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Technology in the 1930s

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New Technologies

- The 1930s saw the beginnings of several technologies we take for granted
  - Photoflash bulbs – 1930
  - Sliced bread – 1930
  - Polyvinyl chloride – 1930
  - Polystyrene - 1931
  - Electric guitar – 1931
  - Electron microscope – 1933
  - FM radio – 1933
  - Magnetic tape recording – 1935

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New Technologies - 2

- IBM electric typewriter - 1935
- Xerography – 1936
- Waring blender – 1937
- Instant coffee – 1938
- Fluorescent lights – 1938
- Ballpoint pens - 1938
- Nylons – 1939
- Helicopter -1939
- Television – 1939
- Car radio - 1939

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Maturing Technologies

- We will focus on the four technologies that had a significant influence on the 1930s
  - Motion Pictures thanks to the “talkies”, 3-color Technicolor, the full-blown emergence of the studio and star systems, and the marketing of 16mm and 8mm film cameras
  - Still photography thanks to the 35mm camera and Kodachrome
  - Radio, thanks to the newly-created networks, the cheap table-model radio, the newly-created radio genres, and the full emergence of sports and news broadcasts
  - The airplane thanks to the DC-3 and a new airport infrastructure

Movies in the 1930s

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Motion Pictures

- Motion pictures are based on the illusion of continuous motion. This results from:
  - The persistence of vision
  - The Phi phenomena
- Because of persistence of vision, we do not see the dark interface areas of a projection print as it moves through the projector

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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 1/20th to 1/5th 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.

Prior to the Talkies

- Hollywood had emerged as the center of both American and world feature film production
- The "star system" had emerged
- The Hollywood studios had come to dominate film production and film distribution
  - The Studio System consisted of:
    - 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
    - Multiple production units, each headed by a director
    - Each director shooting an assigned film according to a detailed continuity script, a detailed budget, and a tight schedule with the studio making the final cut

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WWI and European film - Shut down European production - During the war, however, European film production virtually ceased, in part because the same chemicals used in the production of celluloid were necessary for the manufacture of gunpowder. The American cinema, meanwhile, experienced a period of unprecedented prosperity and growth. By the end of the war, it exercised nearly total control of the international market: when the Treaty of Versailles was signed in 1919, 90 percent of all films screened in Europe, Africa, and Asia were American, and the figure for South America was (and remained through the 1950s) close to 100 percent.

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. 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. The star system enabled Hollywood to create

The Golden Age of Movies

- The 1930s saw the following:
  - Talking pictures replaced the silents
  - Technicolor came on the scene
  - Movies developed many of their characteristic genres
  - Movies become subject to the strictures of the Motion Picture Production Code
- With the combination of sound and color, Hollywood entered a “golden age” that lasted until television

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Talking Pictures - 1

- In 1927, Warner Bros released *The Jazz Singer* which included dialog as well as music. Its phenomenal success ensured the film industry's conversion to sound.
  - Warner Bros pioneering of talkies propelled it from the smallest, most poorly financed movie studio to a major studio and a force to be reckoned with in Hollywood

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Warner Bros – Warner Brothers—Harry, Jack, Sam, and Albert—was the smallest, most poorly financed movie studio in Hollywood. As box office receipts fell, the broth-ers knew they would have to take greater risks than larger studios if they were to increase their box-office revenue. Thus, when the owners of Vitaphone patents came around to see them, the Warner brothers were interested. Vitaphone demonstrated its wares in New York City with a program of musical short sub-jects from renowned musical celebrities such as Mischa Elman and Giovanni Martinelli, plus a silent film, Don Juan with John Barrymore. Because the music came from behind the screen rather than from live musicians sitting in front of the screen as in the case of silent films, the Warner brothers thought that a film's musical accompaniment enhanced the quality of the movie. At the same time, they might be able to sell Vitaphone as a way of providing "canned" music in lieu of the more expensive live musicians. Because the audience liked the music they heard, the Warner brothers were encouraged to risk everything on a full length sound film. ***The assets of Warner Bros rose from $5 million in 1927 to $160 million in 1929, with a net profit for 1929 of $17 million, a record high for the industry, and nearly 900% greater than the previous year.***

Talking Pictures - 2

- Rather than use Warner Bros sound system, however, the other studios decided to use a sound-on-film system
  - This enabled images and film to be recorded simultaneously on the same film medium, insuring automatic synchronization
  - Competition between Western Electric's Movietone and General Electric's Photophone competing sound-on-film systems led RCA to form RKO Pictures

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Sound-on-Film - Despite Warner Brothers' obvious success with sound films, film industry leaders were not eager to lease sound equipment from a direct competitor. They banded together to adopt a Western Electric sound-on-film system known as Movietone, that was marketed by Western Electric's newly created marketing subsidiary, Electrical Research Products, Incorporated (ERPI).
RKO Pictures - ERPI's monopoly did not please the Radio Corporation of America (RCA), which had tried to market a sound-on-film system that had been developed in the laboratories of its parent company, General Electric, and had been patented in 1925 as RCA Photophone. In October 1928, RCA therefore acquired the Keith-Albee-Orpheum vaudeville circuit and merged it with Joseph P. Kennedy's Film Booking Offices of America (FBO) to form RKO Radio Pictures for the express purpose of producing sound films using the Photophone system (which ultimately became the industry standard).

