The Rise of Broadcasting

Geoff Nunberg

History of Information: 10/25/06
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.

Neil Postman, Amusing Ourselves to Death, 1986
Factors Determining the Form of Broadcasting

Technological Developments
Political & Regulatory Decisions
Commercial Interests
Cultural Predispositions
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

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

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
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"
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
Techological adolescence...
...and maturity
The Development of Programming

1925-1940 Emergence of radio-specific genres

1928: "Amos n' Andy originates at WMAQ Chicago audio


Freeman Gosden and Charles Correl
The Development of Programming

1925-1940 Emergence of radio-specific genres

1925: Grand Ole Opry first broadcast on WSM, Nashville

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

1932: Walter Winchell begins NBC (later ABC) broadcast on "Jergens Journal" [audio 1941 Clip]

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

Father Charles Coughlin

Billy Sunday

FDR after “fireside chat”

http://chnm.gmu.edu/courses/hist409/coughlin/coughlin.html

http://www.earthstation1.com/PreacherFiles/bsunday.wav

Fireside Chat on Bank Crisis, 3/12/33
1940: Edward R. Murrow's broadcasts from the London Blitz increase support for US intervention on Allied side

blitz broadcast 2
Murrow Blitz broadcast audio
Murrow Trafalgar Square broadcast audio
"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

1949: 2m sets in US

1950: 5.3m sets in US,

1951: 13m sets in US; “I Love Lucy” premieres; Jan 1: premiere of “The Archers” on BBC (15,000th episode to run 11/7/06)

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 15 m 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.
[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

**Thursday**

<table>
<thead>
<tr>
<th>Time</th>
<th>ABC</th>
<th>CBS</th>
<th>NBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 PM</td>
<td>The Odd Couple</td>
<td>Paper Moon</td>
<td>Sierra</td>
</tr>
<tr>
<td>8:30 PM</td>
<td></td>
<td>The Waltons</td>
<td>Ironside</td>
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<tr>
<td>9:00 PM</td>
<td></td>
<td></td>
<td>Movin' On</td>
</tr>
<tr>
<td>9:30 PM</td>
<td>The Streets of San Francisco</td>
<td>The CBS Thursday Night Movies</td>
<td>Movin' On</td>
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<tr>
<td>10:00 PM</td>
<td></td>
<td></td>
<td>Movin' On</td>
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<tr>
<td>10:30 PM</td>
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<td>Movin' On</td>
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**Thursday**

<table>
<thead>
<tr>
<th>Time</th>
<th>ABC</th>
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<th>NBC</th>
<th>UPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 PM</td>
<td>Missing Persons</td>
<td>In the Heat of the Night</td>
<td>The Simpsons</td>
<td>Mad About You</td>
<td>Clueless</td>
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<tr>
<td>8:30 PM</td>
<td></td>
<td>Eye to Eye with Connie Chung</td>
<td>The Sinbad Show</td>
<td>Wings</td>
<td>Moesha</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Matlock</td>
<td>In Living Color</td>
<td>Seinfeld</td>
<td>Seinfeld</td>
<td>Head Over Heels</td>
</tr>
<tr>
<td>9:30 PM</td>
<td></td>
<td>Herman's Head</td>
<td>Frasier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00 PM</td>
<td>Primetime Live</td>
<td>Angel Falls</td>
<td>L.A. Law</td>
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<tr>
<td>10:30 PM</td>
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**Weekly Schedule**

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<th>Time</th>
<th>ABC</th>
<th>CBS</th>
<th>FOX</th>
<th>NBC</th>
<th>UPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 PM</td>
<td>Soul Man</td>
<td>JAG</td>
<td>FOX Tuesday Night Movie</td>
<td>Mad About You</td>
<td>Clueless</td>
</tr>
<tr>
<td>8:30 PM</td>
<td>Over the Top</td>
<td>Michael Hayes</td>
<td></td>
<td>NewsRadio</td>
<td>Moesha</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Home Improvement</td>
<td>Hiller and Diller</td>
<td>Frasier</td>
<td>Frasier</td>
<td>Hitz</td>
</tr>
<tr>
<td>9:30 PM</td>
<td></td>
<td></td>
<td></td>
<td>Just Shoot Me!</td>
<td>Just Shoot Me!</td>
</tr>
<tr>
<td>10:00 PM</td>
<td></td>
<td></td>
<td></td>
<td>Dateline NBC</td>
<td>Dateline NBC</td>
</tr>
<tr>
<td>10:30 PM</td>
<td></td>
<td></td>
<td></td>
<td>Head Over Heels</td>
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</tr>
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</table>
The "TV-ization" of Spectacle

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

State of the Union address broadcast since 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 "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 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)

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