

# 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-19<sup>th</sup> and early-20<sup>th</sup> 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)

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Thus, to use Washington as an example, I-66 allowed suburbs to spread to the outer reaches of Fairfax County and out into Loudoun County. I-95 made Fredericksburg part of the Washington commuting area, and allowed the Baltimore and Washington suburbs to meet at Laurel and Columbia. I-70 made Gaithersburg and Frederick part of the Washington commuting area.

## 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

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**Limited access roads** - Because traffic soon clogged even wide thoroughfare streets, traffic engineers soon proposed 'express' streets with no stoplight or intersections and limited access. !! "William K. Vanderbilt's Long Island Motor Parkway (1906-1911) was the world's first thoroughfare restricted solely to the automobile, and especially designed for its needs. Made of innovative concrete, it featured open speeds, bridges and tunnels to separate it from local cross traffic, and limited access through its own toll gates. Even more significant was Westchester County's bucolic and meandering Bronx River Parkway, begun in 1906 and completed in 1923. There, the complete separation of crossing traffic from the parkway was accomplished cheaply. Because the park roadway ran through a valley, it could be bridged by crossing roads without massive earthwork. The result was an enormous aesthetic success. Running sixteen miles from Bruckner Boulevard in the Bronx alongside the New York Central tracks to White Plains, the beautifully landscaped road stimulated automobile commuting from Scarsdale, Mount Vernon, Bronxville, and New Rochelle. Within ten years, the New York area also witnessed the construction of the Hutchinson River Parkway (1928), the Saw Mill River Parkway (1929), and the Cross County Parkway (1931). The Henry Hudson Parkway, the first inner-city freeway (there was a toll across the bridge to the Bronx, however) to have limited access, no grade crossings, and service stations of its own, was begun along the West Side of Manhattan in 1934.

## 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

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**Installment purchases** - Cars were relatively expensive so that families had a hard time coming up with the money to buy cars. Manufacturers wanted to make money so they collaborated with bankers and factions of society that held capital to find a way to sell more autos—thus the birth of installment payments or credit – an innovation pioneered by GM.

**Used cars** - The sale of new shiny autos posed a new issue: What do we do all these used cars when we persuade families to buy new cars and upgrade their previous models? So, a new industry evolved: *Used Car Sales* or what we today called *Previously Owned*.

**Camping & picnicking** – During the period 1900-1920, several hundred thousand families toured the countryside, camping each night in a different spot along the road, sleeping in cars or tents, cooking their meals over campfires. Two factors accounted for this. First, the early absence of roadside motels and restaurants. Second, a turn-of-the-century revolt against late Victorian institutions which was an offshoot of the 19<sup>th</sup> century romantic reaction against industrial capitalism -- a nostalgia for local color, community, roots, family cohesiveness, contact with nature, spirituality, and individuality. In Europe, this nostalgia produced powerful collectivist movements; but in America, the resilience of the political system and the existence of new channels of escape led to different consequences. “Thus, among the ironies surrounding the car culture, perhaps the strangest is this: early on, the automobile industry became the backbone of modern industrial capitalism, yet it was born in a spirit of rebellion against that system.

**Auto campgrounds** - As time went on, towns and municipalities established auto campsites. There was a twofold motive. First, roadside camping led to littering, trespassing, and property theft of flowers, fruit, and other property. Second, town merchants wanted to cash in on the new tourist trade. Since tourists were assumed to be prosperous middle class consumers, they hoped a small investment in camp facilities would produce good business for local stores. Thus, the auto camp was part of the process by which individualized ‘drifter tourism’ -- gypsying -- became institutionalized ‘mass tourism.’

**Private campgrounds** – Municipal campgrounds began to find themselves in a bind. In order to attract tourists, they had to upgrade their facilities. By the mid-1920s, this meant

## 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

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**Gasoline stations** - In 1905, Sylvanus F. Bower invented a gasoline pump which automatically measured outflow. Thereafter, the gasoline station went through phases of development:

**Phase 1** - Until 1920, such an assembly consisted of a single pump outside a retail store which was primarily engaged in other busi-nesses and which provided precious few services for the motorist.

**Phase 2** - Between 1920 and 1950, service stations entered into a second phase and became, as a group, one of the most widespread kinds of commer-cial buildings in the United States. Providing under one roof all the functions of gasoline distribution and normal automotive maintenance, these full-service structures were often built in the form of little colonial houses, Greek temples, Chinese pagodas, and Art Deco palaces.

**Phase 3** - After 1935 the, gasoline station evolved again, this time into a more homogeneous entity that was standardized across the entire country and that reflected the mass-marketing techniques of billion-dollar oil companies. Whatever the prod-uct or design, the stations tended to be operated by a single entrepreneur.

**Phase 4** – This phase began in the 1970s, with the slow demise of the traditional service-station businessman. New gasoline outlets were of two types. The first was the **super station**, often owned and operated by the oil companies themselves. Most featured a combination of self-service and full-service pumping consoles, as well as fully equipped "car care centers." Service areas were separated from the pumping sections so that the two functions would not interfere with each other. Mechanics never broke off work to sell gas. The more pervasive second type might be termed the "**mini-mart station**." The operators of such establishments have now gone full circle since the early twentieth century. Typically, they know nothing about automobiles and expect the customers themselves to pump the gasoline. Thus, "the Texaco man who wears the star" has given way to the teenager who sells six-packs, bags of ice, and already-prepared sandwiches.

**Drive-in restaurants** – With the auto came the notion of grabbing something to eat on the road and the realization that there was money to be made in selling motorists food. What differentiated roadside restaurants was the presence of a parking area for the cars along with garish signs or restaurant architecture that could stick out and grab the motorist's attention. The auto thus encouraged not only a geographic separation between buildings to permit parking, but also a bold and flamboyant architecture. One outgrowth of the drive-in restaurant was the fast-food franchise restaurant – the first of which was the White Tower hamburger chain which began in the 1920s and became somewhat of a model for McDonald's and other fast-food franchise chains.

**Motels** - In the mid-dle of the 19<sup>th</sup> century, every town and city with aspirations to larger size, had to have a hotel. Whether such structures were grand palaces or jerry-built shacks, they were

## Autos and Social Inventions

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  - Drive-in movies
  - Shopping centers
  - Malls
  - Parking lots
  - Traffic courts
  - Automobile tags
  - Driver's Licenses

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**Drive-in movies** - Like the hotels, the downtown movie theaters and old vaudeville houses also faced a challenge from the automobile. In 1933 Richard M. Hollinshead set up a 16-mm projector in front of his garage in Riverton, New Jersey, and then settled down to watch a movie. Recognizing a nation addicted to the motorcar when he saw one, Hollinshead and Willis Smith opened the world's first drive-in movie in a forty-car parking lot in Camden on June 6, 1933. The idea never caught on in Europe, but by 1958 more than four thousand outdoor screens dot-ted the American landscape. Because drive-ins offered bargain-basement prices and double or triple bills, the theaters tended to favor movies that were either second-run or second-rate. Horror films and teenage romance were the order of the night, as *Beach Blanket Bingo* or *Invasion of the Body Snatchers* typified the offerings. Drive-in movies proved especially popular with two very diverse groups – one was parents with small children who could go to a movie without having to pay a babysitter, letting the kids sleep in the backseat of the station wagon while the parents watched the movies; the other was teen-agers who found the “passion pit” a very appealing place for a date. Pundits often commented that there was a better show in the cars than on the screen.<sup>19</sup> In the 1960s and 1970s the drive-in movie began to slip in popularity. Rising fuel costs and a season that lasted only six months contributed to the problem, but skyrocketing land values were the main factor. When drive-ins initially opened, they were mostly in the hinterlands. As subdivisions and shopping centers edged closer, it became more profitable to sell the land. Thus, by 1983, the more than 4,000 drive-ins of 1958 had dwindled to 2,935. What finally finished off the drive-in movie was the VCR.

