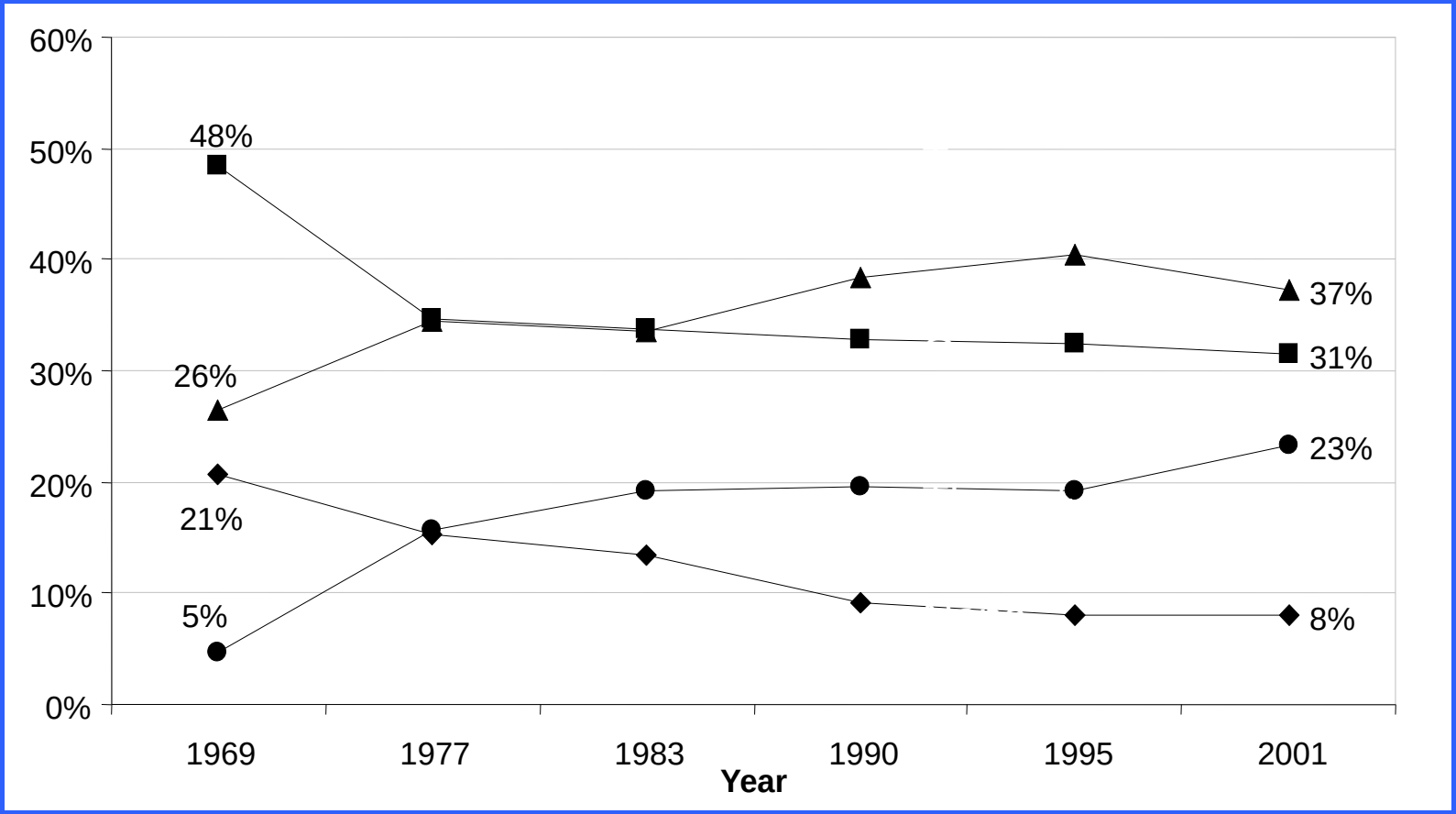
- *.. and less as group members*
- Social ties and events organized around the ***individual*** rather than a ***social unit*** such as a family, neighborhood, or organization
- The ***person has become the individual*** unit of social connectivity; and not the place,
  - be it household or workplace
- ***Agency:*** Each person operates own network
- Cell phones and internet allow ***person-to-person*** contact to supplant place-to-place communication.
- *The social network revolution has provided the opportunities – and stresses – for people to reach beyond the world of tight groups*

Widespread Connectivity

- Automobile and airplane trips have made travel wider-ranging and broadly affordable
  ➔ Dispersed social networks

- Inter-National peace
  ➔ Widespread travel & migration

Percentage of U.S. Households By Number of Vehicles

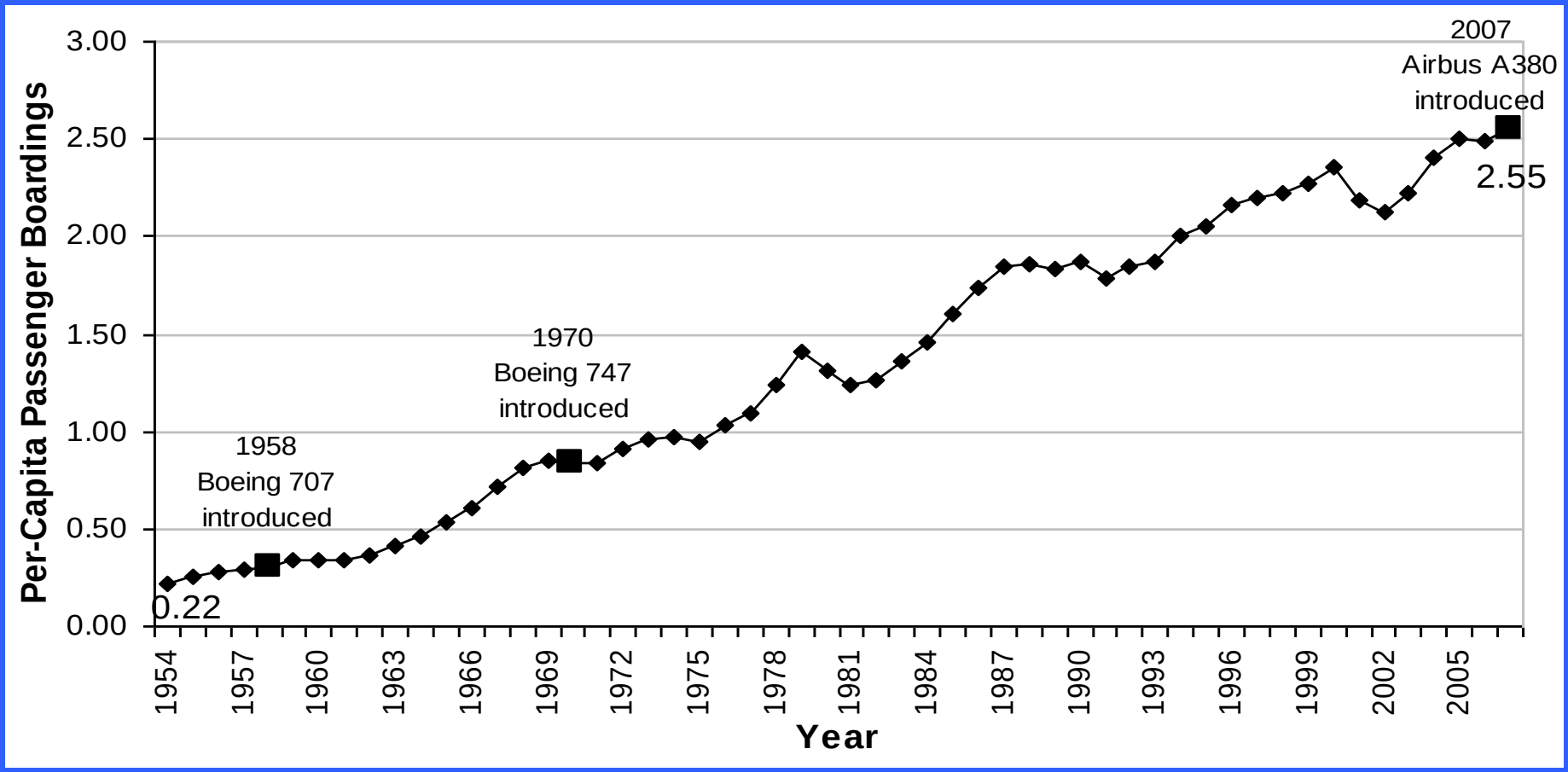


60% of Households Have 2+ Cars

Passenger Miles Up 60%: 900 Billion (1970) ➔ 1.5 Trillion (2007)

Average miles driven rose 20%: 10K ➔ 12K miles

Per-Capita Airline Boardings in U.S.