Talking Pictures' interesting consequences - 1

- Increased Hollywood's share of world cinematic revenue
- Led to 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 creation of distinct genres to facilitate marketing

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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. 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. These included Norma Talmadge, Emil Jannings, John Gilbert, Harold Lloyd, Lillian Gish, Colleen Moore, Gloria Swanson, and Douglas Fairbanks, Sr.

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 Giannini 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

Talking Pictures' interesting consequences – 2

- Led most theaters to drop the interspersing of vaudeville acts and live music with motion pictures
  - Resulted in the fading of vaudeville
- Led to the sound pioneers becoming the dominant studios in Hollywood, resulting in the emergence of a Big 5 and a Little 3 with a few independents
  - The Big 5 were Warner Bros, Fox, M-G-M, Paramount & RKO. The Little 3 were Universal, Columbia, and United Artists
- Altered the behavior of moviegoers
  - The talking audience for silent pictures became the silent audience for talking pictures

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End of vaudeville - With the instant popularity of talking pictures, most theaters found they could drop the practice of interspersing vaudeville acts and live music with silent motion pictures. The grand picture palace, which had the upper hand as long as theaters presented a combination of film and live entertainment, lost its economic advantage as full programs of sound motion pictures became available. A few vaudeville acts, such as the Three Stooges and the Marx Brothers, were able to transfer their style of entertainment to film, but for the most part vaudeville faded.

Studios - Studios quick to seize the opportunity to make "talkies"—Warner Bros., Fox, Metro-Goldwyn-Mayer, and Paramount—soon gained dominance in a movie industry By the mid-1930s, Hollywood was dominated by 8 studios – the Big 5 and the Little 3. Big 5 – Paramount, 20th Century Fox, Warner Bros, RKO, and M-G-M. Little 3 – Universal, Columbia, and United Artists. A few independents – Republic & Monogram

Behavior of Moviegoers - The rapid switch from silent to sound motion pictures altered the behavior of moviegoers, the historian Robert Sklar points out. It was considered quite acceptable for silent movie audiences to react out loud to what they saw on the screen. An ongoing series of comments could create a bond among members of an audience sitting in the dark, furthering a sense of community among those in a neighbor-hood or small-town theater or even creating one temporarily in an ur-ban picture palace. Talking by viewers made silent movie-going a shared experience and rendered each screening a unique and personal event. With talking pictures, however, audience conversation served to distract from the film dialogue, and audience members who spoke aloud were promptly hushed by ushers or fellow patrons. As Sklar observed, "The talking audience for silent pictures became a silent audience for talking pictures."[4] As a result, movie-going soon became a much more private and passive experience, even in a crowded theater.

Talking Pictures' interesting consequences – 3

- Sound gave filmmakers new ways to attract and excite audiences
  - Allowed films to become more fast paced and complex
  - Boosted ticket sales
    - In 1930, weekly movie attendance rose to 90 million. This equaled 75% of the total American population
  - Boosted the popularity of war movies, horror movies, westerns, and films that depended on clever, fast-paced, and witty dialog

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Sound effects - The sound of shooting and screams as well as the noise of galloping horses, creaking doors, and thunderous explosions seemed guaranteed to generate thrills and sell tickets. Stories set in wartime became far more popular than they had been in the silent era, espe-cially after a film set in World War I became the biggest hit of 1930. Ironically, *All Quiet on the Western Front* was based on a German novel stressing the universal destruction and tragedy of war. Horror films, such as *Dracula*, *Frankenstein*, and *King Kong*, likewise attracted crowds. *King Kong* proved particularly popular. The story re-volved around a clash between modern science and a powerful force of primitive nature. The filmmakers shrewdly kept the contest even until the last scene when warplanes finally destroyed the giant ape as he climbed to the top of New York's newest and tallest skyscraper, the Empire State Building. The sounds of shooting and pounding horses' hooves helped Westerns, which had been slipping in popu-larity but which were relatively inexpensive to produce, regain an important position in Hollywood's output. Sound also made possible films that depended on shocking or clever fast-paced dialogue, often with subtle sexual double meanings that could titillate audiences but escape censorship.

