Wiring the Castle Demography, Technology and the Transformation of the American Home

Jorge Reina Schement

Distinguished Professor of Communications
Professor of Information Sciences and Technologies
Co-Director, Institute for Information Policy
The Pennsylvania State University

A 20th Century Household

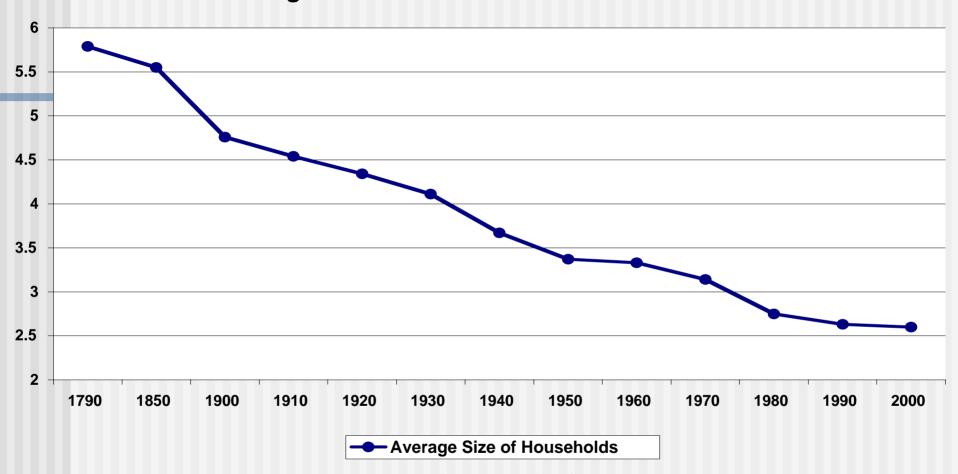
Such was the Comet family life. Theirs was the spendthrift and almost luxurious existence of the American working class. Ready-made clothes; white shoes; Sunday papers; telephone; phonograph; a radio; pork roast; ice-cream; the movies. A somewhat sordid household, certainly but comfortable, too. Bookless, of course. Extravagant with its quarters, its half dollars, and its dollars.

Ferber, Edna 1927 <u>Mother knows best</u> Garden City NY: Doubleday Page & Co., p. 87

From the 20th Century Household to the 21st Century Household

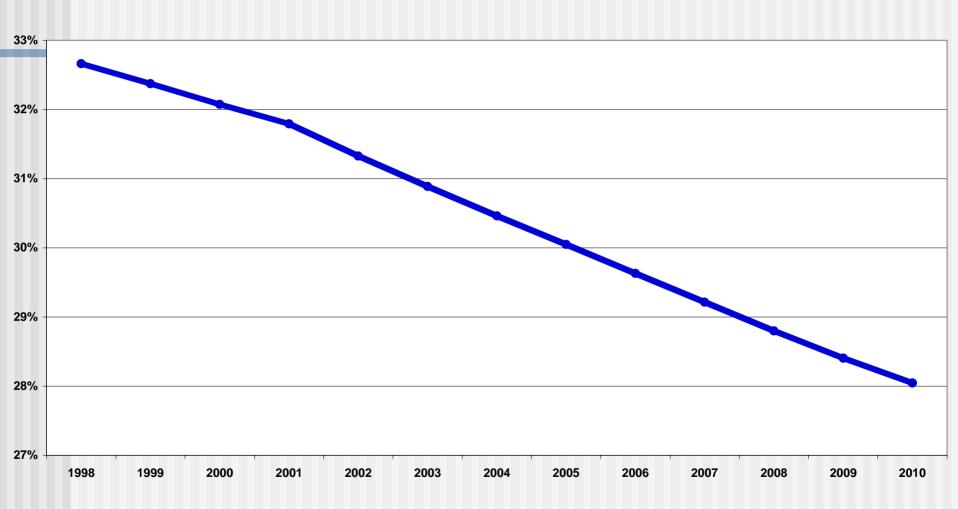
- Demographic changes w/consequences for media consumption.
- Adoption of household ICTs arriving in waves.
- Displacement of older ICTs, but not replacement.
- Individual orientation to social and political participation.

