

American Social and Cultural History

Class 4

American Social and Cultural History

- What we will do today
 - Finish up discussion of the automobile and its effects
 - Discuss the three great communication media innovations of the late-19th and early-20th century
 - Motion Pictures
 - Radio
 - Television

Effects of the Interstate Highway System

- Cloverleaf interchanges became the sites of new malls and industrial parks
- Suburban and exurban development was spurred by the enabling of workers to commute from further distances
- Travelers' desire for familiarity in unfamiliar surroundings when one turned off an Interstate led to the growth of franchised restaurants (like McDonald's) and chain motels (like Holiday Inn)

Automobile – Traffic Jams and Parking

- Initially, many politicians and urban planners felt the car would solve the problem of urban congestion
 - Cars could use all of a city's streets instead of just a few and cars could pass each other
 - But even in the 1920s, it became obvious that these predictions were wrong. The result:
 - Limited access expressways
 - Gradual abandonment of the central city

Autos and Social Inventions

- By its very existence, the automobile led to the following innovations - 1
 - Installment purchases
 - Used car markets
 - Camping & picnicking
 - Auto campgrounds
 - Private campgrounds

Autos and Social Inventions

- By its very existence, the automobile led to the following innovations – 2
 - Gasoline stations
 - Drive-in restaurants
 - Fast-food franchise restaurants
 - Motels and Motor Hotels
 - Gasoline credit cards
 - Traffic police & State highway patrols
 - Parking meters

Autos and Social Inventions

- By its very existence, the automobile led to the following innovations – 3
 - Drive-in movies
 - Shopping centers
 - Malls
 - Parking lots
 - Traffic courts
 - Automobile tags
 - Driver's Licenses

Creating the Auto Suburbs

- Autos created the modern auto-dependent suburbs
 - Prior to the auto, the city consisted of a commercial hub surrounded by residences within walking distance followed by development of businesses and residences radiating out from the central hub like spokes from a wheel, with the railroad and the horse-car and then the trolley lines providing the spokes

Creating the Auto Suburbs

- Creating the modern suburb - 1
 - The auto's ability to move laterally or perpendicularly to fixed trolley track opened up land for settlement that was previously too remote
 - This meant that vacant land between the transportation corridors could be platted and sold for home and business sites
 - The auto released potential home buyers and renters from the necessity of living close to a bus or trolley line

Creating the Auto Suburbs

- Creating the modern suburb – 2
 - As the central business district (CBD) was transformed from a shopping district to a skyscraper district of government and corporate headquarters
 - The skyrocketing rents, downtown traffic snarls, and inadequate parking forced small retail businesses out and they relocated elsewhere, usually to the suburbs
 - Eventually, the auto (and decline of public transportation) encouraged government and corporate offices to relocate from the CBD to industrial parks in the suburbs

Creating the Auto Suburbs

- Creating the modern suburb – 3
 - What set the modern suburb off from what existed previously was
 - Dependency on the auto not only for commuting to work but also for shopping
 - Relatively low density and larger average lot size due to cheaper land prices
 - With the modern suburb and the auto eventually came the centerless city and commuting from suburb to suburb

Creating the Auto Suburbs

- Social Effects of the Modern Suburb
 - In the city, life often took place on the sidewalk and the front porch or front steps; in the suburbs it took place in the family-oriented (and often fenced-in) backyard
 - Instead of congregating at a trolley or bus stop to commute to work, people now commuted individually in their cars
 - Instead of meeting neighbors at nearby stores that one walked to, suburbanites did their shopping at malls they drove to

Creating the Auto Suburbs

- Social Effects of the Modern Suburb – 2
 - Because of differential land prices and zoning regulations, different suburbs became stratified by housing size and price, and thus by socio-economic status
 - As suburban residents became more car-dependent, the number of cars increased while road construction and public transportation lagged. The result: increased traffic congestion not only in the city but also in the suburbs

Notes on the Effects of the Automobile

- Autos not only displaced the horse and generated the modern highway, they also
 - Had major economic impacts
 - Created some major problems by their very existence
 - Resulted in new social inventions
 - Reoriented urban and rural space