Comedies - The comedies of the Marx Brothers and Mae West in the early 1930s first exploited the humorous possibilities of sound. As the decade wore on and as the industry put in effect a 1934 self-censorship production code, filmmakers turned away from overt sexuality and toward much more subtle "screwball" comedies. Films such as *It Happened One Night*, *My Man Godfrey*, and *His Girl Frid*ay combined wacky situations, witty talk, and romance.

Singing & dancing - Films that featured singing and dancing offered additional op-portunities to exploit sound. Some of the most popular films of the decade, from *Gold Diggers* of 1933 to *The Wizard of Oz* in 1939, in-volved song and dance.

The Motion Picture Production Code

- 1915 – The Supreme Court ruled that movie making was a business not protected by the the First Amendment
- In the 1920s, the motion picture industry was rocked by sex scandals, sensational divorces, and accusations that sex was for sale in exchange for movie roles
- The 1920s saw conflict between those concerned that movies adversely affected public morals and movie producers/directors who resisted censorship and felt that movies devoid of sex and violence would not sell at the box office

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Supreme Court - In 1915, in *Mutual Film Corporation v. Industrial Commission of Ohio*, the Supreme Court ruled that making movies was a business as any other business, and so movie producers were subject to prior censorship and could not claim the protection under the First Amendment to the United States Constitution which guarantees freedom of expression. Moreover, by 1927 the threat of government regulation loomed over the movie industry. There were those in Congress who felt that recent consolidations in the movie industry had been in violation of the anti-trust laws and they threatened government investigation. What the movie industry wanted was a means of regulating and censoring itself while keeping government imposed controls at bay. Faced with pressure to offer more uplifting fare, the newly created Motion Picture Producers and Distributors of America (MPPDA) in 1922 turned to William Harrison Hays, President Warren G. Harding's postmaster general, to direct their organization.

The Motion Picture Production Code -2

- By 1927, the Hays Office developed a list of 11 DON"Ts and 25 BE CAREFULs
- In 1930 in response to the threat of censorship by various states, the Motion Picture Producers and Distributors of America agreed to the Code
  - The Code consisted of
    - A general statement of principles concerning the moral responsibilities of moviemakers
    - The "Don'ts" and "Be Carefuls"

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The Don'ts and Be Carefuls - The Hays Office developed a statement of movie "Don'ts" and "Be Carefuls." While God was satisfied with ten commandments, the list of "Don'ts" included eleven items which could not be shown on the screen. These included profanity, licentiousness or suggestive nudity, illegal drug traffic, and inference of sexual perversion, white slavery, miscegenation, sex hygiene and venereal diseases, childbirth, children's sex organs, ridicule of the clergy, and willful offense to any nation, race, or creed. The list of "Be Carefuls" included twenty-five subjects about which movie producers were to exercise spe-cial care. Producers were to be careful about the use of the flag, international rela-tions, arson, firearms, theft, robbery, brutality, murder techniques, methods of !! smuggling, hangings or electrocutions, sympathy with criminals, sedition, cruelty to children or animals, the sale of women, rape or attempted rape, first-night scenes, man and woman in bed together, deliberate seduction of girls, institution of marriage, surgical operations, the use of drugs, and excessive kissing. The cod-ification of "Don'ts" and "Be Carefuls" was unanimously adopted by MPPDA in October 1927.
Motion Picture Production Code - In 1929, lay Catholic Martin Quigley, editor of the *Motion Picture Herald,* a prominent trade paper, and Jesuit priest Father Daniel A. Lord, created a code of standards (which Hays liked immensely), and submitted it to the studios. Lord was particularly concerned with the effects of sound film on children, whom he considered especially susceptible to their allure. Several studio heads, including Irving Thalberg of Metro-Goldwyn-Mayer (MGM), met with Lord and Quigley in February 1930. After some revisions, they agreed to the stipulations of the Code. One of the main motivating factors in adopting the Code was to avoid direct government intervention. It was the responsibility of the Studio Relations Committee (SRC) to supervise film production and advise the studios when changes or cuts were required. On March 31, the MPPDA agreed that it would abide by the Code.

Academy of Motion Picture Arts & Sciences - On January 11, 1927, thirty-six people gathered in the Ambassador Hotel in Los Angeles with a view toward establishing an organization to speak on such issues as the role of the emerging sound films, demands for censorship of movies by religious and community improvement groups, threats by government to sue the industry for alleged violation of anti-trust laws, and most importantly, to respond to the demands of employees in the movie industry to join unions. The movie producers were determined to keep Hollywood an open shop. In the lat-ter effort they failed. By May of 1927, the founders of the Academy of Motion Picture Arts and Sciences developed a constitution and set of by-laws and selected their first officers. A charter was granted to the academy by California and the board of directors chose Douglas Fairbanks as its first president.

