The Rise of Broadcasting

Geoff Nunberg
Is103
History of Information
11/7/07
Agenda

The (re-)invention of radio
The political background
The rise of radio broadcast
The advent of television
Television and political life
The (re-(re-))invention of radio
Establishing Remote Presence

Representing presence symbolically or iconically
Writing, print, telegraphy, postal service etc.; also painting, engraving, etc.

Extending presence:
Photography, telephony, cinema, radio, television
Television has become, so to speak, the background radiation of the social and intellectual universe, the all-but-imperceptible residue of the electronic big bang of a century past, so familiar and so thoroughly integrated with American culture that we no longer hear its faint hissing in the background or see the flickering grey light. This, in turn, means that its epistemology goes largely unnoticed. And the peek-a-boo world it has constructed around us no longer seems even strange... Our culture's adjustment to the epistemology of television is by now almost complete; we have so thoroughly accepted its definitions of truth, knowledge and reality that irrelevance seems to us to be filled with import, and incoherence seems eminently sane.

Factors Determining the Form of Broadcasting

- Technological Developments
- Political & Regulatory Decisions
- Commercial Interests
- Cultural Predispositions
Technological Development of Radio

1861-1865: James Maxwell describes propagation of electromagnetic waves

1886: Heinrich Hertz demonstrates transmission & reception of radio waves at 20 m. distance

"It's of no use whatsoever[...] this is just an experiment that proves Maestro Maxwell was right - we just have these mysterious electromagnetic waves that we cannot see with the naked eye. But they are there."

1895: Nikola Tesla transmits radio waves from NY to West Point (50 mi.)

1895: Guglielmo Marconi transmits radio signals over a mile using coherer, basis of early radiotelegraphy
Technological Development of Radio

1896: Marconi receives British patent for transmission & reception of "Herzian waves" (US patent 1896)

1900: Marconi patents tuning dial

1901: Marconi claims to have transmitted radio signals from Poldhu (Cornwall) to Newfoundland

1900-1910: New technologies make possible continuous wave transmission of voice
Early Point-to-Point Applications of Radio

1905: Japanese use of radio helps in victory over Russian fleet at battle of Tsushima.

1912: Titanic uses radio to signal for help, but one nearby ship misses signal; Congress passes Radio Act to allocate band frequencies, require licensed radio operators on ships.

1914-1918 British domination of wireless & cable technology gives it strategic advantages in WWI

1917: Interception of Zimmerman telegram helps bring US into war
Models of Control of Broadcasting

State-owned, politically controlled (many European nations)
State establishes quasi-independent public corporation supported by tax on receivers (e.g. UK)
State licenses frequencies to commercial broadcasters, exerts some control over content; revenues derived from advertising (US)
Models of Broadcasting as Medium

- Broadcasting as common carrier (i.e., like phone service) with obligation to provide general access
- Broadcasting as extension of press, exempt from control
- Broadcasting as entertainment (like movies) subject to censorship
The Emergence of Broadcast

1906: Reginald Fessenden makes first AM transmission, experiments in voice & music broadcast.

1920: Marconi Company sponsors first regular "public" broadcasts in UK, but Post Office bans further use until 1922

Nov. 2, 1920: KDKA Pittsburgh broadcasts results of presidential election; first station to schedule regular broadcasts.

1921: KDKA makes first broadcast of Major League baseball games
The Emergence of Broadcast

1921: AT&T announces plan to create a national broadcasting network

1921: Telephone circuits carry Harding’s Armistice Day Address from Arlington Cemetery to NY and San Francisco
The Emergence of Broadcast

1922: BBC begins broadcasting from the roof of Selfridges in London
1926: AT&T sells network to Radio Corporation of America
1920-1925: "Broadcasting boom" leads to rapid increase in number of stations & receivers.
   Household penetration is 24% in 1927; 46% in 1930; 65% in 1934
1934: First FM licenses granted, but technology doesn’t catch on for 25 years
Resolving the Control of Radio

1927: Radio Act establishes Federal Radio Commission

Authorizes FRC to grant broadcasting licenses & assign frequencies. Gives FRC no power of censorship, apart from banning "obscene or indecent" language, but permits FRC to consider past content in granting licenses. Requires stations to give equal time to political candidates.

Opens radio to wide use of advertising; advertisers assume increasing responsibility for creating content

FRC favors "clear channel" allocations (1 station per frequency), which gives most bandwidth to networks & commercial stations, on grounds of "public convenience"
Resolving the Control of Radio

1934: Communications Act replaces FRC with Fed. Communications Commission.

- Gives FRC power to (somewhat) limit network control of affiliates
- Rejects efforts to establish "hybrid" systems like those in Canada & Australia, which made provision for state-controlled public interest broadcasting alongside of commercial radio
The Development of Programming

1925-1940 Emergence of radio-specific genres

1928: "Amos n' Andy originates at WMAQ Chicago [http://]"
The Development of Programming

1925: Grand Ole Opry first broadcast on WSM, Nashville

1927: H. V. Kaltenborn, broadcasting news, first heard on CBS

1930: WGN Chicago broadcasts "Painted Dreams," first radio soap opera about Irish widow & daughter

1933: With "Biltmore agreement," networks agree to limit radio news.