Autos – Economic Effects

- Autos in 1968:
 - Consumed 85% of the rubber produced, 75% of the gasoline, 25% of the plate glass, 25% of the lead, and 18% of the steel
 - Provided the income for 211,000 gas stations, 114,000 auto repair shops, 51,200 public garages, 40,000 motels, and 60,000 car & truck dealers
 - Provided a considerable proportion of the income of the hotel, restaurant, machine tool, and tourism industries
 - 1 out of every 6 Americans made, sold, repaired, or drove motor vehicles for a living

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Creating the Auto Suburbs

- Social Effects of the Modern Suburbs – 3
 - Aspen Effect – In areas where wealthy residents bid up the price of real estate, home prices and rents often increase to levels that virtually exclude middle- and low-income families
 - Thus low-paid service workers must commute – often a considerable distance – causing traffic jams and decreasing the quality of life

The Auto and Rural America

- Auto reoriented rural space by:
 - Centralizing institutions and activity
 - Instead of shopping at the crossroads or village general store, farmers now drove to nearby towns
 - Increased the amount of rural travel
 - Instead of traveling to town once or twice a year, farmers now traveled every week to a nearby town

Autos – International Effects

- Made U.S. dependent on foreign oil, and as U.S. oil production declines, increasingly dependent on oil from the Middle East and other politically-unstable regions
- Economists estimate that the hidden social costs of automobile driving amount to an estimated cost of \$2.25 a gallon above and beyond the present cost of the gasoline itself.

Autos and Railroads

- Autos and the Decline of the Railroad
 - The auto with an assist from the airlines almost completely replaced intercity passenger train travel
 - In 1928 – 20,000 passenger trains ran
 - In 1968 - 600 passenger trains ran
 - The truck cut deeply into intercity freight traffic
 - In America, in contrast to Europe, truck and rail freight traffic developed in a vacuum, with each seeing the other as a competitor

Trucks and Railroads

- Other Effects of Trucking
 - Trucks led freight-dependent businesses to change their locations from railroad sidings to highways and from crowded cities to industrial parks in the suburbs where more space was available and rents were cheaper
 - Between 1920-1930, the proportion of factory employment in central cities declined in every city of more than 100,000 population and continued thereafter

Trucks and Railroads

- Other Effects of Trucking
 - Trucking opened up a niche for owner-operated trucking businesses
 - Of the 3,500,000 trucks on the road in 1930:
 - 2/3rd were owner operated
 - Of those who owned the rest, most owned 5 trucks or fewer

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The Auto – Why We Love It

- Given all the problems associated with the auto, why do we love it?
 - The auto provided privacy
 - No longer did we have to associate with strangers when we traveled or have others watch what we are doing
 - The auto provided a sense of power
 - It gave us an ability to control a powerful machine and to control our travel without being dependent on transportation provided by others
 - The auto gave us a sense of freedom
 - We could go when we wanted, where we wanted, and with whom we wanted

Movies

- Origins of Motion Pictures
 - Thomas Edison devised a kinetoscope that cast separate still photos on a screen one after the other so rapidly that the pictures seemed to be moving
 - Used the celluloid roll film produced by George Eastman in an endless loop
 - It was designed for its film to be viewed individually through the window of a cabinet housing its components

Movies

- Origins of Motion Pictures
 - Thomas Armat and Charles Francis Jenkins invented the first film projector – the Vitascope
 - The Film Projector allowed motion picture film to be shown in a dark room to moderately large audience
 - This became the standard method by which people viewed motion pictures
 - The kinetoscope with its individual viewing largely survived not in theaters but in establishments that catered to persons interested in porn

Movies

- Motion pictures create the illusion of continuous motion through:
 - The persistence of vision – the brain retains images cast upon the retina for $1/20^{\text{th}}$ to $1/5^{\text{th}}$ of a second beyond their removal from the field of vision
 - The Phi phenomena – that which causes us to see the individual blades of a rotating fan as a unitary circular form
- Because of persistence of vision, we do not see the dark interface areas of a projection print as it moves through the projector