**Shopping centers & malls** - Large-scale retailing, long associated with central business districts, began moving away from the urban cores between the world wars. The first experiments to capture the growing suburban retail markets were made by major department stores in New York and Chicago in the 1920s, with Robert E. Wood, Sears's vice president in charge of factories and retail stores, as the leader of the movement. !! Another threat to the primacy of the central business district was the "string street" or "shopping strip," which emerged in the 1920s and which were designed to serve vehicular rather than pedestrian traffic. These bypass roads encouraged city dwellers with cars to patronize businesses on the outskirts of town. Sears's big stores were initially isolated from

## 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

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**Why the 19<sup>th</sup> century city had its characteristic features** - The densely concentrated U.S. cities of the 19<sup>th</sup> Century, with their industries, stores, and offices crowded together toward the middle, were a short-lived phenomena brought on by the fact that interurban transportation -- that between cities via railroad and steamship -- was better than intra-urban transportation -- that within cities via horse cars and omnibuses.

**Picturing the 19<sup>th</sup> century city** - To picture the 19<sup>th</sup> century city development, look at Washington's Metro. Metro Center, Gallery Place, and L'Enfant Plaza are like hubs from which three of the systems' subway lines radiate -- all like spokes from the center of a wheel. The problem with this wheel-spokes arrangement is that to go from Rockville to Silver Spring, or Vienna to Wheaton, one has to travel through downtown DC, and in the case of Vienna to Wheaton travel, one has to transfer from the orange to the red line. To go from Vienna to National Airport, one has to go to Rosslyn and transfer from the orange line to the blue line.



## 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

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**Auto-dependent suburbs** - The auto allowed residential and business development to fill in areas between the spokes and to expand development beyond the end of the trolley or subway line

In addition to the daily flow of traffic into the city, automobiles made possible lateral and perpendicular movement throughout the outlying districts -- something streetcars could not do. Often, this cross-current movement superseded commuting into the downtown area. In Los Angeles, for example, the number of people entering the downtown between 1923 and 1931 declined by 24 percent despite a population boom in the metropolitan area. But the most important point was that the reorganization of urban space made these crosscurrents of movement not only more possible but more necessary as well. Goods which families had purchased in old downtown shopping districts now had to be purchased at stores scattered throughout the suburbs. Many employees had to drive to decentralized workplaces, or from decentralized residences to the CBD

## 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

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## 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

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**Low density and land prices in the suburbs** - Because the motor vehicle opened up much more land than was possible with public transportation, the price of a square foot of real estate was lower in areas accessible only to cars than in neighborhoods served by good streetcar systems.!! With more developable land available at cheaper prices, the average size of a building lot rose from about three thousand square feet in streetcar suburbs to about five thousand square feet in automobile suburbs. Residential densities moved in the opposite direction from about twenty thousand per square mile in trolley-based areas to about half that in areas based solely on the motorcar. In fact, the residential density of a neighborhood today is largely a function of the type of transportation system that accompanied its early development

**Centerless city** - The automobile led to the centerless city -- a collection of suburbs with no obvious central city -- starting with Orange and Santa Clara counties, but eventually spreading to the East as industries, businesses, and offices migrated from central cities to suburban industrial parks and mega-malls.

## 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

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In the words of Kenneth T. Jackson's *Crabgrass Frontier. The suburbanization of the United States*. "There are few places as desolate and lonely as a suburban street on a hot afternoon."

## 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

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**Residential stratification** - Since the auto-dependent suburbs had their greatest growth from the postwar-1940s to the early-1960s (the era of the baby boom), early suburban growth, thanks to restrictive covenants and refusals to sell to Blacks and other minorities, was almost all White and Middle- and Upper-Middle-class. As the White Middle-class abandoned the central city, the central city residential areas became the province of poor whites and ghetto Blacks. This exacerbated racial tensions that eventually exploded in the riots of the 1960s.

**Car-dependency** – In an era where mom stayed home with the kids and dad could take public transportation to work, a family car would easily meet the family's needs. As mom went to work, as dad needed a car to drive to work, and as teenage children needed a car of their own to work, shop, or go to school, the number of cars in the suburbs exploded.

## 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

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Some of the major problems were traffic jams, parking (or the lack thereof), traffic accidents, pollution, breakdowns (and the need for repair), the propensity of some people to drive carelessly or recklessly or drunk, and a thirst for gasoline and oil.

## 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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In the words of Kenneth T. Jackson's *Crabgrass Frontier. The suburbanization of the United States*. "In the mid-nineteenth century, when row houses predominated, the street was the primary open space, and it performed an important recreational function.<sup>17</sup> By 1920, however, most urban residents and virtually all highway engineers saw streets primarily as arteries for motor vehicles."

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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

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**Aspen Effect and traffic jams.** The basic mechanism at work is something we may call the Aspen effect. Wealthy residents have long since bid up real estate prices in Aspen and other exclusive resort communities to levels that virtually exclude middle- and low-income families. Most of the people who provide services in these communities -- teachers, policemen, firemen, laundry and restaurant workers -- must therefore commute, often at considerable distance. As a result, all roads into Aspen are clogged morning and night with commuters, many of whom come from several hours away. "Greater Aspen" now has a radius of more than 50 miles! As a result of these changes, residential patterns have become much more stratified by income. The effect has been more pronounced in some communities (the San Francisco peninsula, Austin and Seattle) than others (Chicago or Philadelphia). But the direction of change has been the same almost everywhere, and it has contributed to the rise in traffic delays.

## 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

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**Centralizing rural activities** - Small crossroads centers lost their general trade and service functions to neighboring towns -- some disappeared while others became specialized agricultural supply depots. Small towns located on highways developed facilities catering to tourists. Many formerly localized institutions and services -- education, health care, postal service, general stores -- and other formerly urban institutions -- libraries, chain stores, gas stations --- were relocated to, in, and around the larger rural villages. These larger villages became the centers of rural space.

**Amount of rural travel** - While rural people could travel greater distances with cars, most trips occurred within a previously demarcated rural area, with 1/3<sup>rd</sup> to 1/2 of all trips under 20 miles.!! While the automobile did not generally lead to longer trips, it did lead to more frequent ones. Families that traveled to a village only one or two times a year before the car now traveled every few weeks with one. Instead of traveling only to the nearest village, they traveled throughout the area to several different towns. Meanwhile, they went less frequently to the crossroads centers which were themselves disappearing or losing their retail business functions. Goods which the family formerly purchased at a crossroads store or by mail order catalog now had to be purchased in town. The automobile so fundamentally changed the structure of rural society that by the Great Depression, a farm family without a car faced special difficulties -- it took longer by horse and wagon to reach relocated services in village centers; and barns, livery stables, harness shops, and blacksmiths dwindled as their owners converted them into parking lots, garages, and gas stations. Thus, the car became a rural necessity.