Deregulation ➔ Lower prices
Very few crashes
Flights to more airports

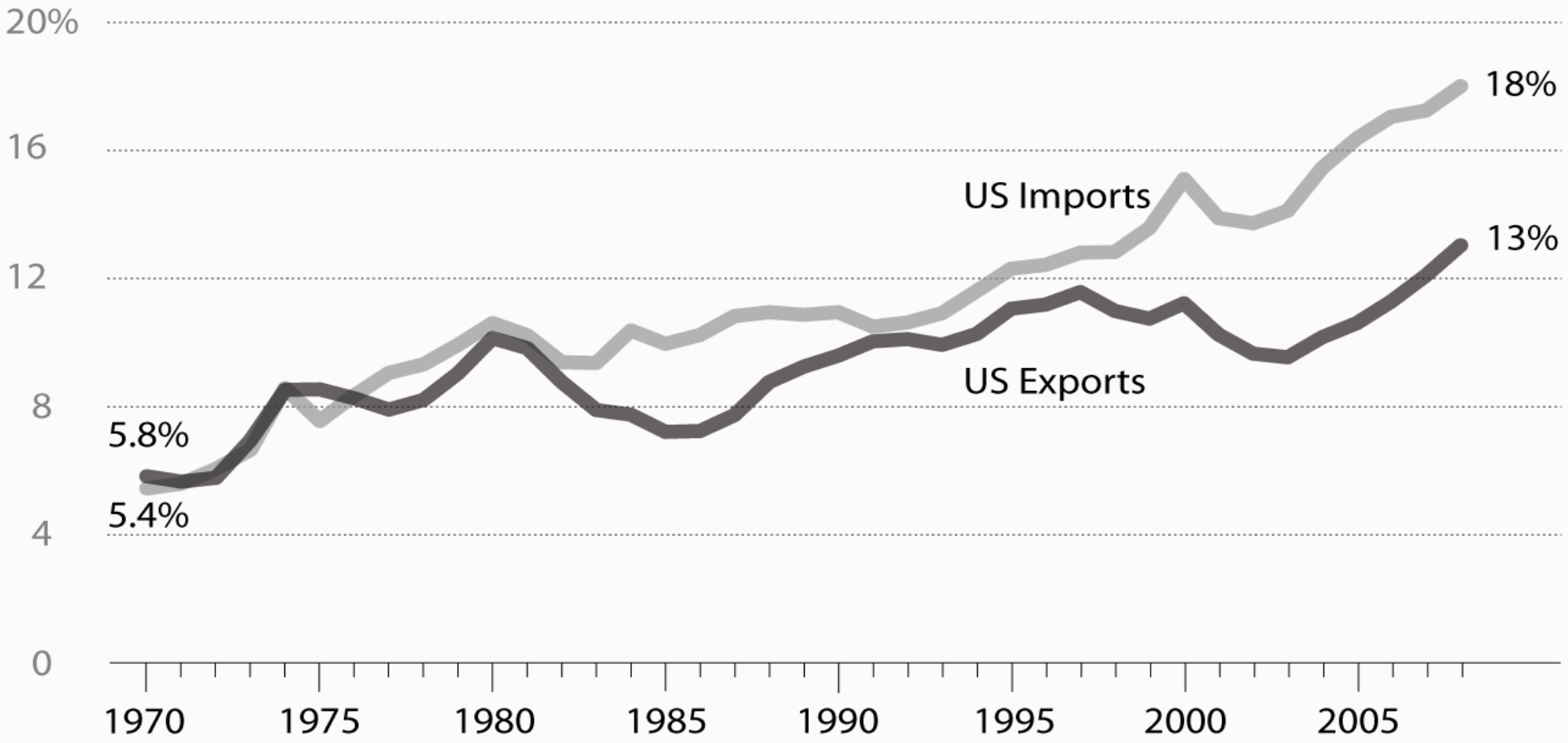
Globalized Fruit

Fiesta Farms Supermarket, Toronto 2010

Fig. 2.7

U.S. Imports and Exports

PERCENTAGE OF GDP



Source: Wolfram Alpha

Society based more on individual connectivity than on ethnic, religious & sexual memberships

- 14.5% of US marriages are interracial
  - Few worry about inter-ethnic:
  - Protestant-Catholic-Jewish boundaries no longer immutable

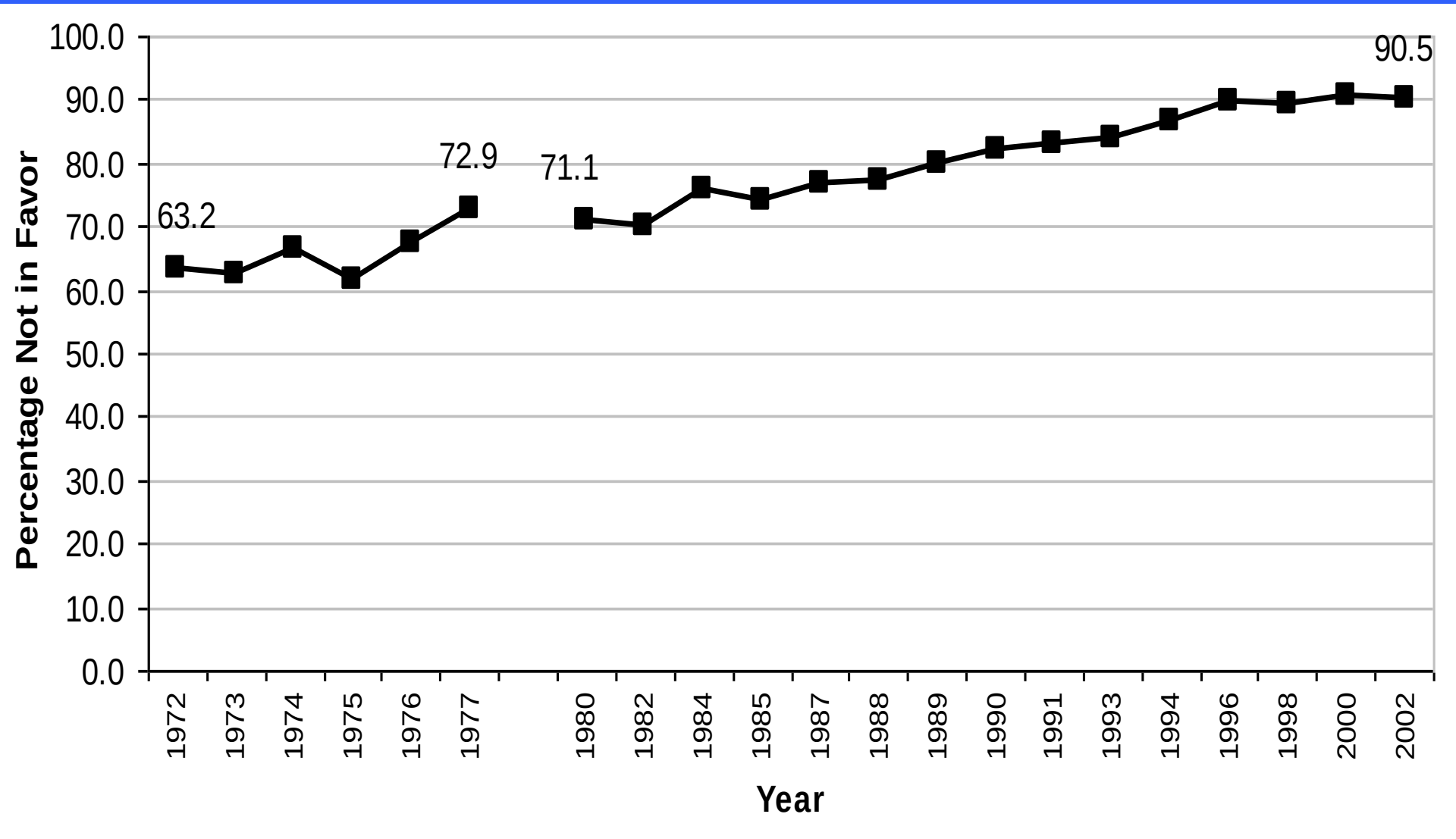
    Contrast: Will Herberg, *Protestant-Catholic Jew* (1955)
    & didn't even think about interracial, same-sex

