

IN THE MIDDLE OF THE NINETEENTH CENTURY, A DRAMATIC TRANSFORMATION OCCURRED...

AN INTRODUCTION: THE TELEGRAPH

REACHING BEYOND

After 450 years of communicating dominantly via printed word, words can be sent at unprecedented speed via the **telegraph**, a digital device that uses electrical pulses to transmit combinations of dots and dashes (Morse Code).

Lifts isolation of communities, facilitates vast networks, brings news from around the world

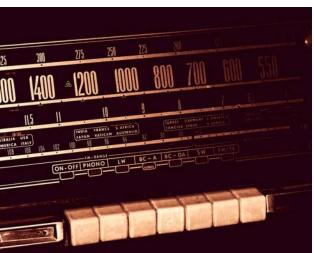
BUT LIMITED

Needed:

- trained operators
- large amounts of capital to string up wires
- sometimes installing wires was impossible







THE DREAM OF WIRELESS COMMUNICATION

Many people involved in the creation and development of radio: from the production of radio waves with oscillators, tuning the receiver (to receive signals of specific wavelengths) and commercializing the devices, to the upgrade of said receiving through the creation of heterodyne transmission, using two alternating currents, as well as the creation of diodes and triodes.

In order of appearance:

- Heinrich Hertz
- James Clerk Maxwell
- Guglielmo Marconi
- Ronald Fessenden

- John Ambrose Fleming
- Lee de Forest

COMMERCIAL RADIO

Few thought of radio as a means of providing entertainment; simply seen as ship-to-shore communication or used by military forces during WWI, which stimulated its progress.





Amateur Radio Operators

- similar to today's hackers
- cluttered up airwaves
- sometimes with mischevious aims
- others began to broadcast news, weather bulletins, musical recordings

Enterprises begin to take notice...



COMMERCIAL

Westinghouse Electric and Manufacturying Company engages an employee (radio amateur himself) to construct first broadcast station

GOES ON AIR

Radio station KDKA on November 2 1920, to give details on 1920 presidential election; audience several hundred.

BY 1922

Over 500 stations are transmitting music, sports events, speeches, news; but very low budget (not for long).

ASCAP

American Society of Composers, Authors and Publishers demands payment for broadcast of recorded music; radio broadcasting in U.S. sponsored through commercials

LISTENING TO RADIO BECOMES INTEGRAL PART OF AMERICAN LIFE







REACHING MORE SENSES

Inventive activity around the globe

In 1929 the British Broadcasting Corporation (BBC) transmits half-hour television programs five days a week using an "electromechanical system in which a rotating disc was used to convert electrical signals into visible images" (Volti, p. 246). These efforts boosted: methods of transmission and reception

The cathode Ray tube

Method discovered by **Ferdinand Braun** in 1897, used by **Boris Rosing** in Russia for television reception (only laboratory demonstration).

Vladimir Zworykin produced the first workable electronic television camera or "iconoscope".

1939 RCA begins regular broadcasting: television becomes a practical possibility

GOVERNMENT STEPS IN

Even if development of radio & tv were largely private enterprises, federal government gave a substantial boost.

After WWI, government officials grow concerns about monopoly of British Marcony Company over international radio communication



Navy & General Electric Company buy it and transfer it to newly formed Radio Corporation of America (RCA)





Other companies held important patents. This was solved by giving them financial stake in RCA, thus creating a radio monopoly at the behest of the U.S. government





GOVERNMENT CONTIN'D

Federal government also used regulation to ensure orderly broadcasting (for clear reception); each broadcaster to remain on one frequency.

In 1927 Congress creates the Federal Radio
Commission, giving it powers to issue and assign
frequencies, followed by consolidation of
communications media creating the Federal
Communications Commission (FCC).

Issue of federal regulation became prominent again with TV for commercial purposes. First, RCA standards were employed by FCC to permit broadcast, but these were problematic to some, as it meant the need to pay for RCA patents.

After WWII (which halted commercial TV) and with TV's rapid growth during the 40's & 50's, uniform standards were developed and the issues resolved.

"PUBLIC INTEREST, CONVENIECE AND NECESSITY" VS. "A VAST WASTELAND"



What is good TV for you? What would you do to regulate or make sure that broadcasters provide "good TV"?

REGULATION PROBLEMS

1934 Communications Act by FCC granted and renewed licenses on basis of "public interest, convenience and necessity", but licenses were scarcely not renewed (creating according to some a "vast wasteland".

In some instances, FCC's decisions **even benefited particular firms at the expense of others**, such as with the relocation of FM frequencies (30's) and the support of RCA's color technology over that by CBS. In other cases FCC did not provide support for innovations such as FM broadcasting, UHF, and pay and cable TV, which might have been financially advantageous for established broadcasters **but slowed the pace of technological advance.**



"Regulatory branches are supposed to be independent of other branches of government and therefore insulated from political pressure. At the same time, their insulation often leads to lack of political support, so agencies find it in the industries they are regulating [...]. there is often close personal contact and [regulating officials] are often alert to the possibility of going to the other side [the industries]", Volti (2014, p.249).