## 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.

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These costs include:

- The 40% of the cost of road construction and maintenance that are not covered by current motor vehicle license fees and Federal/state gasoline taxes
- Police and safety services, including state highway patrols, auto accident and theft investigation, and ambulance and paramedic services
- Defense costs associated with CENTCOM which has the responsibility for protecting access to Middle East oil
- Air pollution control costs and the higher health costs associated with auto-created air pollution
- Parking
- Environmental costs of disposing of millions of junked cars, tires, and batteries
- Costs of death, personal injury, and property damage resulting from automobile accidents plus related legal fees and auto insurance premiums
- Time lost in traffic jams.

## 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

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**Truck & rail** - In other countries, governments responded to the automobile revolution by invoking the principle of comparative advantage -- it made sense for the railroads to haul long distances and for the truckers to haul short distances and handle delivery from the station to the customer. I.e. to work together rather than at cross purposes. In America, road and rail developed in a vacuum with each mode of transportation viewing the other as a competitor.

**Other factors in RR decline** - The railroads were hurt not only by the truck, but also by the decline of America's smokestack industries. From the 1940s through the 1960s, the use of anthracite coal for home heating declined drastically as American homes shifted to gas, oil, and electric heating. This hurt the railroads which had been (and still are) the principal haulers of coal. During the 1970s and 1980s, production of iron ore, and iron and steel dropped by half, while production of phosphates, industrial sand, pulp and paper dropped by 40%. The institution of 'just-in-time' inventory systems which required regular shipments of small loads rather than occasional shipments of large loads also hurt railroads, but benefitted truckers. What saved railroad freight hauling was containerization -- the packing of goods in 20' or 40' sealed containers -- {a technological innovation of the shipping industry designed to reduce the costs of loading and unloading cargo in port} proved to be a boon to the railroads, bringing them more money than any source other than coal.

## 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

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# 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:
      - 2/3<sup>rd</sup> were owner operated
      - Of those who owned the rest, most owned 5 trucks or fewer

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## Autos and Social Inventions

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**Installment purchases** - Cars were relatively expensive so that families had a hard time coming up with the money to buy cars. Manufacturers wanted to make money so they collaborated with bankers and factions of society that held capital to find a way to sell more autos—thus the birth of installment payments or credit – an innovation pioneered by GM.

**Used cars** - The sale of new shiny autos posed a new issue: What do we do all these used cars when we persuade families to buy new cars and upgrade their previous models? So, a new industry evolved: *Used Car Sales* or what we today called *Previously Owned*.

**Camping & picnicking** – During the period 1900-1920, several hundred thousand families toured the countryside, camping each night in a different spot along the road, sleeping in cars or tents, cooking their meals over campfires. Two factors accounted for this. First, the early absence of roadside motels and restaurants. Second, a turn-of-the-century revolt against late Victorian institutions which was an offshoot of the 19<sup>th</sup> century romantic reaction against industrial capitalism -- a nostalgia for local color, community, roots, family cohesiveness, contact with nature, spirituality, and individuality. In Europe, this nostalgia produced powerful collectivist movements; but in America, the resilience of the political system and the existence of new channels of escape led to different consequences. “Thus, among the ironies surrounding the car culture, perhaps the strangest is this: early on, the automobile industry became the backbone of modern industrial capitalism, yet it was born in a spirit of rebellion against that system.

**Auto campgrounds** - As time went on, towns and municipalities established auto campsites. There was a twofold motive. First, roadside camping led to littering, trespassing, and property theft of flowers, fruit, and other property. Second, town merchants wanted to cash in on the new tourist trade. Since tourists were assumed to be prosperous middle class consumers, they hoped a small investment in camp facilities would produce good business for local stores. Thus, the auto camp was part of the process by which individualized ‘drifter tourism’ -- gypsying -- became institutionalized ‘mass tourism.’

**Private campgrounds** – Municipal campgrounds began to find themselves in a bind. In order to attract tourists, they had to upgrade their facilities. By the mid-1920s, this meant

## 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

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**Gasoline stations** - In 1905, Sylvanus F. Bower invented a gasoline pump which automatically measured outflow. Thereafter, the gasoline station went through phases of development:

**Phase 1** - Until 1920, such an assembly consisted of a single pump outside a retail store which was primarily engaged in other busi-nesses and which provided precious few services for the motorist.

**Phase 2** - Between 1920 and 1950, service stations entered into a second phase and became, as a group, one of the most widespread kinds of commer-cial buildings in the United States. Providing under one roof all the functions of gasoline distribution and normal automotive maintenance, these full-service structures were often built in the form of little colonial houses, Greek temples, Chinese pagodas, and Art Deco palaces.

**Phase 3** - After 1935 the, gasoline station evolved again, this time into a more homogeneous entity that was standardized across the entire country and that reflected the mass-marketing techniques of billion-dollar oil companies. Whatever the prod-uct or design, the stations tended to be operated by a single entrepreneur.

**Phase 4** – This phase began in the 1970s, with the slow demise of the traditional service-station businessman. New gasoline outlets were of two types. The first was the **super station**, often owned and operated by the oil companies themselves. Most featured a combination of self-service and full-service pumping consoles, as well as fully equipped "car care centers." Service areas were separated from the pumping sections so that the two functions would not interfere with each other. Mechanics never broke off work to sell gas. The more pervasive second type might be termed the "**mini-mart station**." The operators of such establishments have now gone full circle since the early twentieth century. Typically, they know nothing about automobiles and expect the customers themselves to pump the gasoline. Thus, "the Texaco man who wears the star" has given way to the teenager who sells six-packs, bags of ice, and already-prepared sandwiches.

**Drive-in restaurants** – With the auto came the notion of grabbing something to eat on the road and the realization that there was money to be made in selling motorists food. What differentiated roadside restaurants was the presence of a parking area for the cars along with garish signs or restaurant architecture that could stick out and grab the motorist's attention. The auto thus encouraged not only a geographic separation between buildings to permit parking, but also a bold and flamboyant architecture. One outgrowth of the drive-in restaurant was the fast-food franchise restaurant – the first of which was the White Tower hamburger chain which began in the 1920s and became somewhat of a model for McDonald's and other fast-food franchise chains.

**Motels** - In the mid-dle of the 19<sup>th</sup> century, every town and city with aspirations to larger size, had to have a hotel. Whether such structures were grand palaces or jerry-built shacks, they were

## 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

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**Drive-in movies** - Like the hotels, the downtown movie theaters and old vaudeville houses also faced a challenge from the automobile. In 1933 Richard M. Hollinshead set up a 16-mm projector in front of his garage in Riverton, New Jersey, and then settled down to watch a movie. Recognizing a nation addicted to the motorcar when he saw one, Hollinshead and Willis Smith opened the world's first drive-in movie in a forty-car parking lot in Camden on June 6, 1933. The idea never caught on in Europe, but by 1958 more than four thousand outdoor screens dot-ted the American landscape. Because drive-ins offered bargain-basement prices and double or triple bills, the theaters tended to favor movies that were either second-run or second-rate. Horror films and teenage romance were the order of the night, as *Beach Blanket Bingo* or *Invasion of the Body Snatchers* typified the offerings. Drive-in movies proved especially popular with two very diverse groups – one was parents with small children who could go to a movie without having to pay a babysitter, letting the kids sleep in the backseat of the station wagon while the parents watched the movies; the other was teen-agers who found the “passion pit” a very appealing place for a date. Pundits often commented that there was a better show in the cars than on the screen.<sup>19</sup> In the 1960s and 1970s the drive-in movie began to slip in popularity. Rising fuel costs and a season that lasted only six months contributed to the problem, but skyrocketing land values were the main factor. When drive-ins initially opened, they were mostly in the hinterlands. As subdivisions and shopping centers edged closer, it became more profitable to sell the land. Thus, by 1983, the more than 4,000 drive-ins of 1958 had dwindled to 2,935. What finally finished off the drive-in movie was the VCR.