Average Size of Households 1790-2000



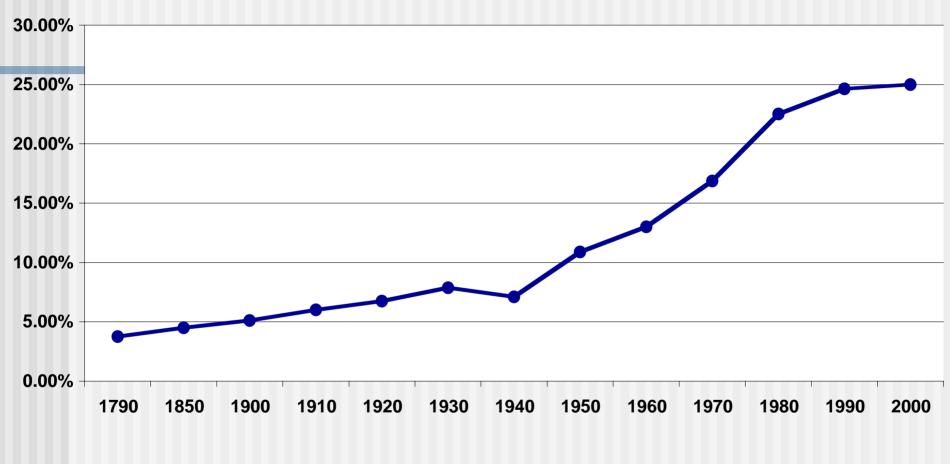
1996 Statitical Abstract of the US

Percentage of Households with Children 1998-2010



Source: U.S. Bureau of the Census, Current Population Reports, P25-1129.

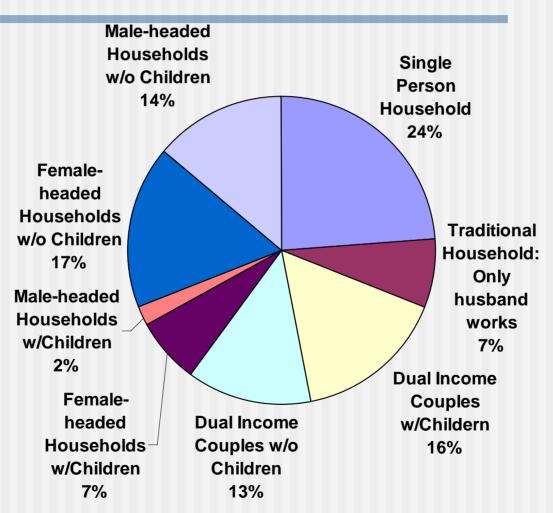
Single Person Households as a Percentage of Total Households 1790-2000



→% Single Households

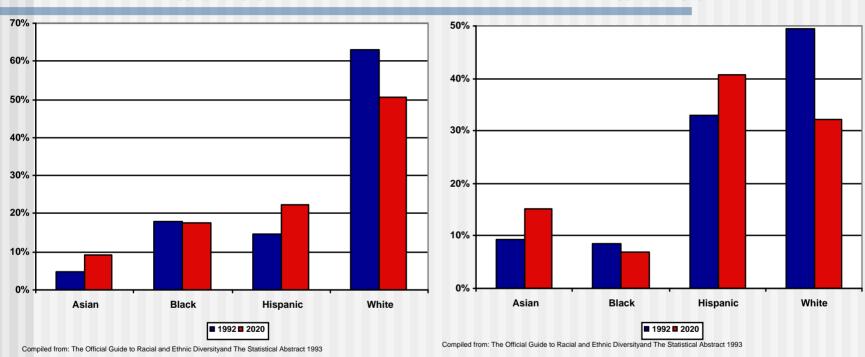
1996 Statistical Abstract of the US

Composition of Household Types as a % of All Households (2000)