1932: Walter Winchell begins NBC (later ABC) broadcast on "Jergens Journal"

1938: Orson Wells' "War of the Worlds" broadcast creates (some) panic and confusion.
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Preachers, Politics & Propaganda

Father Charles Coughlin

Billy Sunday

1941: 90% of Americans listen to radio 4 hrs/day
Radio Goes to War

1940: Edward R. Murrow's broadcasts from the London Blitz increase support for US intervention on Allied side.
"The First Invention to be achieved by committee" -- Albert Abramson

1926 John Logie Baird demonstrates electromechanical television transmission

1934 Philo Farnsworth demonstrates all-electronic television transmission

1936 Experimental TV broadcasting in US, UK, France, Germany

1939: NBC inaugurates US broadcasting at NY World's Fair

1946 Regular network TV broadcasting begins in US
The Advent of Television

In postwar period, television rapidly gains national audiences in US and Europe

1946: “Hourglass,” first hour-long variety show, airs on 3 NBC stations; “Faraway Hills” becomes the first TV soap opera

June 19, 1946 Joe Louis-Billy Conn fight viewed by 1m people over 140k sets (many in bars)

1947: First telecast of World Series game (Yankees v Dodgers); Harry Truman addresses US over TV from White House; Debut of “Kraft Television Theater”

1948: 350k TV sets in use, half in NYC area; "Howdy Doody" debuts
The Advent of Television

1949: 2m sets in US
1950: 5.3m sets in US,
1951: 13m sets in US; "I Love Lucy” premieres; Jan 1:
1953: TVs in 50% of American homes; Debut of “Today Show”
1954: Debut of “Gunsmoke,”
  “$64.000 Question,” “Captain Kangaroo”; "The Tonight Show" (w. Steve Allen; switches to talk format w/ Jack Paar in 1957)
1956: Debut of “Playhouse 90”
Further Developments: Color

1929: Color television demonstrated in 1928 by Bell Labs

1953: First color broadcasts using "compatible system" which could also show B&W but by 1960, color accounts for only 2% of TV sales

1965: NBC announces that all new programming would be in color (except for "I dream of Jeannie.")

1968: Sony introduces single-gun Trinitron color

1972: Sales of color sets exceed B&W
Further Developments

1948: "Community Antenna" television (CATV) systems introduced in rural areas of Oregon & Pennsylvania.

1972: Sterling Cable NY) launches Home Box Office (later first service to use satellite distribution)

1980: Cable reaches 15m households

1952: Raytheon introduces first transistor radio at $49.95

1956: Zenith introduces first remote control (connected to TV by cable). First wireless control (Zenith "Space Command") introduced shortly after.
The Experience of Television: "Flow"

[T]he [commercial] "interruptions are... only the most visible characteristic of a process which at some levels has come to define the television experience. ... There is a quality of flow which our received vocabulary of discrete response and description cannot easily acknowledge.

Most of us say, in describing our experience, that we have been "watching television," rather than that we have watched "the news," or "a play," or "the football" "on television."

Raymond Williams, Television, 1974
# The Implementation of Flow

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The "TV-ization" of Spectacle

Effects of televising on sporting events, political rituals, etc.

State of the Union address broadcast since Coolidge 1923, but retains form of address to Congress

Eisenhower, 1955: "It is expected that more than $12 billion will be expended in 1955 for the development of land, water and other resources; control of floods, and navigation and harbor improvements; construction of roads, schools and municipal water supplies, and disposal of domestic and industrial wastes."
The "TV-ization" of Spectacle

The "Lennie Skutnick" moment, 1982

Just just two weeks ago, in the midst of a terrible tragedy on the Potomac, we saw again the spirit of American heroism at its finest the heroism of dedicated rescue workers saving crash victims from icy waters. And we saw the heroism of one of our young Government employees, Lenny Skutnik, who, when he saw a woman lose her grip on the helicopter line, dived into the water and dragged her to safety.

Ronald Reagan, SOU speech, 1982

1984: Reagan points to Grenada invasion medic; 1999: Clinton points to Sammy Sosa & Rosa Parks; 2005: Bush points to mother of Marine killed in Fallujah, etc.

Cf similar changes in party conventions, debates, campaign speeches, etc.
The Creation of New Political Spectacles

Kennedy-Nixon debate, 9/26/60:
The convention as TV show
The Transformation of Radio

1950-1965 Radio retreats to all-news and "Top-40" formats; programming aimed at "drive time" audiences


Currently supported by station dues, foundation & corporate sponsorship; also CPB grants (2%)

NPR directly produces ATC, Talk of the Nation, etc.

Distributes Fresh Air, On Point, On the Media, Car Talk, which are produced locally.

Other pub. Radio programs not affiliated with NPR: This American Life, Prairie Home Companion, etc. (some distributed by PRI)

Currently 20m weekly listeners; av. Age 50, income ca. 80k. Audience increasing sharply since 9/11.
The Transformation of Radio, 2

1945: On NYC's WMCA, DJ Barry Gray begins conversing with listeners live.

1960: KABC (LA) adopts first all-talk format

1982: Howard Stern begins broadcasting at WNBC (NYC)

1984: Morton Downey Jr. leaves KFBK (Sacramento) to launch new right-wing TV talk program. Downey video

1984: Rush Limbaugh replaces Downey at KFBK.

1987: FCC repeals "Fairness Doctrine," dating from 1949, which required radio stations to present issues in an "equal and balanced" manner. Cites large number of stations variety of media voices.

1988: Limbaugh moves to NYC in 1988. Current weekly cume = 13.5 m, followed by Sean Hannity (12.5), Michael Savage (8.25), Laura Ingraham (5.0), Bill O'Reilly (3.25), others. Highest-ranked liberal talker is Ed Schultz (2.25)
The Transformation of Radio, 2

1996: Fox News launched, pioneers political cable talk-show. Quickly establishes lead in average hourly viewership, though remaining behind CNN in cumulative audience.

2004: Air America radio begins syndicated broadcasting to provide "liberal voice" in radio;

10/13/06: files for bankruptcy protection
Role of broadcast media in modern political language