What are your thoughts on this? Can you think of other examples? Can you think of any solutions?

"TELEVISION OWNERSHIP HAS **BEEN VIRTUALLY UNIVERSAL** FOR DECADES, [...] INHABITANTS WITHOUT A TELEVISION ARE DE **FACTO MEMBERS OF SOME** SORT OF COUNTERCULTURE", **VOLTI, P.249.**

TV & THE PUBLIC

In recent years, TV viewing steady, regardless of other forms of entertainment (videogames, Internet).

BUT...

It is thought that better-educated people spend less time watching TV than people with less education. It appears it also declines as incomes rise.

Do you agree or disagree with this statement?

Average **American: 34** hours and 39 minutes of TV weekly Did this surprise you?





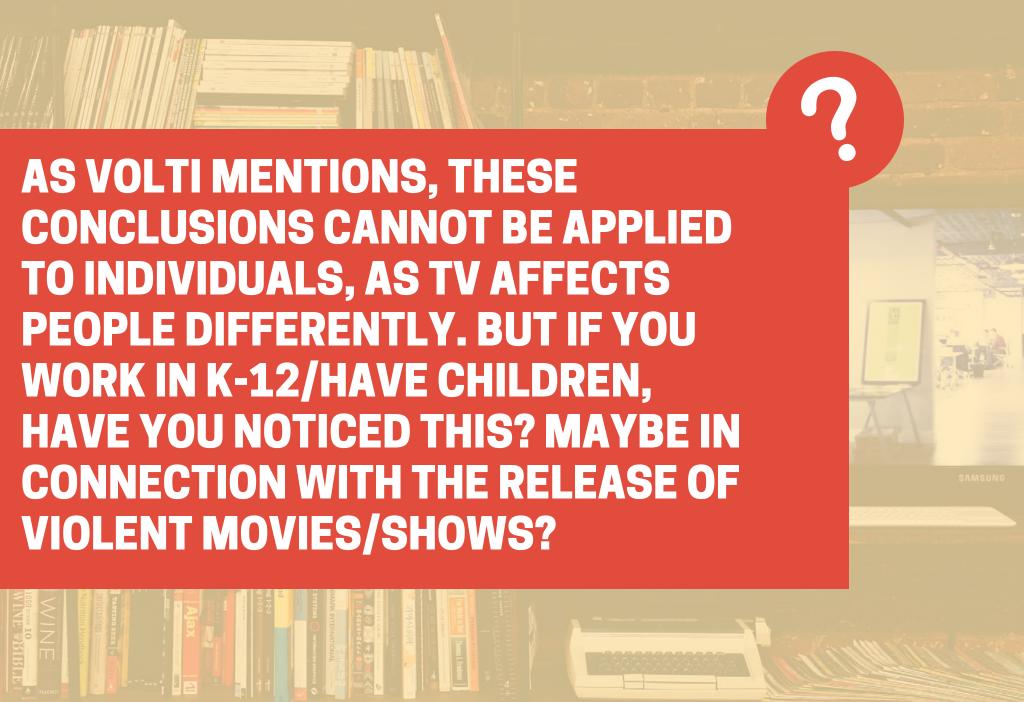


VIOLENCE & TELEVISION

One of concerns about TV influence is its vast amount of violent and aggressive behavior on screen, contained in 61% of TV programs.

Violence in TV & children

- Several studies on TV viewing and aggressive behavior in children:
- Laboratory experiment, group of children witness actor assaulting Bobo the Clown, control group see nothing.
 Subsequent behavior compared in room with Bobo doll.
 - Children that viewed aggression displayed higher levels of aggressive behavior, some even acting what they viewed.
- More "naturalistic studies": children group view "normal" violent programming, control group doesn't. Subsequent behavior (in everyday setting) reported by parents/teachers. Again, violent programming associated with aggressive behavior.
- "Correlations" between viewing habits and aggressive behaviors, but hard to prove.







VIOLENCE CONTIN'D

Violent behavior is a product of a complex set of motivations and inhibitions, and Volti mentions three reasons why we refrain from acting with violence: retaliation, doesn't solve problems, internalized code of behavior.

However, **TV has the capacity to alter them**, by idealizing violent acts to attain socially accepted goals or desensitizing people.

"TV violence has been identified as a significant social problem, but it is not one with an easy solution", Volti (2014, p. 252).

What are your thoughts on the Motion
Picture Association of America (MPAA)
film rating system? Can you think of other
systems that might help with this topic?

RADIO & TELEVISION 05/10

DELIVERING THE NEWS

GLOBAL VILLAGE?

In 1960 is indicated for the first time that TV had replaced newspapers as prime source for news, and it continues to be so, with viewships of 21.6 million in evening news programs.

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