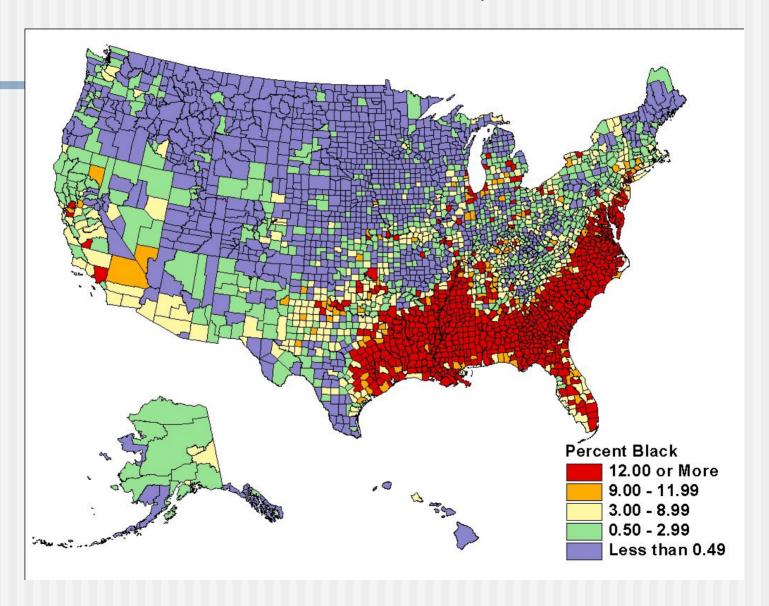


Selected Ethnic Population for New York, NY 1992 and 2020

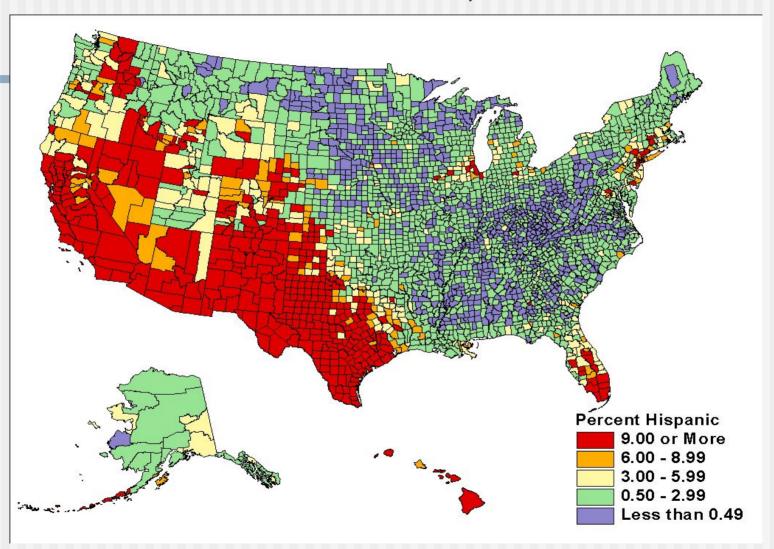
Selected Ethnic Population for Los Angeles, CA 1992 and 2020