**Shopping centers & malls** - Large-scale retailing, long associated with central business districts, began moving away from the urban cores between the world wars. The first experiments to capture the growing suburban retail markets were made by major department stores in New York and Chicago in the 1920s, with Robert E. Wood, Sears's vice president in charge of factories and retail stores, as the leader of the movement. !! Another threat to the primacy of the central business district was the "string street" or "shopping strip," which emerged in the 1920s and which were designed to serve vehicular rather than pedestrian traffic. These bypass roads encouraged city dwellers with cars to patronize businesses on the outskirts of town. Sears's big stores were initially isolated from

## 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

**Edison' kinetoscope** – Edison's kinetoscope was a device for viewing through a magnifying lens a sequence of pictures on an endless band of film moved continuously over a light source and a rapidly rotating shutter that creates an illusion of motion. It was designed for films to be viewed individually through the window of a cabinet housing its components. The first public showings were in New York City, in Broadway kinetoscope parlors with slot machines that charged ten cents for a program lasting sixteen seconds. The subjects were violent and included lynchings, scalpings, and beheadings.

# 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

**Large screen** - The transformation of these hole-in-the-corner affairs into large-screen exposures was the work, not of Edison, but of little-known inventor and realtor Thomas Armat of Washington. Edison's backers knew that the new invention would have more appeal to the public if it carried Edison's name. Accordingly, when the Amazing Vitascope was shown to the press on April 3, 1896, it was described as "Thomas A. Edison's latest marvel." Armat was initially quite content to forgo the credit and take the cash. This [prototype](#) of modern [film](#) projectors cast images onto a wall or screen for a moderately large audience. A renegade Edison associate, William Dickson, developed a camera taking pictures eight times larger than Edison's. He filmed the *Empire State Express*, and, when his show opened at Hammerstein's Theater on October 12., 1896, the sight of the great train hurtling along was so realistic that the alarmed audience stampeded for the exits

## 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

Motion pictures or the illusion of continuous motion are dependent on:

- The persistence of vision (a characteristic of human perception whereby the brain retains images cast upon the retina of the eye for approximately  $1/20^{\text{th}}$  to  $1/5^{\text{th}}$  of a second beyond their actual removal from the field of vision), and
- The Phi phenomena (the phenomenon which causes us to see the individual blades of a rotating fan as a unitary circular form or the different colors of a spinning color wheel as a single homogeneous color)

Persistence of vision prevents us from seeing the dark interface areas of a projection print and the phi phenomenon or “stroboscopic effect” creates apparent movement from frame to frame.

## 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

Moving images are as powerful as photos, if not more so. Like photographs, they appeal to emotion and can be read in competing ways. Yet moving images change so rapidly and so often that they arrest our attention and task the brain's ability to absorb what we are seeing. They are becoming a ubiquitous presence in public and private life—so much so that Camille Paglia, an astute critic of images, has called our world “a media starscape of explosive but evanescent images.”

## 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

**Pre-WWI film industry** - Hollywood's ascendancy to domination of movie-making was not preordained. Before World War I, both the French and the Italian movie industries regularly surpassed the U.S. in film exports

**WWI and European film** - WWI destroyed the ability of European cinema to compete commercially with Hollywood. British, French, and Italian production was curtailed or suspended during the war; and post-war reconstruction demands left little money to finance large-scale moviemaking.

**Emergence of Hollywood** - Hollywood became the epicenter of U.S. film production for two major reasons -- the temperate sunny climate which permitted outside camera shooting throughout the year and the fact that Los Angeles, as the country's principal non-unionized city, had lower wage rates than East Coast cities. (p65) [Puttnam]

## 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

**Factors Favoring Hollywood** - The existence of a large domestic audience in the U.S. enabled American studios to recover the cost of production and make a substantial profit on a movie before they ever turned to an international market. They, then, could charge lower rental fees overseas and undersell their European rivals. In addition, the devices of block booking, the imposition of tariffs on imported foreign films, the use of the star system to create 'brand names,' and studio control over distribution networks both protected the home market against European films and created a continued demand for Hollywood films. In addition, Hollywood simply made better movies with more luxurious sets and magnetic stars.

**Heterogeneity** - "the heterogeneity of the American population -- its ethnic, racial, class, and regional diversity -- forced the media to experiment with messages, images, and story lines that had a broad multicultural appeal, an appeal that turned out to be equally potent for multi-ethnic audiences abroad. ... In sum, the domestic market was a laboratory for and a microcosm of the world market." Europeans, operating in much smaller markets with homogeneous populations, had much less incentive to communicate with a multicultural audience and were thus ill-equipped to compete in the international arena.

**Need for commercial success** – In the words Richard Pells in his *Not Like Us*, "In the United States, moviemakers and television producers had to pay attention to the audience because if they did not, their films would quickly disappear from the theaters and their shows would be cancelled within weeks. The hunger for a hit and the fear of commercial failure gave American films and television programs ... their vitality, their emotional connection with viewers ..., and their immense global popularity. Not infrequently, the effort to enthrall an audience also resulted in works that were original and provocative. In fact, markets had always served as a stimulus for art: Shakespeare cared as much as Walt Disney about box office receipts."



## 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

Through movies people became familiar with American products, lifestyles, patterns of behavior, and values. The opulence of the average Hollywood film made Europeans want to drive American cars, eat American foods, smoke American cigarettes, and wear American clothes. Even worse, according to some intellectuals, Europeans were losing respect for their native cultures and traditions.”

## 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

**Increased Hollywood’s share of world cinema revenue** - Counterintuitively, the onset of the sound era increased Hollywood's share of world cinematic revenue. At the time of the transition, equipping the theaters with sound and making movies with sound were costly. To recoup these costs, theaters sought out high-quality, high-expenditure productions for large audiences. The small, cheap, quick film became less profitable, given the suddenly higher fixed costs of production and presentation. This shift in emphasis favored Hollywood moviemakers over their foreign competitors. Also, The talkies, by introducing issues of translation, boosted the dominant world language of English and thus benefited Hollywood. Given the growing importance of English as a world language, and the focal importance of the United States, European countries would sooner import films from Hollywood than from each other. A multiplicity of different cultures or languages often favors the relative position of the dominant one, which becomes established as a common standard of communication

**Silent Film stars** - Many silent film stars who had excellent acting and pantomime skills but thick foreign accents or voices maladapted to early sound equipment never made the transition to talking movies

**Bank of America** - A.P. Giannini and his Bank of America was the first banker to recognize the motion picture business as a legitimate industry. By the end of the 1930s, the Bank of America had pumped about \$130,000,000 in loans into Hollywood. The Bank of America handled 70 per cent of film-making loans in the United States, advancing up to 80 or 90 per cent of the cost of making productions. As the Giannini’s showed that it was possible to make a lot of money by financing a maverick industry, Otto Kahn of *Kuhn, Loeb, & Company* started the flow of Wall Street investment bank money into Hollywood and he was followed by others.