Movies

- Edison and other earlier pioneers such as the Lumiere brothers saw motion pictures as a documentary medium
 - They filmed actual scenes or events, recording noteworthy persons, scenes, and events
- George Meliès was the first to see that editing could manipulate time and space to make the MOPIC film a narrative or storytelling medium
 - Meliès originated the fade-in, fade-out, dissolve, and stop-motion shot, multiple exposure, and time-lapse shots
 - His most famous film was *A Trip to the Moon*

Movies

- Edwin S. Porter in *The Great Train Robbery* originated the idea of combining stock footage from the Edison archives with staged scenes to create a uniquely cinematic form – a fiction constructed from recordings of empirically real events and the use of intercuts to depict parallel actions.
- D.W. Griffith in *Birth of a Nation* pioneered the full-length feature film and was the first to make use of the close-up, cutaways, parallel action shots, and the re-creation of historical events

Movies

- *Birth of a Nation* did the following:
 - Created the historical epic as a film genre
 - Established the motion picture as an artistic medium and inspired subsequent directors and filmmakers
 - Distorted history by providing a militantly white-supremacist perspective on the Civil War, Reconstruction, and African-Americans
 - Filled with factual distortions and racist stereotypes
 - Led to the origin and growth of the Ku Klux Klan

Movies - Emergence of Hollywood

- Prior to WWI, France and Italy regularly surpassed the U.S. in film exports
- WWI shut down the European film industry as celluloid film production was diverted to the production of explosives
- Hollywood emerged as the center of U.S. film production for two reasons
 - Sunny California climate
 - Lower wage rates in non-unionized LA

Movies – Why Hollywood Won Out

- Why Hollywood Became the Center of Feature Film Production
 - Large domestic audience and consequently larger profits to finance productions with lavish sets and expensive stars
 - Development of the Star system
 - Studio control over distribution networks
 - Heterogeneity of the American population
 - Dependency of American films on commercial success

Movies – The Result

- Effects of WWI and the emergence of Hollywood
 - By the mid-1920s, approximately 95% of the films shown in Great Britain, 85% in the Netherlands, 70% in France, 65% in Italy, and 60% in Germany were American films
 - The beginning of the “Americanization” of first European and then World popular culture

Movies – Talking Pictures

- Talking Pictures had some interesting consequences
 - Increased Hollywood’s share of cinematic revenue
 - Meant the demise of many “Silent Era” film stars
 - Made Bank of America a major financial institution since they, unlike other banks, were willing to finance Hollywood productions
 - Led to the dominance of the studio system
 - Led to the creation of distinct genres to facilitate marketing

Movies – The Studios

- Paradoxically, the studio system originated in France with Charles Pathé
 - Involved actors under exclusive contract
 - Vertical integration – screenwriting, production, promotion, distribution & exhibition under one roof
 - Use of the profits of one film to fund the production of another

Movies – The Studios

- Emergence of the Hollywood Studios reflected:
 - The success of Pathe and adoption of his approach by American moviemakers
 - Oligopolistic success in a highly competitive industry
 - The need to finance ever increasing production costs and the conversion of theaters to sound
 - Required an ability to obtain bank loans and Wall Street investment bank financing

Movies – The Studios

- By the mid-1930s, Hollywood was dominated by 8 studios – the Big 5 and the Little 3
 - Big 5 – Paramount, 20th Century Fox, Warner Bros, RKO, and M-G-M
 - Little 3 – Universal, Columbia, and United Artists
 - A few independents – Republic & Monogram
- This system dominated Hollywood until the early-1950s

Movies – Some Notes

- Movies initially appealed to a lower class (immigrants & working class) audience
 - Explains why we eat popcorn at the movies but not at plays or the opera
- Movie producers were quick to seek respectability
 - Luxurious movie palaces

Movies – Some Notes

- Movies and plays were both narrative and storytelling media but they differed in that:
 - Treatment of time – movies handle flashbacks and multiple time perspectives differently and more easily
 - Close-ups – Movies permit close-ups while plays do not for most members of the audience

Movies – What Hollywood Wrought

- Movies had the following effects:
 - Constituted a lifestyle classroom on a whole host of topics – clothes, hairstyles, social attitudes, behavior, and much else
 - Provided a set of shared experiences for almost the whole population
 - Affected people's concepts of historical fact
 - Served as a purveyor of a whole host of consumer goods
 - Fostered discontent in the Third World