Changing Interracial Marriage Norms

1967 Shocker

2010 Commercial Dating Ad

Percentage of Adult Americans Aged 18+ Who Would Not Favor A Law Against Racial Intermarriage



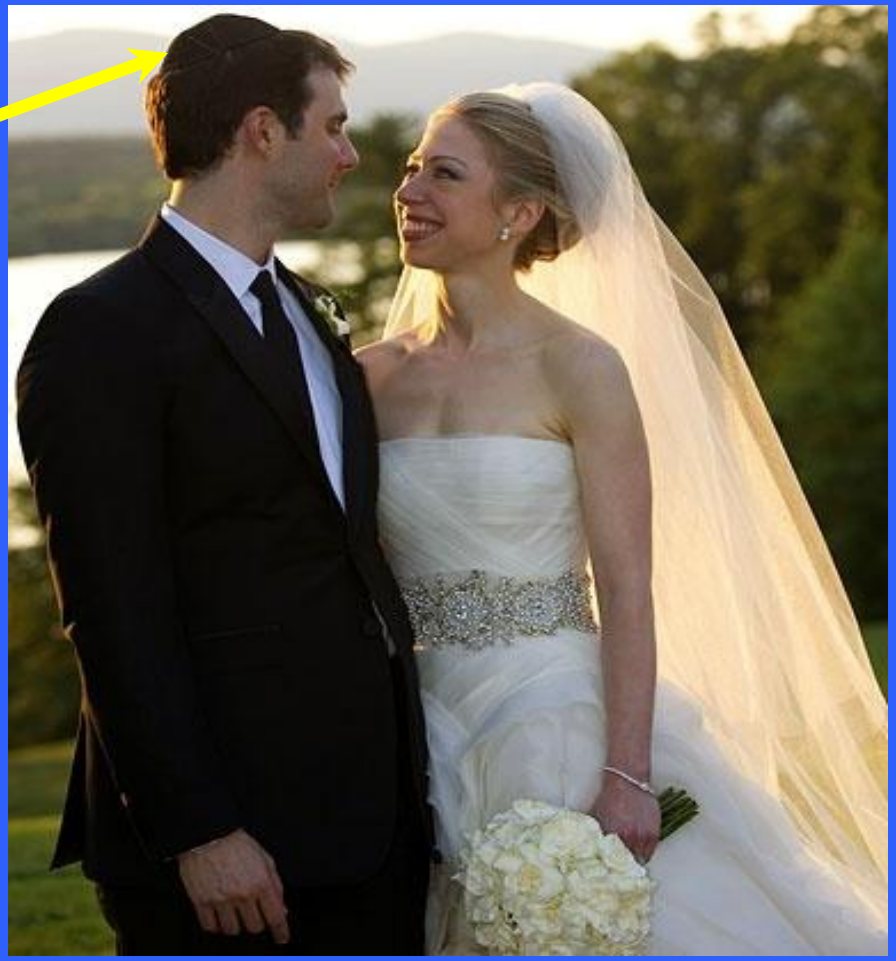
Shift away from Institutionalized Religion To Do-It-Yourself or No Religion

- **Switch away from *institutionalized* religion** (US data):
  Catholicism (-8% net change)
  Baptist (-4%)
  Methodist (-2%)
  Non-denominational Christianity (+3%)
  Unaffiliated (+9%).

- + Rise of Islam, Hinduism, Buddhism & Confucianism in North America & Western Europe

Interfaith: Ex-President Clinton's Daughter Chelsea Marries Kepi-Wearing Marc Mezvinsky