**Creation of distinct genres** - Another method of marketing films was to offer an increasingly clear cut variety of styles. The studios began to group their productions into standard narrative forms -- westerns, musicals, gangster films, horror films, screwball comedies, war films, detective or ‘who done it?’ films, etc. Thus, individual movies acquired a ‘brand identity’ which greatly facilitated their marketing and advertising, both at home and abroad

## 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

**Charles Pathe** - Charles Pathe adopted the regimented techniques of mass production to the business of film making, just as a few years later Henry Ford would apply them to the auto industry. Thus, Pathe, more than any of his American rivals, was able to guarantee a consistent supply of films. Pathe introduced the idea of employing a company of actors, anticipating the Hollywood studio system of putting leading actors and actresses under exclusive contracts. He also introduced the concept of vertical integration -- bringing the development, production, promotion, distribution, and screening of films together under one company roof. Pathe's vertical structure allowed him to minimize risks by using the profits generated by the distribution of his films to fund the production of new ones, thus spreading the risk across a number of films. "Pathe saw that in a market where the public was consistently clamoring for new films, power would inevitably accrue to anyone who could supply a consistently high output of quality product."

By 1908, Pathe's domination of world cinema was complete. He was selling twice as many films in the U.S. as all American companies put together. Pathe's success stemmed from two separate insights:

1. A recognition that the movie business had to be organized like other late-19th century mass production industries; and
2. An understanding (which eluded Edison and others) that the biggest profits lay not in manufacturing cameras, film projectors, or film stock, but in the production and distribution of movies themselves.

## 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, 20<sup>th</sup> 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

**Lower class audience** - The social origins of motion pictures were a critical early influence on their path of development. Whereas newspapers and magazines had begun among the elite and evolved in a more popular direction, movies acquired a lowbrow image at an early point in their history and faced a challenge in achieving respectability. According to an 1911 study of New York City moviegoers, 72% of the audience came from the lower class, {25% from the middle class}, and only 3% from the leisure class. By comparison, the legitimate theater audience was only 2% working class, with 51% coming from the leisure class and 47% from the middle class. {Two factors that made the movies popular with immigrants were (1) they were cheap, and (2) as a purely visual entertainment medium before 'talkies,' they could be easily understood and appreciated by immigrants whose fluency in English was limited

**Popcorn at the movies** - As in the theater before the middle class began enforcing its protocols of passivity, working class patrons made a display of their lack of breeding -- members of the audience would neck during performances, munch peanuts or eat fruit, talk, wander, shout at the screen. Even today, the fact that one eats popcorn at the movies and would not think of doing so at the ballet, opera, or symphony, is a demarcation between low and high culture.

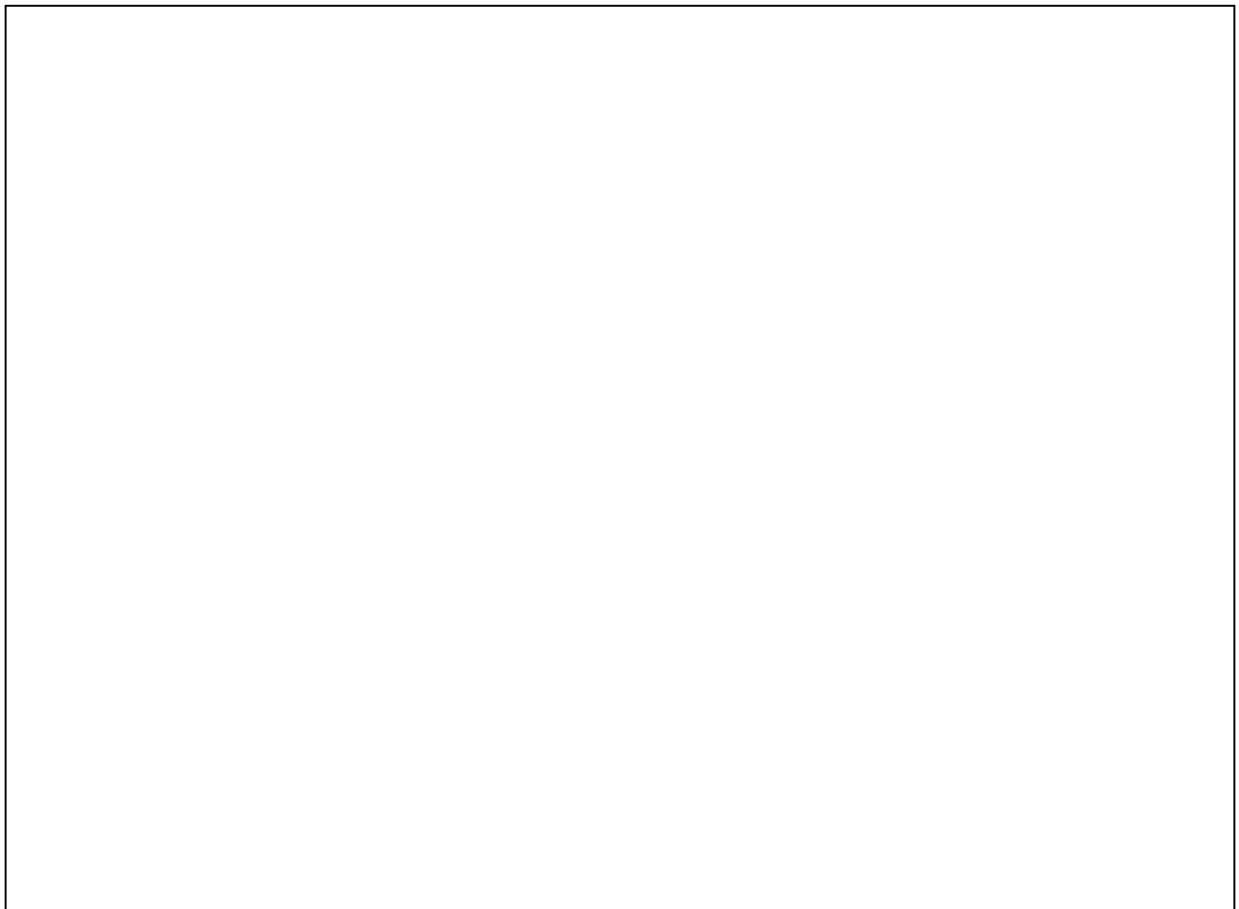
**Respectability** – Movie studios were quick to seek to appeal to a middle class audience by upgrading the sites where movies were shown. The movie palaces brought together regular patrons of the legitimate theater who paid \$2.00 per ticket to see moving pictures in their first class playhouses, vaudeville customers, and nickelodeon and neighborhood theater regulars accustomed to paying a nickel or dime to see short films. Because the movies were so entertaining and so useful, they would rapidly grow in popularity, rapidly extending their power over the middle class and ultimately leaving the working class storefronts behind for capacious and often opulent uptown theaters. In 1922, average weekly movie attendance was 40 million with an average weekly household attendance of 1.56. This continued to grow until weekly attendance peaked out at 90 million in 1948 with an average weekly household attendance of 2.22.

## 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

**Time** - Film treated time differently than does the stage. Flash backs, multiple time perspectives, and overlays, come across differently on the screen than they do on the stage. Both TV and film are nearer to narrative and depend much more on the episodic

**Close-ups** - Just as radio helped bring back inflection in speech, so film and TV recovered gesture and facial awareness -- a rich colorful language, conveying moods and emotions, happenings and characters, even thoughts, none of which could be properly packaged in words."





## 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 as classroom** - Movies provided in the words of Daniel Bell, ‘a set of ready-made daydreams’ that became the most powerful classroom in America for educating the young and gradually their elders as well in everything from fashion to sex. ‘Our children are rapidly becoming what we see in the movies,’ wrote one critic. Films not only instructed people in a wide curriculum of subjects but also helped shape their attitudes and social values

**Shared experiences** - Even more important than providing a model, the movies provided a new set of shared experiences for the entire nation, nationalizing every viewer as a citizen of a country of the imagination that would eventually supercede and devour the country of the material

**Concept of historical fact** - What movies portray came to be seen as historical fact, even if they were not. Witness *The Birth of a Nation*, *JFK* (on the Kennedy assassination), *Gone With the Wind*, and other Hollywood historical epics. PBS has often had historians commenting on history-theme movies that they have broadcast.