3-Color Technicolor

- Added living color to the movies
- Popularized certain genres that were better viewed in color than in black & white
  - Historical costume dramas
    - Gone with the Wind (1939}
    - The Adventures of Robin Hood (1p38}
  - Animated features
    - Snow White and the Seven Dwarfs (1937)

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What Hollywood Wrought - 1

- 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

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According to historian David Kyvig *Daily Life in the United States, 1920-1940,* Young people testified over and over, for a pioneering study of the influence of movies, that they learned a great deal about how to act from what they saw on the screen. One young woman reported that her observation that movie actresses closed their eyes while kissing led her to imitate them. A young man reported, "It was directly through the movies that I learned to kiss a girl on her ears, neck, and cheeks, as well as on the mouth." And the rapid pace of silent movie romances convinced other young people that romance occurred quickly; they reported that kissing and neck-ing were happening earlier than before in their relationship. "I know love pictures have made me more receptive to love-making," said one sixteen-year-old high school sophomore. "I always thought it rather silly until these pictures, where there is always so much love and everything turns out all right in the end, and I kiss and pet much more than I would otherwise."

What Hollywood Wrought - 2

- 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 popularizing the myth of the "Wild West"

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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 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 19th 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 – While the myth of the "Wild West" dates back to the days of the frontier and was popularized by Buffalo Bill Cody's Wild West Show and countless dime novels, it was Hollywood that made the cowboy, the sheriff and marshall, the gunslinger, and the Wild West known to all

What Hollywood Wrought - 3

- 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

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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 Satin 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.

What Hollywood Wrought - 4

- 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 feature film

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Air Conditioning - In 1922 Carrier engineers built a 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, and said "Yes, 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 and paved the way for the air conditioned home.
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 1937 because no one imagined that a feature-length animated film might be possible. The songs from that movie became memorable hits, and the characters enjoyed immense merchandising success.

What Hollywood Wrought - 5

- Movies had the following effects - 5
  - Helped turn the American people against Prohibition
    - The urban jazz-age flapper and her boyfriend conveyed the impression that drinking was widespread and that violating Prohibition laws was socially respectable
  - 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

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In a representative sample of 115 films from 1930, liquor was referred to in 78 percent and drinking depicted in 66 percent. Further analysis of 40 of those films reveals that while only 13 percent of male villains and 8 percent of female villains could be seen consuming alcohol, no less than 43 percent of heroes and 23 percent of heroines were shown doing so.

Movies and the Great Depression - 1

- Movies were a low-priced amusement
  - 25 cents to see a double feature as late as 1940 ($3.78 in 2009 prices)
  - For the unemployed and underpaid, they were comfortable places to sit
  - In 1940, weekly attendance averaged 80 million

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Movies and the Great Depression - 2

- Effects of the Great Depression on Movies
  - Popularized escapist as distinct from topical films
    - Historical or literary-based films that showed people coping with difficult times and overcoming them
    - Animated films – Walt Disney
  - Led to various innovations as theater owners sought to attract customers
    - Drive-in movies
    - Serials
    - Double Features
    - Popcorn & candy sales
    - Bank Nights and Giveaways

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Coping with difficulty films - A large number of historically or literary-based films, from *David Copperfield* in 1935 to *Gone with the Wind* in 1939, of-fered images of people coping successfully with even worse circumstances than the Great Depression. Other forms of cinematic escapism were likewise popular. Busby Berkeley produced a series of elaborately choreographed and imag-inatively photographed musicals that also involved upper-class lifestyles but achieved their effect as much from their dancers' com-plete departure from the conventions of real life. Meanwhile the child actress Shirley Temple starred in a series of films that showed her singing, dancing, and cheerfully triumphing over adversity, of-ten in exotic settings and usually assisted only by some elderly male companion. The plump pre-teenage girl with curly hair, deep dim-ples, and an ever-present sunny smile became so popular that moth-ers all over the country rushed to dress their daughters in Shirley Temple outfits and give them Shirley Temple hairdos. Perhaps the most escapist film of the decade was the 1939 hit *The Wizard of Oz*, which transported a young girl from depressed black-and-white Kansas to the vivid color (new to film) of Oz, a land popu-lated by talking scarecrows, lions, tin men, wicked witches, and other fantastic creatures. The film contained the populist message of the novel on which it was based—that simple human virtues of honesty, courage, sensible thought, mutual support, and affection were more to be relied on in times of difficulty than hocus-pocus in the capital city.

Drive-in movies - In 1933 Richard M. Hollinshead set up a l6-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. 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. 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.[19] 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.