Jewish Kepi

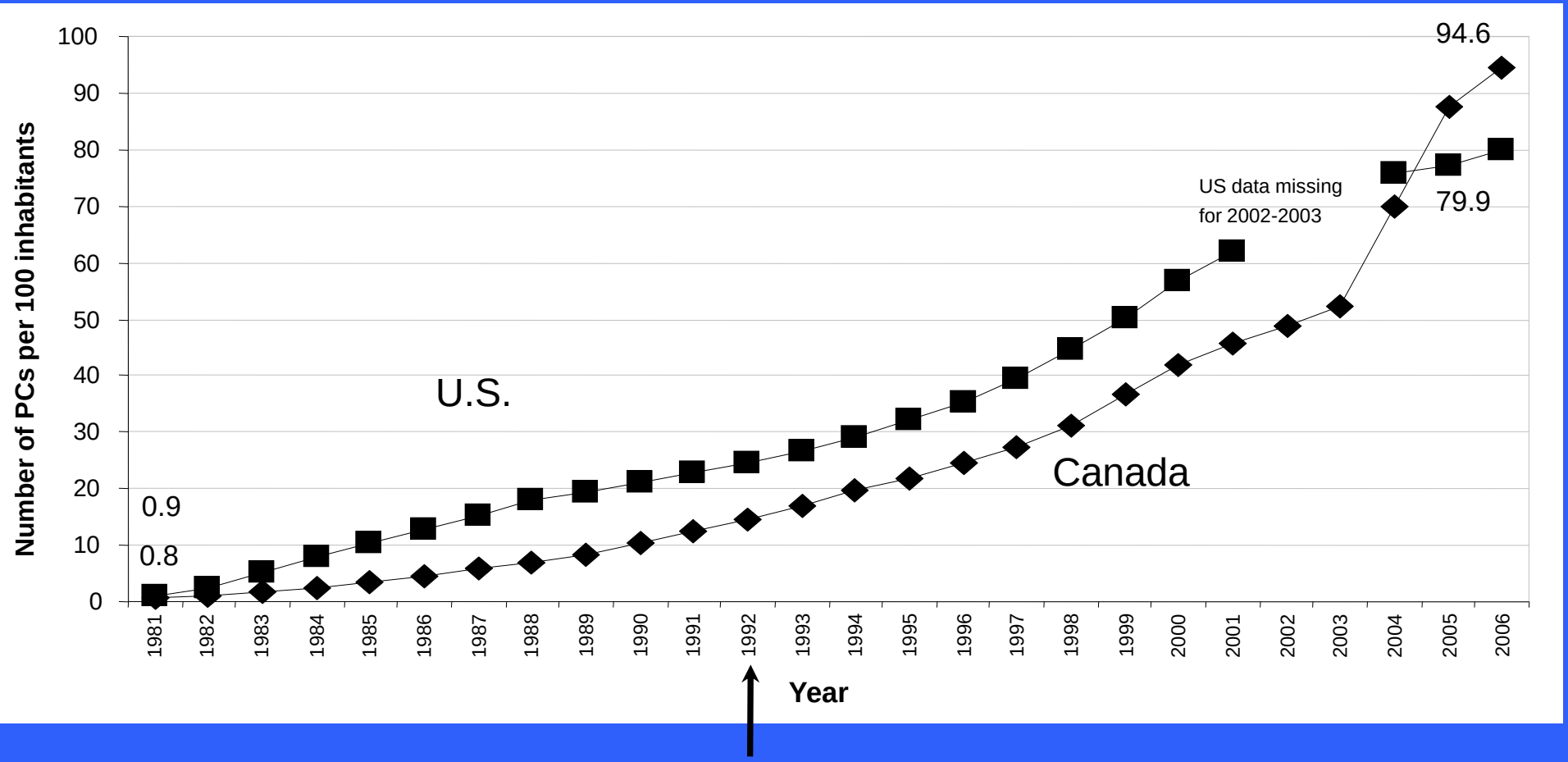


July 31, 2010

Revolution 2: The Internet

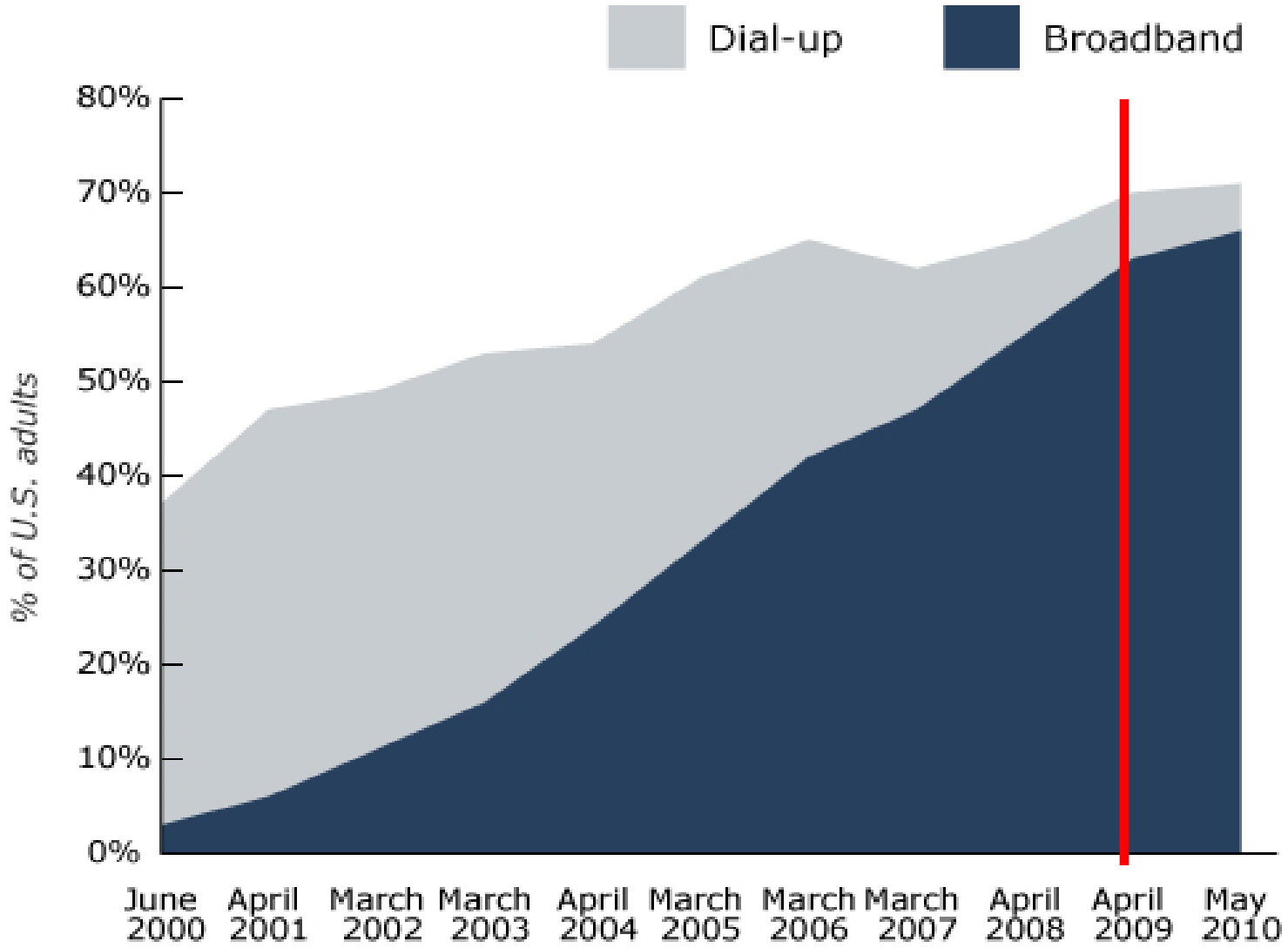
- Far-Flung
- High Bandwidth: More Bits/Second
- And Cheaper Equipment ➔
  - From Text to Graphics, Pix, Video & Music
  - Until recently, Desk Bound
- Enhanced the Turn to Networks
  - Didn't Cause It
- And above all, *Personal – not Group-y*

Number of Personal Computers in U.S. and Canada (1981-2006)



Internet Opened to Public

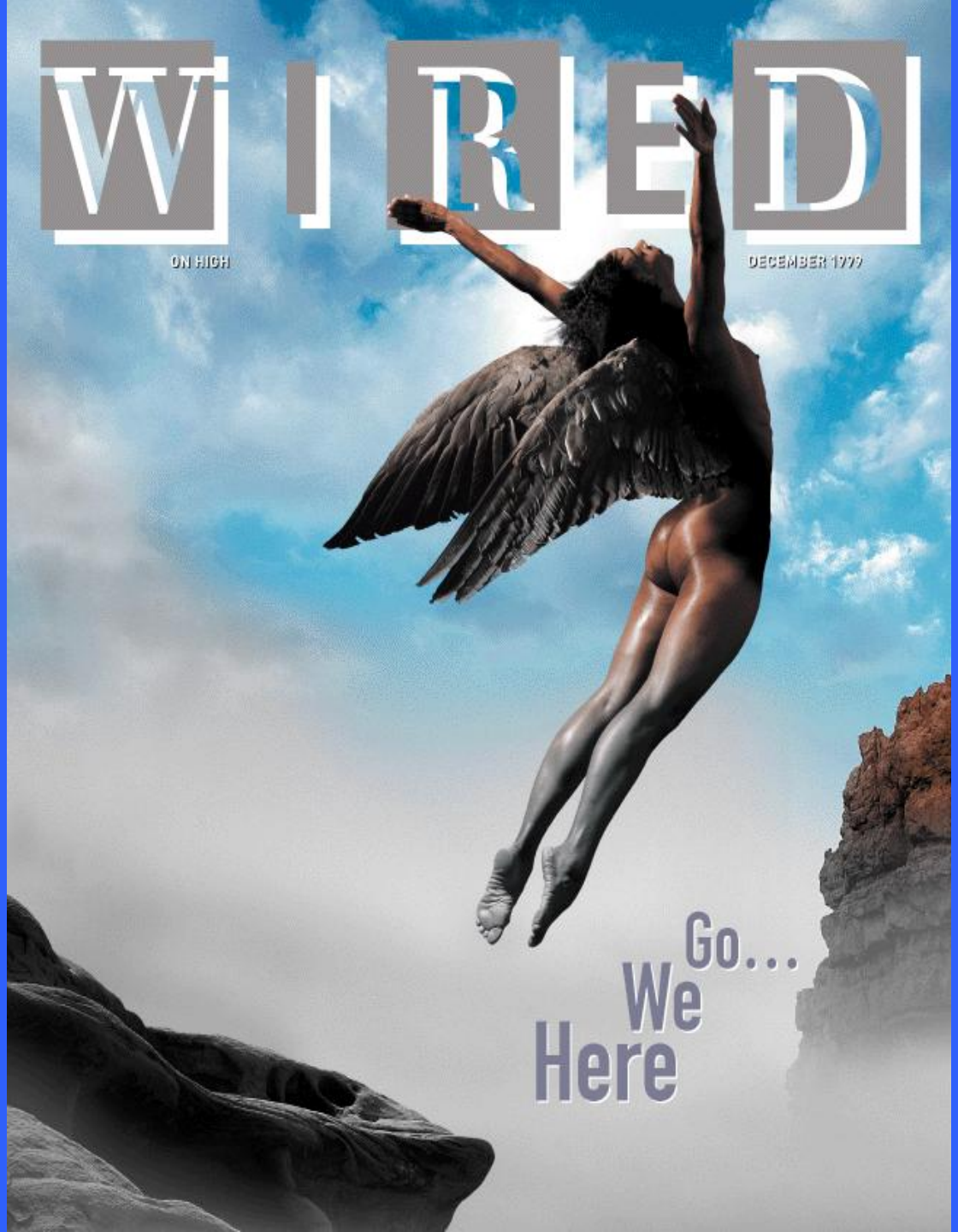
Home Broadband Adoption, 2000-2010



Source: Pew Internet & American Life Project surveys 2000-2010. Based on all American adults 18 and older.