Percent Blacks for U.S. Counties, 2000



Percent Latinos for U.S. Counties, 2000

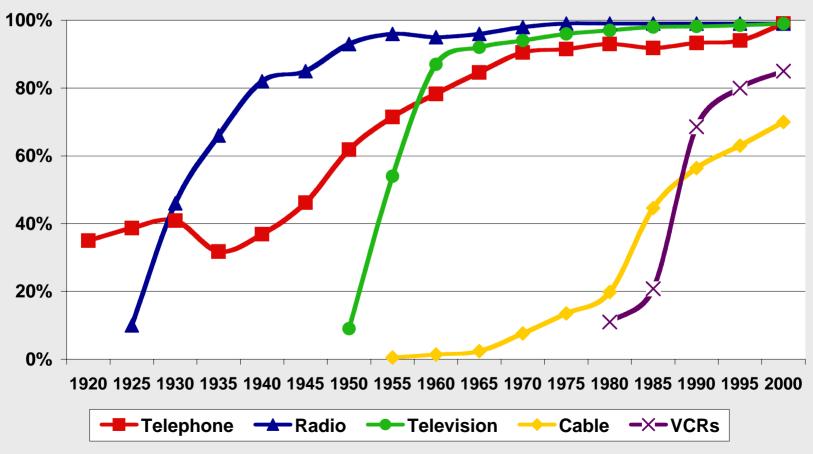


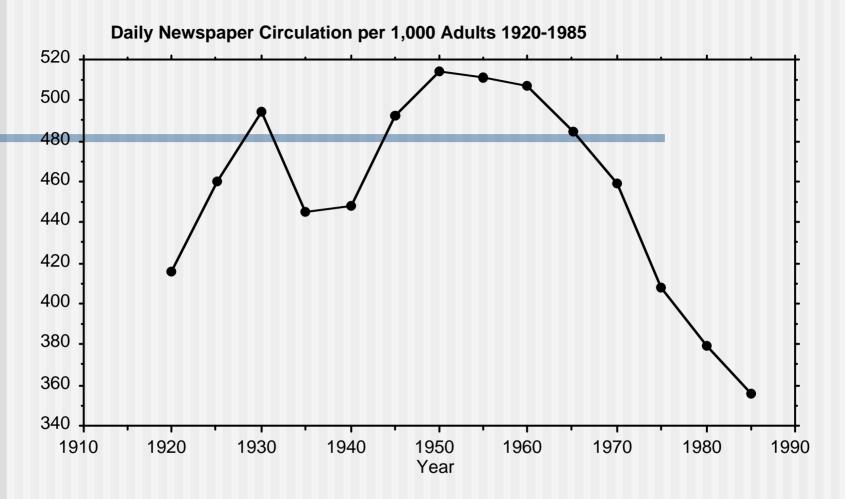
A Century of Waves of Information and Communications Technologies

- Americans have eagerly purchased ICTs for over 100 years.
- The arrival of television.
 - Sometimes, social change sidesteps technology.
- Before 1980, the home contained a simple ICT environment. After 1995, it became a node on a network.

American adoption of ICTs follows two distinct patterns.

Household Penetration of Selected Media 1920-2000

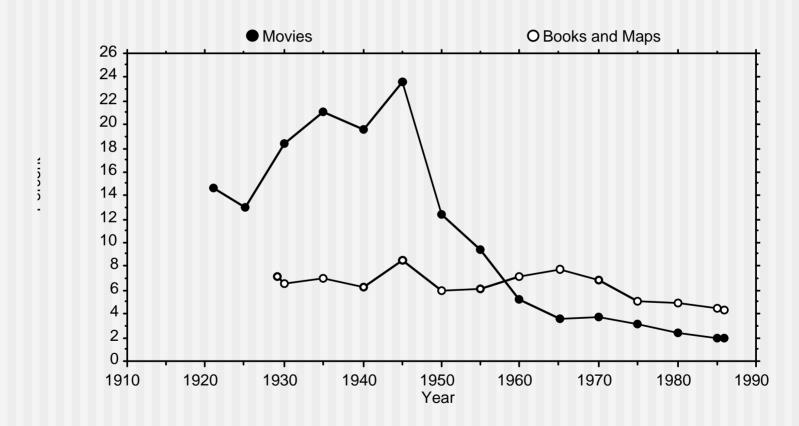




Comp iled from Series A 29-42, R 224-231 (1975). His torical statistics of the unit ed states, colonial times to 1970 Washington DC: GPO. Tables 13, 878 (1987). Statistical abstract of the unit ed states: 1988 Washington DC: Burea u of the Census.