Serials - To keep their patrons coming back, theaters re-turned to the silent-era practice of showing serials, short, intensely thrilling films that invariably left Flash Gordon or some other cen-tral character suspended in a perilous situation until the next episode a week later would produce an escape followed by entrapment in yet another predicament.

Double Features - Theater operators struggling to hold onto their audiences not only continued the practice of changing what they were showing one, two, or more times a week, they also began offering double features, two full-length films for the price of one. Producers and distributors disliked this latter practice but proved powerless to stop it. By the mid-1930s half the theaters in the United States were showing double features.

Popcorn & candy at the Movies – Theaters that had once disdained selling popcorn and candy because it seemed cheap and undignified now discovered that candy returned a 45 percent profit and popcorn three or four times its cost. In many theaters the sale of food and drink represented the difference between profit and loss, and snacking while watching a movie became commonplace.

Bank Nights – Bank nights involved the drawing of lucky tickets stubs for cash prizes. These became very popular, as did giveaways of glassware and china, one piece a week, so that only regular customers could build a set.

Still Photography in the 1930s

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Photography

- Photography is based to some extent on an optical illusion
  - The human eye sees a vast range of greys and colors but if the individual items of grey or color are small enough, it blends the distinct elements into a continuous tone
  - At the microscopic level, developed black & white film consists of either black or white film grains (or pixels in the case of digital photographs) but they are so small that the eye sees them as a continuous tone

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Where continuous tone imagery contains an infinite range of colors or greys, the halftone process reduces visual reproductions to a binary image that is printed with only one color of ink. This binary reproduction relies on a basic optical illusion—that these tiny halftone dots are blended into smooth tones by the human eye. At a microscopic level, developed black and white photographic film also consists of only two colors, and not an infinite range of continuous tones.

Color Photography

- At the microscopic level, developed color film consists of the black or white film grains, but they are within three different dye layers – normally cyan, magenta, and yellow. When white light is reflected off or passed through the film, each layer subtracts from the white light to produce what we see as continuous tone colors

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There are two different types of color photography – Additive systems which add red-green-blue to black and Subtractive systems which subtract cyan, magenta, and yellow from white. Both involve the use of dye layers or color filters to produce the optical effect of full-tone colors. Most modern color films – such as Kodachrome, Ektachrome, and Kodacolor - use the subtractive system. Digital systems use an additive system of 24- or more-bit pixels.

35mm Photography

- 35mm still photography was based on several prior innovations
  - 35mm MOPIC roll film with perforations
    - The fact that film companies were producing large quantities of 35mm film stock led to the development of 35mm cameras
  - Fine grain film that could be exposed at high shutter speeds
  - Film cassettes that permitted loading of film into the camera with ease in broad daylight into all 35mm cameras

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35mm movie & still film – While both still and movie film were 35mm, they differed in the size of the image. Still images were 24mm x 36mm while the movie image is 22mm by 16mm with space on the side of the film to accommodate a soundtrack. They also differed in the type of perforations used – Bell & Howell standard for movie & Kodak standard for still.

35mm Still Cameras

- In 1934, Kodak introduced single daylight-loading 35mm film cassettes
  - This cassette could be used in all 35mm still cameras, including the German Leica and Zeiss Ikon Contax cameras
- In 1935, Kodak introduced the Kodak Retina 35mm camera. Also in 1935, the Argus camera came onto the market
  - The Argus Model A sold for $12.50 ($209.30 in 2012 prices)
    - 30,000 were sold the first week it went on the market
  - The Retina 1, which sold for $57.50 had shutter speeds up to 1/500th of a second – fast enough to freeze motion without blurring

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Daylight loading cassettes - Individual rolls of 135 film were enclosed in single-spool, light-tight, metal cassettes to allow cameras to be loaded in daylight. The film is clipped or taped to a spool and exits via a slot lined with flocking. The end of the film is cut on one side to form a leader.

Kodak Retina cameras - Retinas were manufactured in Stuttgart by Nagel Camerawerk, which Kodak had acquired in 1931, and sold under the Kodak nameplate. Retinas were noted for their compact size, quality, and low cost compared to their competitors and retain a strong following today. The original Retina, was introduced in 1934. The first Retina, a compact folding camera which pioneered the 135 version of the 35mm film, was followed by two new models in 1936. The *Retina I*, which was the more popular of the two, was essentially the same as the previous model. The *Retina I* was most commonly equipped with a 50 mm f/3.5 Schneider Kreuznach Retina-Xenar lens and Compur or Compur-Rapid shutter, though other lenses and shutters were available. The *Retina II* was a more expensive model which included a rangefinder.