Icaran “Cyber-Angel”
Wired magazine cover
December 1999

Empowered
Individual



Ryan Lackay ran an isolated data haven in a WWII anti-aircraft platform in the English Channel: the "Principality of Sealand". His hacker name is "octal".

From *Almost Real,* Ann Shin, 2004, National Film Board of Canada

The Personal Internet Revolution

- Instant Access to Diverse, Copious Information
  - If You Know Where and How to Look
- Rapid, Low-Cost Communication
  - Distance, Time Much Less of a Constraint
  - Email as Frequent with Ties 3,000 km as 3 km
  - Yet most ties remain local – people have bodies!
- Increasing *Volume* and Velocity of Information & Communication
- ***Point of contact has changed from the household (and work group) to the individual***
- ***"Networked Individualism"***

The Controversy Revived Yet Again: "Social Isolation in America"

- Article in June 2006 *American Soc. Review*

  J Miller McPherson, Lynn Smith-Lovin, Matthew Brashears
- *General Social Survey:*
  # of Americans "Discussing Important Matters"
- Declined 28%: from 2.9 in 1984 to 2.1 in 2005
  – Includes spouses
- 23% of Americans are "social isolates":
  – Don't have any confidants – even spouses

The Return of a Media Moral Panic

- "Will this glow [from the Internet] produce a closed generation of socially challenged individuals; humans who are more comfortable with machines than anything else?"
  - Douglas Cornish, *Toronto Globe & Mail,* October 13, 2006,
- Also *NY Times, LA Times, Financial Times, Washington Post*
- Links with fears about *Facebook, Twitter* (e.g., Chomsky, 2011)

Yet, Much Evidence Shows A Vibrant Networked World:

- Many Pew Internet Studies
  - *www.pewinternet.org*
- Our NetLab's *Connected Lives* studies
  - East York, Toronto
- World Internet Project surveys: U.S. (over time)
- StatCan and U.S. Data Archives

Sizeable Personal Networks

- 634 Total Ties (Mean)
  - 400-800 middle 50%
- 23 Close Ties + 27 Significant Ties = 50
- 12 Close Ties

Meet social, emotional, and economic needs by tapping into loosely-knit, diverse networks; Rather than relying on tight connections to a relatively small number of core associates

- Many don't have one sure-fire "home" community.
- Looser and more diverse social networks require more choreography and exertion to manage.
- Often, they rely on many specialized relationships to meet their needs. A typical social network might have some members who are good at:
  - meeting local, logistical needs (pet sitting, watering the plants),
  - while others are especially useful when medical needs arise.
  - Yet others (often sisters) provide emotional support.
  - Still others are the ones whose political opinions carry more weight, while others give financial advice, restaurant recommendations, or music and books to enjoy.

Networked individuals have partial membership in multiple networks rather than permanent memberships in settled groups (The Facebook fallacy)

- They must calculate where they can turn for different kinds of help – and what kind of help to offer others as they occupy nodes in others' extended networks.
- They have more transitory relationships than in the past.
- At the same time, they have an easier time reattaching to those from their past even after periods of non-contact.
- With a social environment in flux, people must deal with frequent turnover and change in their networks. "networkers", "netweavers", "net jugglers."

Revolution #3: Mobile Connectivity

Talking

http://totallyawesomename.files.wordpress.com/2011/04/find_out_who_is_calling_with_a_cell_phone_search.jpg

Talking Internationally

http://c1.ac-postto.myspacecdn.com/postto01/2/88e507a26d7e4ac199f6e7fd83d16488/s.jpg

Texting

http://img.ehowcdn.com/article-page-main/ehow/images/a07/ob/r2/can-signature-texting-blackberry-curve-800x800.jpg

Informing

http://c0839932.cdn.cloudfiles.rackspacecloud.com/Articles%20for%20iPad%20-%20Entry%20Landscape.png

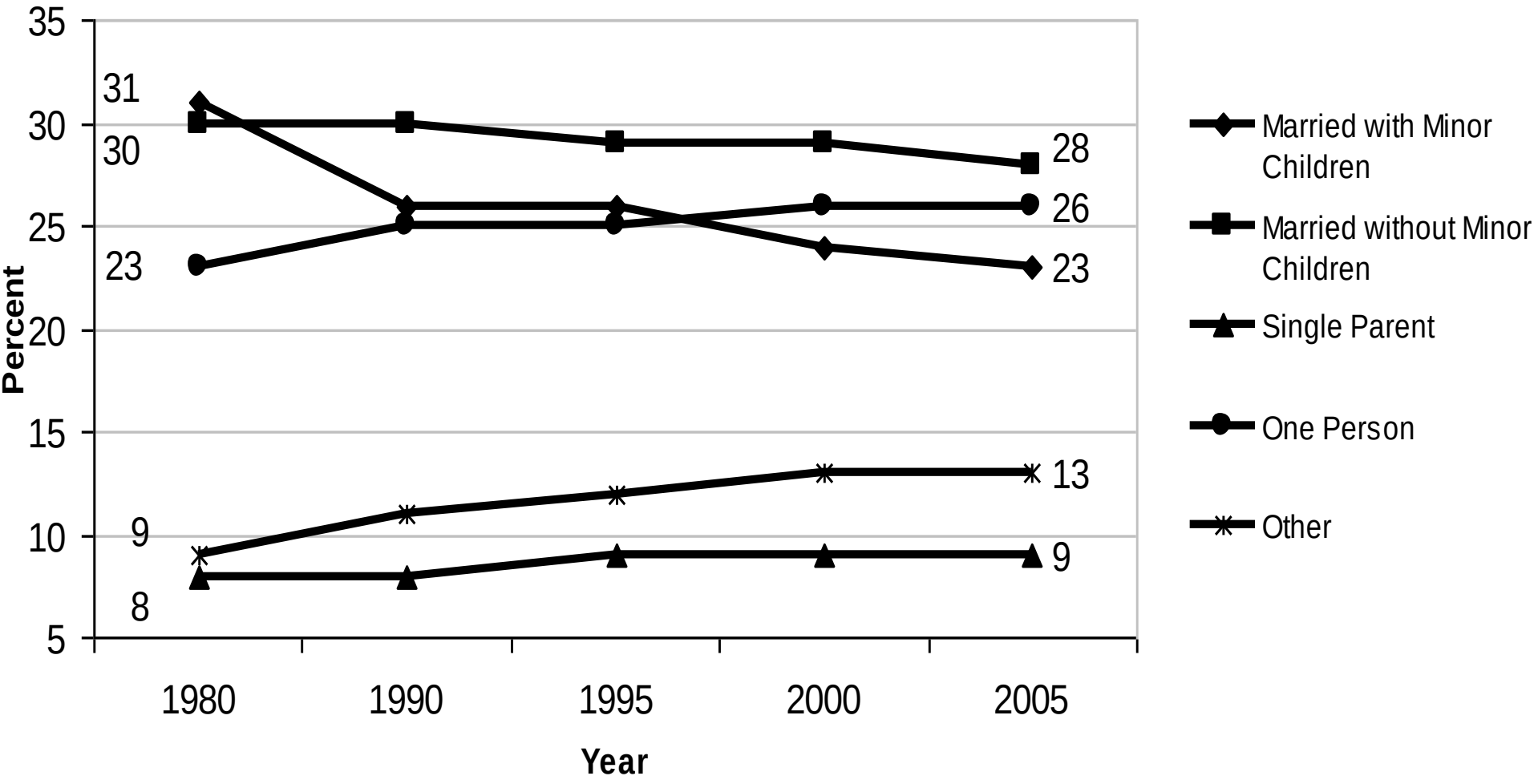
Modal Shifts: Integrating Travel with ICTs