Movies – What Hollywood Wrought

- Movies had the following effects – 2
 - Along with the automobile, led to the Drive-in movie
 - Initially supplemented and then supplanted lecture hall and vaudeville theater audiences
 - Brought the “Star” system to full fruition
 - Led to fan magazines and fan clubs
 - Played a major role in creating the myth of the “Wild West”

Movies – What Hollywood Wrought

- Movies had the following effects – 3
 - Films made cultural production a major economic force
 - Films made commercial entertainment a center of American social life
 - As noted earlier, films constituted a major force in Americanizing world popular culture
 - As a backlash, it also led both intellectuals and traditionalists to react against aspects of American culture deemed incompatible with traditional values

Movies – What Hollywood Wrought

- Movies had the following effects – 4
 - Popularized air conditioning
 - Seeing movies in comfort on hot summer day fueled a desire for air conditioning in the home and office
 - Gave us the animated feature cartoon
 - The marriage of the newspaper comic strip with the movie gave us the animated cartoon and feature film
 - Diverted artistic talent from other endeavors to the movies
 - People who formerly composed symphonies now wrote movie scores; persons who in the past wrote novels now wrote screenplays

Movies and Television

- What Television Did to the Movies
 - While the Studios initially saw television as a mortal threat, independent movie producers saw TV as an opportunity
 - The independents began making films – mostly crime dramas, westerns, and comedies – for television
 - Among the most successful was Desilu Productions
 - The success of Disneyland with the theme park, TV programs, and movies mutually promoting each other led studios to see television as a potential ally

Movies and Television

- What Television Did to the Movies
 - Movie studios began renting their archives of old productions to the networks
 - Feature films on television
 - Studios invest the archiving, preservation, and restoration of old feature films
 - Films made for television without exhibiting them in theaters beforehand

Movies and Television

- What Television Did to the Movies
 - Television changed the economics of the movie business
 - Before television, box office revenues were the source of movie profits
 - After television, it is primarily video (initially VCR tape and now DVD) rentals and sales that are the source of profit, followed by box office revenue and sales of exhibition rights to free and pay television. In some cases, there is additional revenue from product tie-ins.

Radio

- Origins of Radio
 - James Clerk Maxwell's theory had predicted the existence of electromagnetic waves that traveled through space at the speed of light
 - Heinrich Hertz in 1886 devised an experiment to detect such waves.
 - He connected two ends of a coil of wire to the opposite sides of a small gap and then shot a high-voltage spark across the gap. Hertz found that as the spark jumped the gap, a much smaller spark flowed between two other wires, similarly configured, on the other side of the room.

Radio

- Origins of Radio – 2
 - By this and related experiments, Hertz showed that these waves conformed to Maxwell's theory and had many of the same properties as light except that the wave lengths were much longer than those of light – several meters as opposed to fractions of a millimeter.
 - Guglielmo Marconi had attended lectures on Maxwell's theory and read an account of Hertz's experiments

Radio

– What Marconi accomplished

- He devised a practical wireless telegraphy transmitter and receiver
- He also visualized a market for the device
 - Navies and shipping companies that wanted to be able to communicate with their ships at sea
- Marconi gradually improved his invention and in 1901 actually transmitted a message from Cornwall in England to Newfoundland
 - This led to the discovery of the ionosphere since what Marconi accomplished was theoretically impossible if radio waves like light followed lines of sight.

Radio

- What Reginald Fessenden accomplished:
 - Fessenden and Ernst Alexanderson of GE developed a high-frequency alternator that allowed continuous wave transmission on a single frequency
 - This made possible voice and music radio transmission
 - On December 24, 1906, Fessenden began transmitting voice and music from his experimental radio station in Plymouth MA.