Kodak Retina 1 Camera

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Argus Camera

Fuji 35mm Film Cassette

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Notes about the 35mm Camera

- Became a favorite of both professional and amateur photographers
  - The camera was small, compact, easily portable, and rugged enough to be used in the field
  - 35mm cameras like the Leica and Kodak Retinas had a sufficiently high shutter speed and low focal length to lens aperture ratio (f-stop) to photograph moving objects without blurring and to take pictures in poor light

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The Kodak Retina 1 had a shutter speed up to 1/500th of a second and a f3.5 lens. This was fast enough to freeze motion without blurring and to shoot black & white pictures in poor light without use of flash.

Impact of the 35mm Camera

- Led to the popularization of the candid snapshot in which the subject is not aware of being photographed
- Permitted “concealed” and “secret” photography since the camera was small enough to be hidden in one’s clothes or in a room and yet still be able to take pictures
- Led to the creation of a large body of skilled photographers who were not professionals but definitely beyond the casual shooter with a box camera
  - Could use the 35mm camera to create a variety of special picture effects

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The 35mm camera with its various shutter speeds and aperture f-stops (and different attachable lens ranging from wide angle to telephoto) permitted photographers to take pictures with a variety of special effects, such as blurring the foreground or background, deliberately underexposing or overexposing the film, and double or multiple exposing the image.

Impact of the 35mm Camera

- Since the processing of black & white film was a fairly simple process that could be done in a small dark room, it made the dark room part of many a house
  - There, one could process the film and then make prints and enlargements from the negative(s)

Kodachrome

- Kodachrome, introduced in 1935, was the first successfully mass-marketed color film
  - It produced a positive color slide
  - It used a subtractive color process with layers of magenta, cyan, and yellow
  - Because of its complex processing requirements, it was sold process paid until 1954
  - It won the admiration of both professionals and amateurs because of its vivid colors and its long-term archival stability
  - It's production run lasted for 74 years

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Process paid – When you bought Kodachrome, the film cassette came with a small screwtop can and a mailer. When you finished shooting the roll, you mailed it to Kodak, Kodak processed the film, and mailed back mounted slides.

Impact of Kodachrome

- Popularized color vis-à-vis black & white photography
- Created an ancillary demand for slide projectors and screens for viewing
- Led to the ritual of the photographer subjecting family, relatives, and friends to the slide show
  - With the subject generally being the recent wedding, birth, graduation, or family vacation

More General Impacts - 1

- Led to the visual documenting of persons and events that previously went undocumented
- Created a treasure trove of material for future historians and producers
  - People and institutions now only left paper records in the form of documents now left photos as well permitting us to see what people and objects looked like

More General Impacts - 2

- Since film freezes images in time, it draws very visible contrasts between the then (when the film was shot) and the now (when it was viewed)
  - This may have had some effect on how people viewed history
    - If events did not leave a visual record, then the events either did not happen or had relatively little significance in comparison with those event that left a visual record
    - History is less a logical continuous developmental flow and more a dichotomous succession of events

Radio in the 1930s

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During the 1920s

- Radio became a broadcasting medium took on many of the characteristics that marked radio and later television during their heydays
  - The AM band as we know it was created
    - Bandwidth & wattage allocations favored well-heeled stations
  - Commercial advertising emerged as the dominant source of radio station revenue
  - Networks provided programming to individual stations

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Creation of the AM band - In 1923, the Commerce Department realized that as more and more stations were applying for commercial licenses, it was not practical to have every station broadcast on the same three wavelengths. It was decided to set aside 81 frequencies, in 10 kHz steps, from 550 kHz to 1350 kHz (later extended to 1630 kHz), and each station would be assigned one frequency (albeit usually shared with stations in other parts of the country and/or abroad), no longer having to broadcast weather and government reports on a different frequency than entertainment.
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.
Network Programming - 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 in the 1930s

- Was characterized by:
  - Programming directed toward the tastes and interests of the largest possible audience
  - A concern with program ratings
  - An alliance of networks and advertisers
  - A weak, administrative type of Federal regulation
  - A widespread diffusion of radios in the American home where they served as centers of family life

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1920s Radio Programming

- In the 1920s:
  - Music – both live performances and phonograph recordings – dominated programming
  - Other programming consisted of
    - Election returns, political party conventions, and major sports events
    - Lectures, dramatic readings, and church services
  - Radio stations broadcast only a few hours each day