- Face-to-face remains non-trivial even at intercontinental distances because people travel to see kin & some friends
- Telephone use stays proportionately the same
  - Almost all is voice. Before the proliferation of texting
- Main increases are email, texting, Facebook

Households Have Become Home Bases

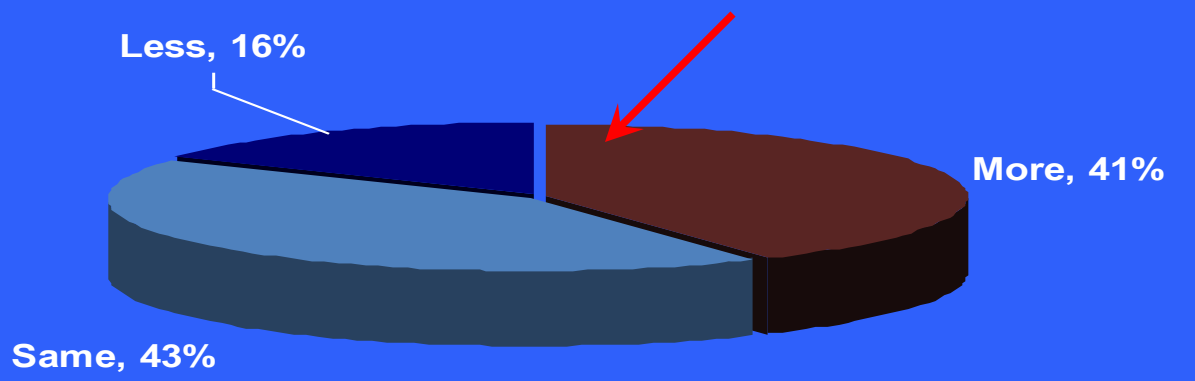
Family composition, roles and responsibilities have transformed households from groups to networks

Distribution of Households in the U.S. (1980-2005)



% of households married with minor children declined by ¼,1980 -2005: 31% ➔ 23%

Time spent at home versus 3 years ago



Total Respondents
(n=4466)

Telus Canadians & Technology surveys

Q22. How much time do you spend at home versus three years ago? Base: Valid respondents (n=4466)

18 Month Old Boys with their Favorite Toys: Mom's Laptop & Dad's iPhone

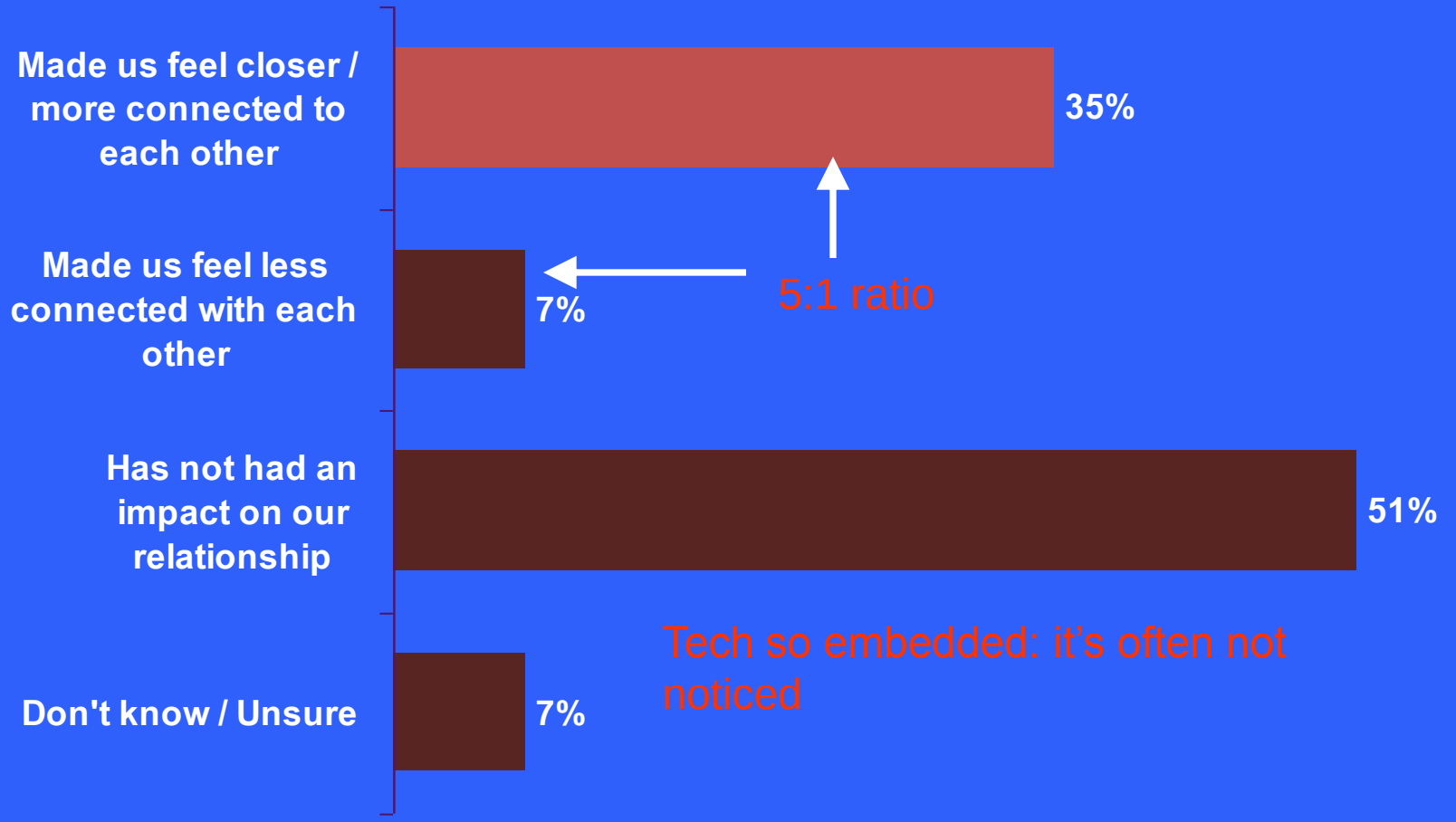
Families operate more as networks; less as groups

- Now act at times more like individuals in networks and less like members of a solidary family.
- Spend less time doing things together as a group
- Family members spend less in-person time together:
  - Canadian women @ home 36 minutes less in 2010 than 1992: 9.1 Hours > 8.5 Hours
- Homes are no longer their castles but bases for networking with the outside world,

Families Function as Networks

- Each keeps a separate address book, calendar, mobile phone and internet account.
- Adults and children connect through mobile phones.
- Family members punch holes in the home-work boundary: working at home or bringing work home
- Unobtrusive surveillance – knowing what each is doing all day