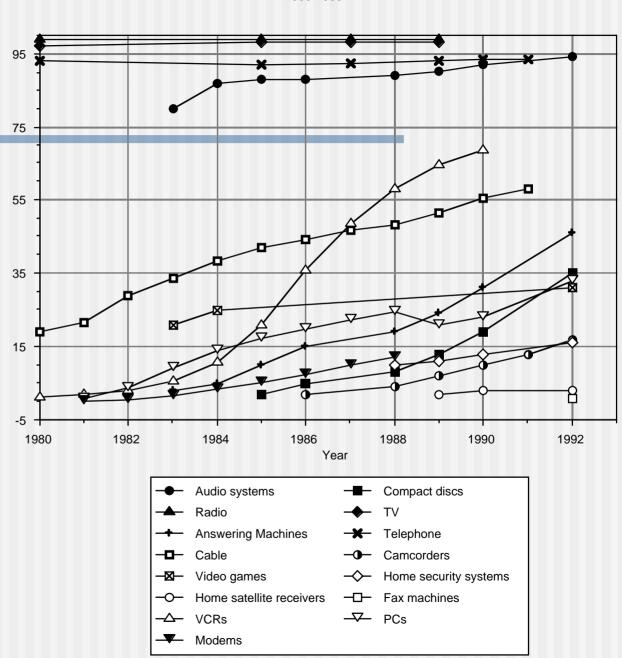
Not all change in the Information Society is driven by technology.

Admissions to Motion Picture Theaters, and Purchases of Books and Maps, as a Percent of Total Personal Consumption Expenditures for Recreation: 1921-1986



Household Penetration of Selected Media 1980-1993

The 1980s, the turning point decade for ICTs in the home.



Top 10 Video Games Ranked by Total U.S. Units Sold, 2005

1	Gran Turismo 4	PS2		
2	NBA Street V3	PS2		
3	Grand Theft Auto: San Andreas	PS2		
4	MVP Baseball 2005	PS2		
5	Zelda, The Minish Cap	GBA		
6	NBA Street V3	XBX		
7	Mercenaries	PS2		
8	Champions: Return to Arms PS2			
9	Madden NFL 2005 PS2			
10	Super Mario 64 DS	NDS		

Women = 43% of video gamers.

Women 18 yrs+ = 28% of video gamers.

Boys 6-17 yrs = 21% of video gamers

Avg. age of all video gamers = 37

Video gamers over age 40 = 24% of gamers

Video gamers purchasing games at Walmart = 28%

A consumer economy oriented to the production, distribution, and consumption of information.

- An increasing percentage of income devoted to purchasing ICTs.
- Households on and off the Internet?
- Culture shapes information consumption.

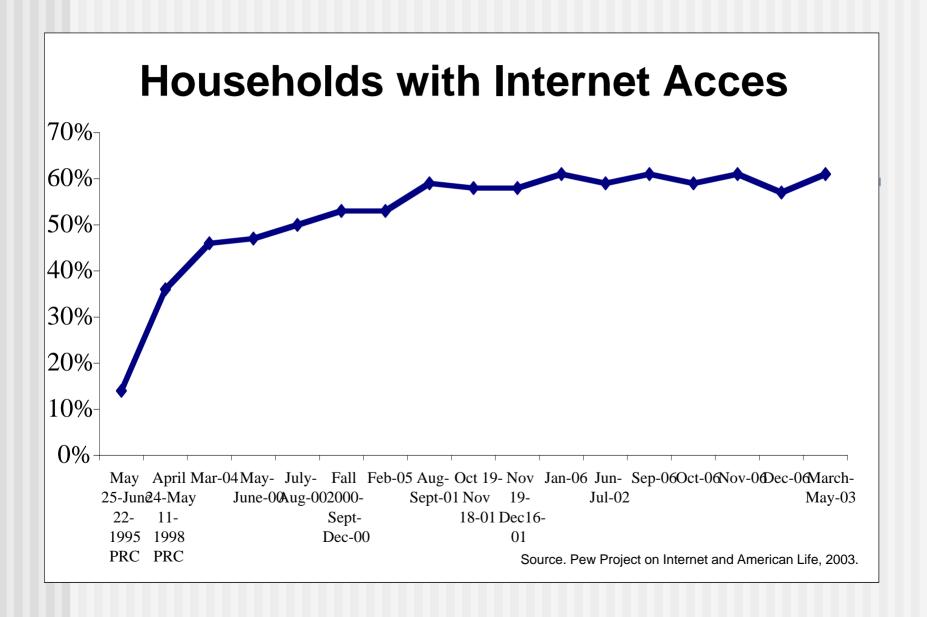
Personal Consumption Expenditures on Information Goods as a Percentage of Total Personal Consumption Expenditures: 1930-