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Regular shows were rare in the early 1920s, and most stations depended on phonograph records, popular and light classi-cal music performed live by local talent, and talks (such as story-telling for children). For example, the early program logs of WHA, pioneer station of the University of Wisconsin, reveal radio pro-grams on nearly every imaginable topic. Faculty members, mostly on a one-time basis, gave dramatic readings and talks on music appreciation, gardening, electronics, and history. Such talks became a staple in radio, particularly on the stations run by universities. On station KDKA musical concerts, singers, and phonograph rec-ords predominated, along with rudimentary news reports and re-mote broadcasts of church services. From the outset, music filled much of radio's available broadcast time. Live performances of the parlor piano and vocal music of recent decades were most common at first, but classical music, especially opera and orchestral performances, enjoyed frequent broadcast. Radio also promoted the popularity of other forms of music. Both jazz and country music reached beyond the audiences they had known and evolved significantly as a result. Music that could be and often had been performed at home in the parlor included sentimen-tal songs, ballads, vaudeville and musical comedy tunes, and less-challenging operatic pieces. Such parlor music was familiar, traditional, and remained widely enjoyed by early radio audiences. The limitations of radio, however, reshaped this sort of music. Intense voices, especially high sopranos, had a tendency to blow out the tubes on radio transmitters. As a result, a number of singers developed a new soft, gentle style that came across well and soon became known as "crooning." Female singers such as Vaughn De Leath and Kate Smith as well as males such as Rudy Vallee and Bing Crosby built large and loyal audiences as they perfected the "croon-ing" style.

1930s Radio Programming

- In the 1930s:
  - Radio became a full-fledged mass medium
  - The entertainment genres that characterized the "golden age of radio" came into its own
  - Sports programming came into its own
  - Radio became a news dissemination medium

Radio Penetration

- Radio quickly penetrated the American market
  - 1927 – 25% of all American households had a radio
  - 1929 - 1/3rd owned a radio
  - 1934 - 60% of all homes had a radio;
  - 1940 - 83% of all households owned at least one set. There were also 6.5 million radios in automobiles.

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Radio penetration - When commercial broadcasting began in 1920, most receivers were simple, homemade crystal sets that could be put together for about $2 and used with a $4 set of earphones. By 1922, however, RCA began to manufacture the radiola, a device with six vacuum tubes, amplifiers, and a superheterodyne tuner that had a superior sound, required no external antenna, and was very simple to operate. As loudspeakers were improved and especially before 1928—when plug-in electric circuitry began to replace batteries interchangeable with automobile batteries and recharged by switching back and forth— sets were fitted into bulky, often ornate wooden cabinets and sold as living room furniture. Console sets large enough to hold a large battery and often also a phonograph dominated the market until the 1930s when economic conditions brought a demand for cheap table models and portable sets.
Radio ownership - According to Hadley Cantrill and Gordon Allport, radio ownership went up with income -- 90% of those earning over $10,000 a year owned radios whereas only 52% of those earning under a $1,000 a year did -- studies showed that upper-income people listened the least while those of middle and lower incomes listened the most. Radio ownership was most prevalent in the Northeast and lowest in the Southeast, with only 24% of Mississippi homes owning a radio. Nearly 40% of the audience listened three hours or more a day. Over 75% of the audience restricted their listening to three stations. The audience overwhelmingly preferred network to local programming, and preferred to get their news over the radio rather than from the newspaper.

Daytime Programming

- By the early 1930s, morning programming focused on weather reports, recorded music, and talk a la “Don McNeill’s Breakfast Club”
- By the late-1920s, broadcasters realized that the right daytime programming might attract housewives
  - This led in the early-1930s to serial romantic dramas, such as “Ma Perkins” and “The Romance of Helen Trent”
    - Termed soap operas because these programs were most often sponsored by laundry soap manufacturers

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Soap operas – By 1940, serialized daytime dramas or ‘soap operas’ constituted nearly 60% of all daytime shows.

Evening Programming - 1

- By 1930, evening programming focused on the radio genres with mass appeal
  - Domestic sitcoms
  - Crime, mystery, & detective shows
    - Psychological Thriller
  - Comedy/Variety shows
  - Radio versions of plays and movies

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Domestic sitcoms – These combined comedy and drama, often in the form of a husband-and-wife sitcom. This genre included *Vic and Sade, The Aldrich Family, Fibber McGee and Molly, The Life of Riley, the Bickersons, The Great Gildersleeve,* and *The George Burns and Gracie Allen Show*
Crime-mystery-detective shows – These included *Mr. District Attorney; Mr. Keen, Tracer of Lost Persons; The Shadow; The Fat Man; The FBI in Peace and War; Candy Matson; Yours Truly, Johnny Dollar; The Adventures of Philip Marlowe; Richard Diamond*; and *The Adventures of Ellery Queen*
Psychological thrillers - Radio with its sophisticated use of music and special sound effects helped popularize 'psychological thrillers' involving crime, action, and suspense. Among the popular shows of the late-1930s and 1940s were *The Shadow* (which began broadcasting on September 26, 1937) and *Mr. Keen, Tracer of Lost Persons* (which began broadcasting on October 12, 1937)
Comedy/Variety shows - comedy/variety shows included *The Jack Benny Program, The Edgar Bergen and Charlie McCarthy Show, Burns and Allen, The Fred Allen Show, The Bing Crosby Show,* and *The Bob Hope Show*
Radio Versions of Plays & Movies – Radio versions of films were done by *The Lux Radio Theater.* Radio versions of plays and novels were done by Orson Welles' *Mercury Theater of the Air*, and *The Hollywood Playhouse.*