**Consumerism & Third World discontent** - in 1956, President Sukarno of Indonesia stated to a large group of Hollywood executives that he regarded them as political radicals and revolutionaries who had greatly hastened political change in the East. What the Orient saw in a Hollywood movie was a world in which all the ordinary people had cars and electric stoves and refrigerators. So the Oriental now regards himself as an ordinary person who has been deprived of the ordinary man’s birthright. In the words of Marshall McLuhan, “the film medium [is a] monster ad for consumer goods. In America this major aspect of film is merely subliminal. Far from regarding our pictures as incentives to mayhem and revolution, we take them as solace and compensation, or as a form of deferred payment by daydreaming. But the Oriental is right, and we are wrong about this.”

## 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”

**Drive-in movie** - Drive-ins appealed to two distinct groups -- teenagers seeking a place where they and their dates could make-out and married couples with preteen kids who wanted to see a movie without having to pay a babysitter. To accommodate both, drive-in theater managers would show a G-rated film or films for the kids, sometimes followed either by a more adult-oriented film for the adults after the kids had fallen asleep or by a Grade B horror flick designed to scare teenage girls into the arms of their male dates.

**Supplemented and supplanted audiences** – The movies converted lecture hall audiences into motion picture show fans, the same process was taking place in the nation’s vaudeville theaters. Screened projected films fit perfectly into the vaudeville program as opening and closing ‘dumb’ acts (along with animals, pantomimes, puppets, and magic lantern slides) that were silent and thus would not be disturbed by late arrivals or early departures.

**Star system** – While the star system had its origins in the 19<sup>th</sup> century with theater and sports stars whose performance tours were facilitated by the railroad and telegraph/telephone and whose images were displayed on posters and photographs, the star system reached its fruition with Hollywood. After some hesitation, the studios realized that promoting stars not only sold films to audiences, but also upgraded the image of the industry. With ‘stars’, the movie industry could separate itself further from its peep show past (there were no stars in the penny arcades) and connect itself with the legitimate theater (which gloried in its stars). Like the stars of live theater, movie stars were larger than life. Thus, it took only a few years for the MOPIC players to ascend from anonymity to omnipresence and their own kind of notoriety. A new institution, the fan magazine, was created to better acquaint audiences with their favorite stars. By 1911, movie stars were touring local theaters to promote their films, granting regular interviews, writing articles for newspapers and fan magazines, and distributing photographs of themselves to their admirers. !! The stars were worth the money because their appearance in a film boosted receipts and added a degree of predictability to the business -- a predictability welcomed by the banks and financiers that loaned money to the studios to pay their production costs. The stars not only brought new customers into the theaters but also incorporated a movie audience scattered over thousands of sites into a unified public that not only saw its favorite pictures and stars but also talked about them, read about them, collected pictures and posters, and bought fan magazines to learn more about the stars’ personal lives and loves.

**Wild West myth** -

## 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

**Film a major economic force** - According to Jeremy Rifkin of *The Age of Access*, “it was the advent of films that established cultural production as a truly significant force in the capitalist marketplace and elevated commercial entertainment to the center of American social life. With film, high and pop culture became ‘consumer culture,’ and cultural capitalism was born.”

**Entertainment a social force** - Movies were *the* preeminent form of popular culture in the 1930s. Almost everyone who could afford to (and millions who could not) went to the cinema frequently through-out the decade. During the depths of the Depression in the early thirties, an average of 60 million to 75 million movie tickets were purchased each week. Although part of this remarkable figure represented repeat customers, the number itself corresponds to more than 60 percent of the entire American population. In the 1970s, movie attendance was less than 10% of the population.

**Americanization** – Through movies, people became familiar with American products, lifestyles, patterns of behavior, and values. It made people throughout the world want to drive American cars, eat American foods, smoke American cigarettes, and wear American clothes.

**Cultural backlash** – One reason the Ayatollah Khomeini referred to America as the Great Satan” was that Satan in Islamic theology was seen as the great and subtle tempter and he saw American popular culture as depicted in the movies and TV as a temptation for people to abandon traditional Islam.

## 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

**Air Conditioning** - In 1922 Carrier engineers built the first top-down, or bypass, cooling system for Grauman's Metropolitan Theater in Los Angeles. This is generally considered to be the birthplace of theater air conditioning, although the real test came three years later at the Rivoli Theater in New York. THE AIR-CONDITIONED Rivoli Theater opened Memorial Day weekend, 1925. After the show Adolph Zukor came downstairs and approached Carrier. The movie had been silent, but the studio chief was not. "Yes," he said, "the people are going to like it."

The box-office grosses at the Rivoli during the next three months proved Zukor correct: ticket sales were up \$100,000 over the previous summer -- more than the cost of installation itself. During the next five years Carrier air-conditioned over three hundred theaters around the country. Not only had he saved Hollywood from its summer doldrums but, by introducing comfort cooling to the masses, he created a demand for air conditioning that carried his own company through the Depression.

**Animation** - Winsor McCay, the earliest animator, created *Little Nemo in Slumberland* in 1911, and then *Gertie the Trained Dinosaur* three years later. Gertie had charm and personality aplenty, a progenitor of Barney. The development of animation began to hit its stride in 1915-16, when Mutt and Jeff films achieved popularity. By the late teens most animated cartoons were adaptations of successful comic strips: "Bringing up Father," "The Katzenjammer Kids," and "Krazy Kat." "Felix the Cat," always outwitted by a mouse, made his first appearance in 1921. Created by Otto Messmer, Felix had a very distinctive personality which made him the greatest cartoon star of the silent era. Until 1928, all animated cartoons had been derived from New York-produced comic strips. But then came an unknown named Walt Disney from California with *Steamboat Willie*, a landmark her synchronized sound with the pictures. Next came Mickey Mouse and an amazing burst of creativity for Disney that endured without a break for more than a decade. The notion that make-believe cartoon characters could talk, sing, play instruments, and move to a musical beat seemed absolutely magical. *Snow White and the Seven Dwarfs* was a landmark in

## 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

**Threat** - When ABC President Robert Kintner tried to persuade Harry Cohn of Columbia Pictures to supply original programming, Cohn said, 'You dumb son of a bitch, you won't get any of my stars, you won't get any of my people -- you can't make films! People want the companionship of the theater, they want their movies the way they are -- not on TV.'

**Opportunity** – The independents realized that *filmed drama could earn for its producers more money than live programming ever could. Under a practice known as syndication, a producer would sell rerun rights to the network and to groups of local stations.*” From the late 1940s on, independent producers began setting up shop on lower Sunset Boulevard in Hollywood and started cranking out cut-rate price films (mostly crime dramas & westerns) for television. ***Tempted by the huge profits that could be made, many Hollywood producers made the switch to independent television production. Among them were two former RKO contract players -- Lucille Ball and Desi Arnaz -- who formed Desilu Productions.*** By 1955, they were turning out hundreds of hours of programming every year, including *I Love Lucy*.