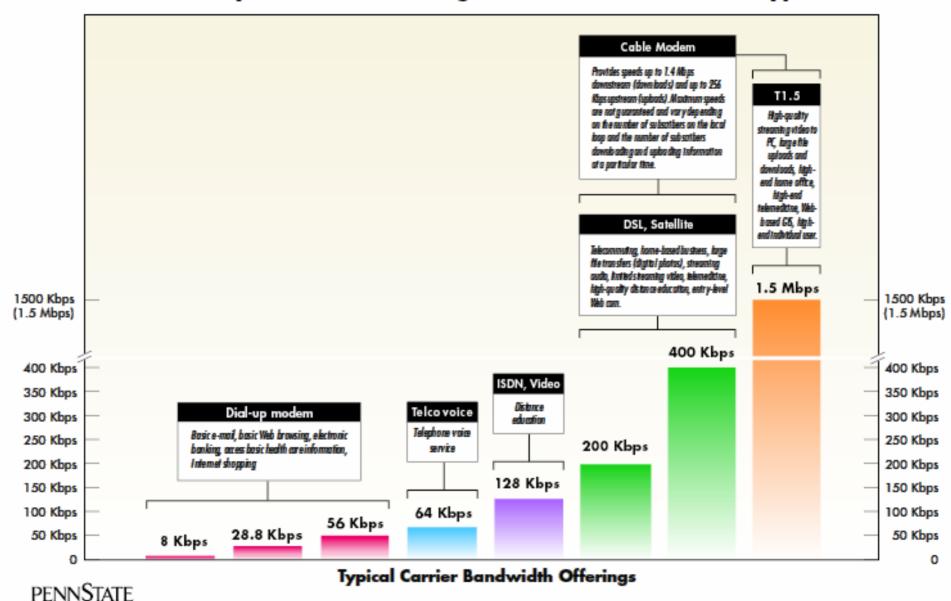
Information Goods Include: Telephone and telegraph, Books and maps, Magazines, Newspapers, Sheet Music, Video and audio goods, Radio and television repair, Admissions to specified spectator amusements.

Data Compiled from: Table 2.4. Personal Consumption Expenditures by Type of Expenditure, Bureau of Economic Analysis Downloaded on 1/13/02 At 6:17:32 PM From Data Last Published on August 2, 2001 from http://www.bea.doc.gov/bea/dn1.htm

IVc. Will all households get on the Internet? What if they don't?