Technology has changed relationship with immediate family



Source: Telus Canadians and Technology Survey, 2009

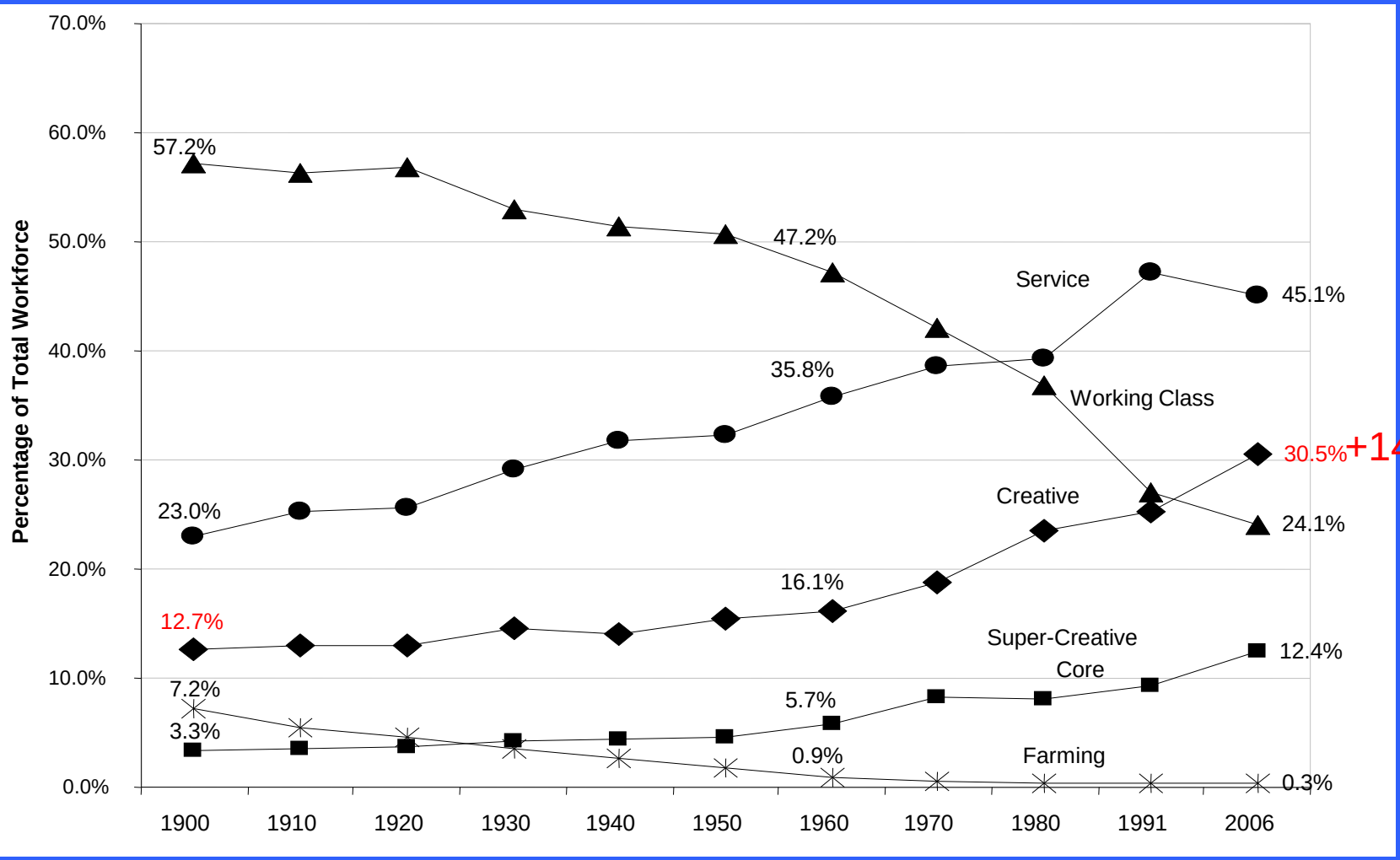
Reconfiguration of Private & Public

- Reveal inner thoughts & daily lives to a wide audience
  - Public spaces colonized by private/intimate activity : personal musings & performances: online diaries, home movies
- Social availability software tell others of your whereabouts:
  - Twitter, Facebook, IM “away” messages
- Few concerns about protecting privacy
  - From friends, institutions or government
  - New expectations about the transparency and availability of people and institutions
- Breaking down walls between: education & entertainment, work & play, consumer & producer

Networked Work

- ***Hyperconnectivity:*** Everyone is connected, often by multiple means.
  - Routinized – not dystopian.
- ***Integrated Connectivity:*** Not fragmented
- ***Media-Message-Role Fit:*** Choice of appropriate medium by task and relationship.
- ***Local Virtuality:*** Much use of ICTs even when physically proximate.
  - Both distance & organizational structure still matter
- ***Conservation of Media Choice:***
  - Tend to respond by the same medium.
- ***Trust in communication access:*** You can connect easily with others.
- ***Hierarchy Still Important:*** Not a networked social structure

Percentage of Creative Class "Bit Workers" in U.S.



Source: Kevin Stolarick & Richard Florida, Martin Prosperity Institute, University of Toronto

Networked "Switchboard" Office

- Each Works Separately
- Office Doors Closable for Privacy
- Glass in Doors Indicate Interruptibility
- If Doors Locked, Must Knock

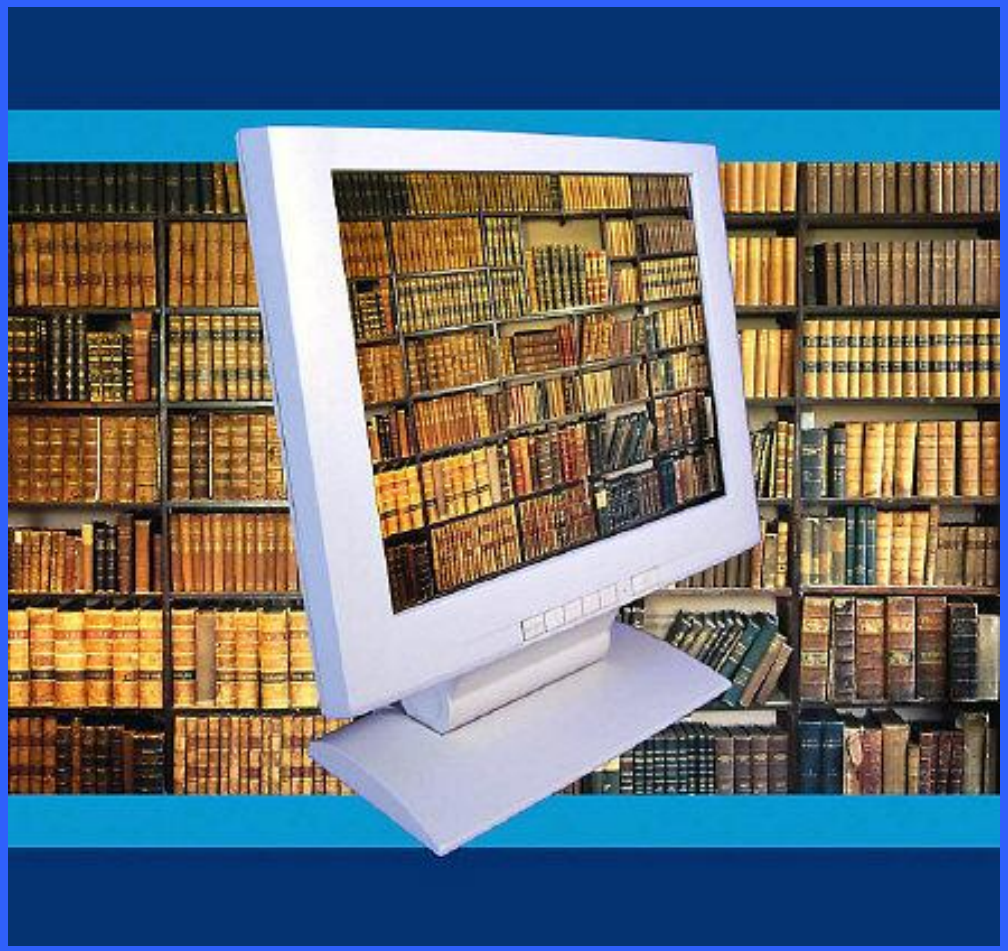
  If Doors Open, Request Admission
- Difficult to learn if Person is Dealing with Others Unless Door is Open
- Large Number of Potential Interactors
  - *Average Person knows > 1,000*
  - *Strangers & Friends of Friends May also be Contacted*