Radio

- Effects of World War I
 - Sparked a huge demand for wireless equipment
 - Trained thousands of new radio operator
 - Familiarized these operators with the latest developments in radio technology
 - Stimulated the development of postwar amateur radio on the part of those involved with radio during the war
 - All of this laid the groundwork for the 1920s boom in radio and radio broadcasting

Radio

- Frank Conrad
 - Was an amateur radio operator who was head of Westinghouse's radio operations
 - Regularly broadcast music from his home radio station
 - Joseph Horne Department Store Ad ran an ad on September 20, 1920 saying that their sets could receive Conrad's transmissions
 - The ad triggered an epiphany in Westinghouse VP Harry Davis
 - Radio was a broadcast medium
 - There was money to be made in selling receiving sets

Radio

- Davis got Conrad to build a radio station at Westinghouse – KDKA – to transmit the 1920 election returns.
- Result – A splurge of radio broadcasting

Radio

- In the 1920s, radio took on many of the characteristics that marked radio and later television during their heydays
 - Bandwidth allocations that favored well-heeled stations
 - Commercial advertising as a source of radio station revenue
 - Networks that provided programming to individual stations

Radio

- Networks
 - The 1920s and early-1930s saw the emergence of four networks – NBC Red (1926), NBC Blue (1928), CBS (1927), & Mutual (1934)
 - Networks gave advertisers access to a large national audience
 - Networks provided programming to the affiliated local stations
 - Programming was produced by the networks, individual sponsors, and increasingly over time by advertising agencies.

Radio

- Radio quickly penetrated the American market
 - 1927 – 25% of all American households had a radio
 - 1929 - 1/3rd owned a radio
 - 1934 - 60% of all homes had a radio;
 - 1939 - 86% of all households owned at least one set. There were also 6.5 million radios in automobiles.

Radio

- Notes About the Radio Medium
 - With radio, the speaker addressed an audience that was invisible and unknown
 - Radio allowed millions to hear the same program at the same time
 - It provided a speaker with an audience that dwarfed any audience that could fit in an auditorium or theater
 - Along with the phonograph, it gave any song, symphony, or opera more listeners than every heard the work in a theater or symphony hall

Radio

- Notes About the Radio Medium
 - Radio leads people to create images in their mind to provide a picture background for the actions and dialog that they are hearing in the broadcast
 - Radio is a medium that allows people to do other things while they are listening
 - Radio fostered the creation of “imagined communities” of people who never met but of which we were a part – E.g. sports fans, Fred Allen fans, rock 'n' rollers, ham operators, Dittoheads

Radio

- Notes About the Radio Medium
 - Before television, radio was a centralizing medium because of both its expense and its broadcasting nature
 - After television, radio became a narrowcasting medium that appealed to specific niches of listeners through specific types of content – specific forms of music, all news, conservative talk shows, etc

Radio

- Some Effects of the Radio
 - By broadcasting the same content to a vast audience at the same time for all, radio created a shared simultaneity and unity of experience
 - This led to both a standardization of culture and also of speech
 - It led people to focus on and become knowledgeable about what was happening at the national and international level as distinct from the local community level
 - Thanks to radio and later TV, we now have people who are well-informed about what is going on in Washington or in the Middle East, but who have no idea of who their local mayor or city council representative is

Radio

- Some Effects of the Radio
 - Along with the movies, led to the rise of a popular entertainment industry geared to the mass market
 - Reduced traditional forms of high art to elite ghettos of the well-to-do and the highly educated
 - Radio made music a more integral, structuring part of everyday life and individual identity.

Radio

- Some Effects of the Radio
 - The concept of the audience led to the concept of the average American
 - This provoked an interest in ratings, audience demographics, and the tastes and attitudes of the presumed average America
 - What was the average American listening to? Or buying? Who was listening to *Our Miss Brooks* or *The Shadow*?
 - Radio adversely affected the advertising revenues of newspapers and magazines

Radio

- Some Effects of the Radio
 - The technical limitations of early radio:
 - Precluded use of very high or very low frequency musical instruments – cello, oboe, violin
 - Favored use of certain musical instruments - piano, clarinet, and saxophone
 - Led to the use of crooning as a singing technique
 - This favored broadcasting of jazz

Radio

- Some Effects of the Radio
 - Radio and WWI led to code encryption and code breaking
 - Radio set the stage for TV
 - Radio made music an acceptable endeavor for men
 - Radio led people to match their personal schedules to the schedules of the broadcast day