Bandwidth Requirements for Existing Consumer Communications Applications



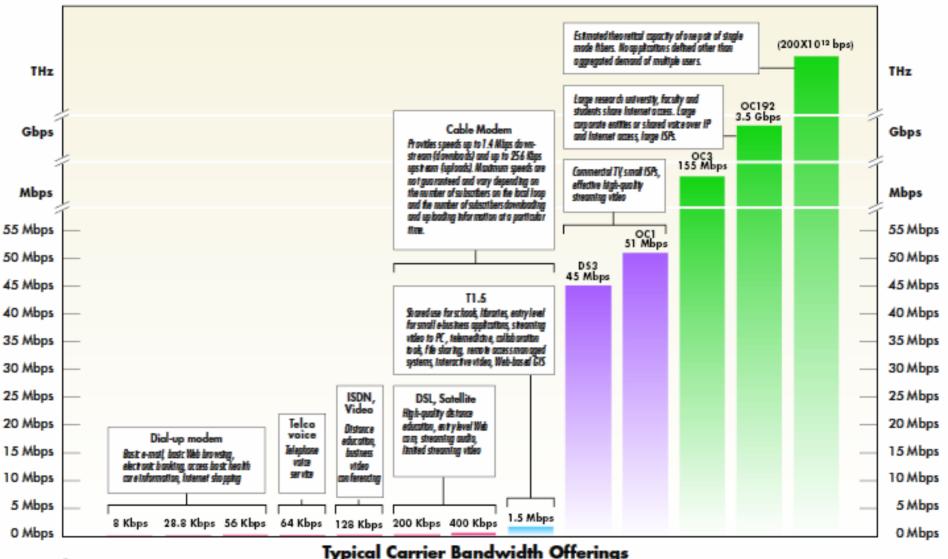


College of Agricultural Sciences

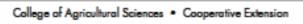
Cooperative Extension

Prepared by William Shuffstall, extension agent, and Jorge Schement, professor of communications.

Bandwidth Requirements for Existing Business Communications Applications



PENNSTATE



Primetime TV Preferences by Ethnicity - 2003, culture shapes information consumption.

Whites' Favorite Shows		Blacks' Favorite Shows		Latinos' Favorite Shows	
1.	ER (NBC)	1.	Steve Harvey Show (WB)	1.	Guinness World Records (Fox)
2.	Friends (NBC)		Jamie Foxx ow (WB)	2.	Wildest Police Videos (Fox)
3.	Frasier (NBC)	3.	Monday Night Football (ABC)	3.	Monday Night Football (ABC)
4.	Veronica's Closet (NBC)	4.	For Your Love (WB)	4.	Simpsons (Fox)
5.	Jesse (NBC)	5.	CBS Sunday Night Movie	5.	Sabrina the Teenage Witch (ABC)
6.	Monday Night Football (ABC)	6.	Touched by an Angel (CBS)	6.	ER (NBC)
7.	NYPD Blue (ABC)	7.	60 Minutes (CBS)	7.	Friends (NBC)
8.	Touched by an Angel (CBS)	8.	Moesha (UPN)	8.	Wonderful World of Disney (ABC)
8.	(tie) 60 Minutes (CBS)	9.	Walker Texas Ranger (CBS)	9.	X-Files (Fox)
10	. CBS Sunday Night Movie	10.	Wayans Bros.(WB)	10.	Boy Meets World (ABC)

Source: TN Media Inc. 2003

Primetime TV Preferences by Ethnicity – 2005

	Whites (Anglos)	African Americans
1	CSI	Vibe Awards
2	Desperate Housewives	Everybody Hates Chris
3	LOST	Girlfriends
4	Without a Trace	Monday Night Football
5	Grey's Anatomy	Half and Half
6	CSI: Miami	Without a Trace
7	Survivor: Guatemala	All of Us
8	Monday Night Football	CSI
9	60 Minutes	America's Next Top Model
10	CMA Awards	Desperate Housewives

A 21st Century Household

That seems to be the best time that we have our family discussions—when we can get away from the home and go out to a restaurant where there's nothing to distract the kids. There's no video games they can run off to. There's no phone ringing. There's no TV on. It seems like a lot of the meals around this table—even though we're still pretty good at coming together as a family around the table—but usually there will be something that we have to get done. There's a game coming on or a TV show coming on or something. The phone will ring during the dinner. So, we look forward to the times that we can go and take the kids and go out to some place and then really have good family discussions.

—Jill Reston, Woodbridge, New Jersey

I had three chairs in my house; one for solitude, two for friendship, three for society.
--Henry David Thoreau, *Walden*, "Visitors" (1854).

A house is a machine for living in.

--Le Corbusier, *Toward a New Architecture*, ch. 1 (1923; tr. 1946).

Wiring the Castle Demography, Technology and the Transformation of the American Home

Jorge Reina Schement

Distinguished Professor of Communications
Professor of Information Sciences and Technologies
Co-Director, Institute for Information Policy
The Pennsylvania State University