- Sparsely-knit
  - *Most don't know each other*
  - *Or not aware of mutual contact*
  - *No detailed knowledge of indirect ties*
- Loosely-bounded
  - *Many different people contacted*
  - *Many different workplaces*
  - *Can link with outside organizations*
- Each functions individually
- Collective activities transient, shifting sets
- Subgroups, cleavages, secrets can develop

Networked Worker: Nelu Handa @ Internet Cafe

Big challenges

Atoms → Bits



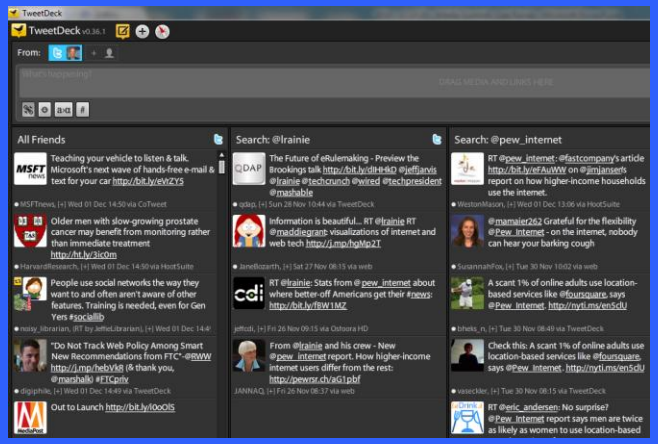
Networked creators among internet users

- 62% are social networking site users
- 55% share photos
- 33% create content tags
- 32% contribute rankings and ratings
- 30% share personal creations
- 26% post comments on sites and blogs
- 15% have personal website
- 15% are content remixers
- 14% are bloggers
- 12% use Twitter
- 4%-17%??? use location-sharing services

- Common culture passed through a small number of mass media firms has shifted to fragmented culture dispensed through more channels to more hardware

- In addition to the internet & mobile info,
- TV has fragmented + YouTube, etc.

Online social networks + ubiquitous mobility



Social Dashboard

Pervasive Awareness

- Allows for immediate, spontaneous creation of networks
- Gives people a sense that there are more “friends” in their networks that they can access when they have needs

In a Nutshell

Triple Revolution: Social Network, Internet, Mobile

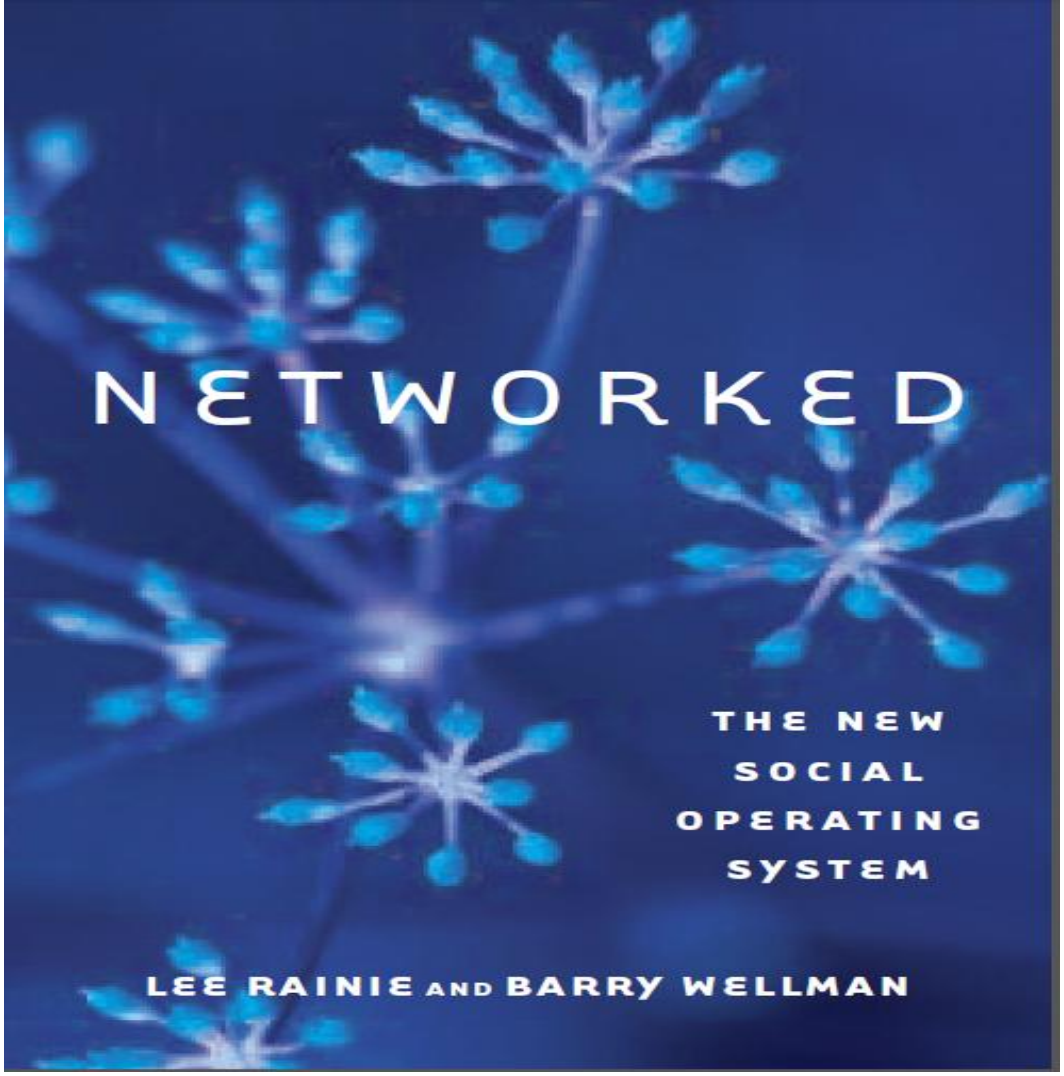
1. People function more as networked individuals
2. Families function as networks, not groups
3. Social networks are larger
4. More internet use ➔ more in-person contact
5. Work at home & away: part-time, full-time
6. Networks are sparsely-knit, loosely-bounded
7. ICTs provide more & more diverse information
8. Shift to interest-based communities
9. Public-private boundaries blurring
10. Transportation fungible, additive with ICTs

Bounded Groups → Networked Individualism

Each in its Place	→	Mobility of People and Goods
"Our Town"	→	*"Friends"*
Met at Malt Shop	→	Met on *Match.com*
Dating > Engagement	→	Hanging Out > Hooking Up
Love > Sex > Marriage > Baby	→	Sex > Love > Partnering
Marriage	→	Civil Union
Household as Reproductive Unit	→	Household as Consummatory Space
"Love and Marriage"	→	*"Sex and the City"*
Mom & Dad, Dick & Jane	→	Carrie, Samantha, Charlotte, & Miranda
United Family	→	Serial Marriage, Mixed Custody
3-4 Person Households	→	1-2 Person Households
Shared Community	→	Personal Nets
Densely-Knit	→	Sparsely-Knit
Neighborhoods	→	GloCalized, Dispersed Networks
Voluntary Organizations	→	Informal Leisure
Face-to-Face Contact, Phone	→	F2F, Mobile Phone, Email, IM, Chat, Listservs, Texts
Landline Phone	→	Mobile Phone
Public Spaces	→	Private Spaces
Similar Attributes	→	Similar Interests
Social Control	→	Dyadic Exchanges
Conserves Resources	→	Gathers New Resources, Failures
"It Takes a Village"	→	It Takes Partial, Multiple, Far-Flung Networks
Routinized Stability	→	***Stable Instability***

In Short: Serving the Networked Individual

MIT Press



Spring 2012

http://www.amazon.ca/Networked-New-Social-Operating-System/dp/0262017199

www.chass.utoronto.ca~wellman

THANK YOU!!! – with a Hat Tip to Lee Rainie