## 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.

In 1993, U.S. figures place pay and free television at 19 per-cent of cinematic revenues, movie theaters at 27 percent, and home video at 49 percent. Disney popularized the use of tie-in products with his movies – movie character dolls and figurines, photographs of stars, games based on the movie and/or movie characters. In 2003, they accounted for only 18% of the take. Instead, home entertainment provided 82% of the revenues. Further, print and advertising costs eat away most if not all of the theatrical revenues, but the studios retain most of the money from home entertainment. All of this has transformed the way Hollywood operates. Theatrical releases now serve essentially as launching platforms for videos, DVDs, network TV, pay TV, games, and a host of other products

# 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.

**Hertz** - Heinrich Hertz (1857-1894) deduced from James Clerk Maxwell's theory that electromagnetic waves, generated by a changing or oscillating electric current, traveled through space with the same velocity as light. This suggested an experiment. In 1886, Hertz invented a simple detector for high frequency oscillations. It consisted of an adjustable loop of wire with a small gap in it for sparks. If a detector was brought near an oscillating circuit, sparks would leap the small gap when the loop was held in the right position to obtain the maximum inductive linkage. The detector could be varied in size and so tuned to the frequency, or the wavelength, of the oscillator. With his simple apparatus, Hertz carried out a decisive series of experiments in 1888 and !! 1889. He measured the length of standing waves transmitted along a long open wire and showed how waves travelling along the wire interfered with vibrations in space from the same source. The wavelength as measured on the wire and the calculated frequency of the oscillator enabled him to calculate the velocity of the waves on the wire. From the interference pattern he was able to show that the velocity of the vibrations, or waves, in space was that of light. And he demonstrated that the waves could be reflected from the walls of a large room to give the effect of standing waves in space. The *experimentum crucis* had therefore decided in favour of Maxwell's theory and the reality of Maxwell-type electromagnetic waves in empty space had been established. Hertz went on to show that these waves had the same properties as the vibrations that caused the sensation and phenomena of light. They could be reflected and refracted; they were 'normally polarized' and could be made to display the characteristic phenomenon of interference. Hertz had enormously extended the spectrum, from visible light through radiant heat to the new Maxwell-type waves whose length, from crest to crest, was measured in metres, rather than in tiny fractions of a millimetre. Significantly, too. Hertz showed that the field strength of electromagnetic waves diminished much less rapidly with distance than did the field strength of Faraday-type induction. (p375-376) [Cardwell\_Norton History of Technology]



# 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

Although much work was being done on Hertzian waves, it was in physics and not technology. It was left to a wealthy young Italian, barely out of his teens, to convert these scientific developments into a revolutionary method of transmitting information. Guglielmo Marconi (1874-1937) had attended Augusto Righi's lectures at Bologna University on Maxwell's theory and on Hertz's experiments; and he had read Lodge's London lecture on Hertz's experiments. He could, he said later, hardly credit that the great men of science had not already seen the practical possibilities of Hertzian waves; but, as Lodge later confessed, they had not. ***Marconi, in short, was the typical outsider who, having no prior connection with an art or technology, revolutionizes it.*** **Marconi's radio** - After Hertz's death in 1894, Marconi replicated Hertz's experiment and then added to the smaller spark gap a Branly coherer [a tube invented by Edward Branly in 1891 with electrical contacts at either end and a metal dust suspended in the middle that was used as an amplifier of telegraph signals], attached the Branly coherer to a battery, and the battery to a Morse printer. Here in primitive form was a wireless telegraph, set to record messages in the dots and dashes of Morse code that were beamed electronically from a transmitter across the ether to a receiver.

# 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.

Spurred by this success and by the possibility of transmitting intelligible sound, GE had by 1914 built alternators that could transmit voice sound across thousands of miles.

## 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

World War I sparked a huge demand for wireless equipment -- millions of vacuum tubes, thousands of transmitters, large numbers of receivers and head phones. These demands were met by General Electric, Westinghouse, and Western Electric (the manufacturing subsidiary of AT&T). Also, thousands were trained as radio operators. In January 1917, there were 970 Navy radiomen; on November 11, 1918, there were 6,700.

# 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

When Harry P. Davis, a Westinghouse vice-president, saw the ad, he suddenly grasped that the company's conception of the wireless market had been much too limited in scope. He realized that "the efforts that were then being made to develop radio telephony as a confidential means of communication were wrong, and that instead its field was really one of wide publicity, in fact, the only means of instantaneous communication ever devised." He now comprehended that the amateurs did not represent a discrete market limited to technically inclined boys and men; rather, the amateurs were simply the forerunners of a much larger market for radio receivers. As Davis later remarked, "Here was an idea of limitless opportunity."

## Radio

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

Davis urged that Westinghouse authorize Conrad to build a more powerful transmitting station at the Westinghouse plant and that Conrad broadcast on an even more regular basis. These broadcasts, according to Davis's plan, would stimulate sales of radio receivers, and the profits from the sales would defray the cost of the station. Davis wanted the station completed by November 2, so Conrad could broadcast the presidential election returns. At 8:00 P.M. on November 2, 1920, the newly licensed station KDKA, operating at 360 meters, broadcast the election results. Amateurs listened enthusiastically, sometimes rigging up loud-speakers so friends and family members could listen, as well. To ensure that the broadcast had the right effect, both within and outside of the company, Davis provided Westinghouse officers with receiving sets, and also helped arrange for local department stores to have their radios tuned to Conrad's station. Newspapers in Pittsburgh and elsewhere took note of the event, but most newspapers and magazines ignored the broadcast. News of it was spread most rapidly and enthusiastically by word of mouth among amateurs and their families and friends. Over the next year and a half, the "broadcasting boom" swept the United States, beginning in the Northeast and moving south and west, reaching unprecedented levels of intensity by the spring of 1922

## 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

**Bandwidth** - A major initial choice facing the FRC at its inception was the design of the spectrum -- how to divide the bandwidth allotted to broadcasting among different kinds of channels. Since broadcast channels needed to be 10 kHz apart, this meant that 96 channels could fit on the broadcasting band. Six of these were set aside for Canada. The number of stations that the remaining 90 channels could support depended on the location and power levels of broadcast transmitters. At a high power, only one station could occupy a channel; at moderate power, there could be several regional stations at the same frequency spread around the country; and at the lowest power level, many dispersed local stations could use the same wavelength. Thus, the greater the number of high-power or clear channels, the less the number of regional and local stations. Because clear channel stations required more expensive transmitting equipment, the interest in clear channels was greatest among the well-financed commercial broadcasters. !! Convincing the FRC to set aside clear channels was a high priority for the emerging national radio networks. Non-profit broadcasters, in contrast, preferred more affordable local stations. Since clear channels could reach rural listeners who otherwise might lack access to radio and also provide better reception for people with cheaper radios, there was a strong argument for clear channels

**Commercial advertising & networks** - Before 1927, stations were able to operate on minimal budgets. In 1925, the average station was on the air only five hours per week, most broadcasters operated at low frequency, and programming was inexpensive since many performers appeared for free and many stations paid no royalties to composers. By the late-1920s, regulatory and competitive pressures had sharply increased costs as stations moved to higher power levels, stricter engineering standards, and 17-hour daily broadcast schedules together with higher programming costs as listening audiences demanded higher quality programs and composers/musicians demanded payment of royalties. Without a license fee or tax support to bear its mounting cost, American radio was certain to be dominated by commercial broadcasters, and these broadcasters were bound to turn to networks to control programming costs and advertising to provide revenue,

# 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.

Networks gave advertisers of brand-name consumer products efficient access to a large national audience, and out of their advertising revenue they provided stations with a dependable stream of income to run the programs the advertisers sponsored. Networks also gave their affiliates a competitive advantage by supplying popular and high-quality programs at low or zero cost that unaffiliated stations in their local markets found it difficult to match. Networks had an economic logic, based on the relatively high cost of producing content (programming) compared to the costs of transmission and reproduction. The additional role of connecting national advertising and national audiences gave the networks an unbreakable hold on broadcasting. With advertisers came increasingly influential ad agencies. Although the agencies started out by preparing copy for the radio advertisements and negotiating with stations on behalf of sponsors, they quickly assumed the central role in program production. Increasingly, the agencies came up with the ideas for programs, wrote the scripts, hired the performers, found sponsors, and presented shows to the networks as a complete package. By 1929, advertising agencies were producing 33 percent of programs; individual sponsors, another 20 percent; the networks, 28 percent; and special program builders, 19 percent. !! Within a few years, the agencies took over virtually all but the sustaining programs the networks produced for use during unsold airtime.



## Radio

- Radio quickly penetrated the American market
  - 1927 – 25% of all American households had a radio
  - 1929 - 1/3<sup>rd</sup> 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

**Audience** – With radio, the audience was invisible and unknown. The speaker or performer could not see facial responses or hear laughter, booing, or silence; nor was there applause. At the same time that the size of the speaker's audience had multiplied beyond anyone's calculation, his visual relationship with that audience was severed

# 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 imagery** - There are compelling physiological reasons why people are so nostalgic for radio. “People loved radio -- and still do -- because as cognitive psychologists have shown, humans find it useful -- in fact, highly pleasurable -- to use our brains to create our own images. What we call our imagination is something the brain likes to feed by generating images almost constantly: that’s what imagination is, the internal production of pictures, of images. Autobiographical accounts from great conceptual scientists like Michael Faraday, James Clerk Maxwell, or Albert Einstein describe a process in which they did their most creative work using visual imagery, which was later translated into equations and theorems” Dr Mark Tramo, a Harvard Medical School neurobiologist, emphasizes that when information comes solely through our auditory system, our mental imaging systems have freewheeling authority to generate whatever visuals they want. Anyone who has camped out in the woods at night, associating different night noises, with all kinds of soothing and dangerous possibilities, knows the power of sound. When sound is our only source of information, our imaginations milk it for all it’s worth, creating detailed tableaux that images, of course, preempt.

**Radio – a multi-tasking medium** – With radio, you could do something else while listening, you didn’t have to watch and you didn’t have to concentrate, depending on what was on. Radio could adjust much more to physical circumstances -- cooking dinner, driving to work -- than any of the other media. We could ‘continue with our lives’ while listening. This meant that radio listening also became interwoven with the ritualized routines of everyday life -- reading the paper, eating meals.

**Imagined communities** – The concept of “imagined communities” derived from Benedict Anderson who asked how nationalism -- the notion of a country with a distinct identity, interests, and borders to which one belonged -- came to emerge so concretely by the end of the 18<sup>th</sup> century. He insisted that while political states had borders, leaders, and populations, nationality and nations are *imagined*, because most of the nation’s members will never actually meet another, ‘yet in the mind of each lives the image of their communion’ -- a communion that transcends divisions based on class, race, and gender and which has both historical continuity and a future directed toward the realization of some larger, grander purpose. While Anderson saw nationally distributed newspapers and

# 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

**Standardization of Speech** – Fully established networks and the advertisers who controlled much of the radio programming imposed standards of radio pronunciation. Diction contests set norms for announcers and listeners. Thus, announcers, newscasters, dramatic actors/actresses, and those who read the commercials spoke an ‘official’ English that was largely mid-Western in form.

## 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** – Radio led to the rise of a revolutionary popular entertainment industry geared to the mass market which reduced traditional forms of high art to elite ghettos inhabited by the well-to-do and the highly educated. Thus, the attendees of the theater and the opera, the visitors to the museums and the art galleries, and the readers of poetry and literary classics were increasingly among the educated elites while the common culture was based upon the mass entertainment industries -- cinema, radio, television, and pop music -- which the elite shared while the general public rarely encountered the traditional high arts

**Music** – Prior to the radio and the phonograph, people heard music only when in the presence of musicians. Now they could hear music whenever they wanted – by either putting a record on the phonograph, or tuning into the proper radio station

# 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

**Audience** - The object of this scrutiny—the audience—was itself an invention, a construction that corralled a nation of individual listeners into a sometimes monolithic group that somehow knew what "it" wanted from broadcasting. But the most important thing to remember is something we now take totally for granted: how the audience spent its leisure time was up for study and study, in fact, became a hugely profitable industry. Beginning in the 1920s and continuing to today, the corporate obsession with the tastes and preferences of the broadcast audience has produced a nationwide, technologically instantaneous network of audience surveillance. Audience ratings got their start when Archibald Crossley developed a ratings service that relied on telephoning people and asking them what they had listened to the night before

**Print advertising** – Advertisers preferred radio over print media for the following reasons:

1. Like graphics, but unlike the printed word, radio could influence illiterates
2. Unlike newspaper and magazine ads, radio commercials could not be skipped over.
3. "Not only could one listen to radio while engaged in other activities, including reading, one could continue to listen long after becoming too tired to do anything else."
4. Unlike print communication, radio could be received by groups of people -- a family in a living room, friends riding in a car,
5. Because radio carried the human voice, broadcasting seemed more personal and more intimate than print, and thus was more persuasive than print.

# 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

Singers—especially sopranos—accustomed to projecting their voices on a stage often blew the tubes on radio transmitters when they used the same vocal force in front of a microphone. Hence the development of crooning, pioneered by Vaughn de Leath, "The First Lady of Radio" who performed frequently on WJZ in Newark in the early 1920s. De Leith developed a soft, cooing approach to her singing that was less stage oriented and more intimate, and that didn't do violence to transmitters.<sup>14</sup> This style was emulated with great success by male singers, most notably Rudy Vallee and Bing Crosby, who exploited radio's technical limitations to their own ends.



# 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

**Code encryption** - Radio was an awkward instrument of war since radio messages could be heard by anyone listening in. This led governments to begin encrypting radio transmissions in code and subsequent attempts on the part of rival governments to break the codes. Thus, radio made code encryption and code breaking key elements of intelligence in war and diplomacy.

**Set the stage for TV** - Radio is arguably the most important electronic invention of the century. Cognitively, it revolutionized the perceptual habits of the nation. Technically, culturally, and economically, it set the stage for television. It forever blurred the boundaries between the private domestic sphere and public, commercial, and political life. It made listening to music a daily requirement for millions of Americans. For the entire span of the twentieth century, listening to radio— first introduced to America as "wireless telegraphy" in 1899—has been a major cultural pastime. Even with the advent of television, which was supposed to make radio obsolete, radio has remained a thriving cultural and political force. Today we have twice as many radios in America as we do people.

**Men and Music** – As Susan Douglas in *Listening . Radio and the American Imagination* noted, "radio—by making musical pleasure acceptable for men; by producing a fraternal subculture of hams eager to feel a sense of connectedness to each other; and by letting male hysterics like Limbaugh vent their emotions about politics, culture, and women invisibly over the airwaves—has also given men access to those "stigmatized parts of themselves" that have been deemed feminine and therefore inadmissible." In other words, through radio men have also been able to become more like women without appearing to do so." In the Victorian era, music was normally the province of women, who as girls were taught how to play the piano, and, as a consequence, monopolized the local (as distinct from the professional) playing of music, thus identifying music as a feminine pursuit.