Evening Programming - 2

- Probably the most popular program of the 1930s was “Amos ‘n’ Andy” which began broadcasting in 1929
  - About 1/3 of the nation’s population tuned in every weeknight at 7:00 PM
  - Focused on two black migrants to the South Side of Chicago who were perpetually confused by city life

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Amos ‘n’ Andy - Simple and trusting Amos, domineering Andy, and their good friend, a rascal who went by the nickname "the Kingfish," as well as many other characters were all played by the show's two white cre-ators, Freeman Gosden and Charles Correll. While much of the show's humor centered on the characters' distortions of language ("What a sitchiation," "Ain't dat sumpin," "I'se regusted," and the Kingfish's favorite phrase, "Holy Mackerel!"), Amos and Andy were portrayed as decent and likable fellows dealing with universally perplexing situations. Many black listeners seemed to enjoy the show as much as whites, though many blacks resented its stereotypical characterizations.

A Note on Sports Broadcasting

- The uncertainties of early radio required radio announcers with the gift of gab who could fill airtime if something went wrong
- Since many radio announcers lacked an athletic background, two or more announcers often teamed up to report a game
  - One described the play-by-play action and the other provided analysis, information on players, and 'color'.
  - With football, there was three announcers – one for play-by-play description, one for color, and a spotter to identify the large and constantly shifting cast of players on the field.

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One early sports broadcaster was Ronald Reagan who broadcast baseball games by reading off the sports telegraph ticker and creating the impression he was broadcasting from the game. One time, he was broadcasting a baseball game when the sports ticker got interrupted. Reagan had the batter foul off pitch after pitch until the ticker resumed.

Impact of Sports Broadcasting

- Revolutionized radio announcing by promoting a relaxed, colloquial, and emotionally inflected form of announcing
  - This in turn affected radio advertising, announcing for entertainment shows, and radio news in the 1930s and beyond
- Made baseball the 'national pastime'
  - Baseball is an ideal radio sport
  - Radio turned baseball into a male soap opera

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Sports announcing - Sports announcing was crucial to radio's early history because it revolutionized radio announcing. Early radio talks and speeches were delivered in a declamatory style that was often stiff or oratorical rather than conversational and ultimate. And a lecture on oral hygiene or the value of the Boy Scouts was not. likely to be animated. But when Graham McNamee announced the World Series he injected emotion, pace, and an intimacy with the listener into his play-by-play**. …** Sportscasting thus set the precedent for a more relaxed, colloquial, and emotionally inflected form of announcing that influenced radio advertising, announcing for entertainment shows, and radio news in the 1930s and beyond. Like newscasting, sportscasting had to be invented. One of the reasons [Red] Barber so admired McNamee was that he developed a mode of announcing with no established procedures or precedents. He couldn't see his audience, and his audience couldn't see the sporting event. What McNamee invented was the combination of the blow-by-blow or play-by-play with what came to be called color, the telling, visual details about how the event looked and felt. He reported the event as it occurred, but he also dramatized it, so listening to the broadcast was often better than going to the game or match itself.

Radio and baseball - Despite the concentrated coverage football got—for years all three networks often covered the same games so the airwaves were saturated with the sport—it is baseball on the air that people are most nostalgic for.[7] Some have suggested that this is because the pace of baseball was especial! well matched to an aural medium. The pace of baseball allows one to imagine not just the play-by-play but the ambience and layout of the ballpark. "There's no radio sport better than baseball to do stream-of-consciousness," adds the announcer Lindsey Nelson. But just as important, baseball over the radio wasn't a once-a-week show-down: it accompanied people and interlocked with their daily lives in three out of four seasons and so got powerfully structured into people's associative memories. As Curt Smith emphasizes, baseball was "less an event than a fact of life." And this has produced biases in what gets remembered and celebrated about sports announcing on radio. Gary Cohen, announcer for the Mets, sees baseball as a male soap opera, "a daily saga of victories and defeats and triumphs and losses." As in soap operas, in baseball "every day connects with the day before and every day connects with the next day and one year connects with the next,"[9] with the dull, repetitive, or disappointing games becoming worthwhile when the team finally ends up in first place.

News Broadcasting

- No regular news coverage before the mid-1930s
  - Newspapers refused to make wire service reports available to radio stations for broadcasting
- Only in the mid-1930s did the networks begin to broadcast regular and substantial news programs
  - Prior to that, radio lacked the resources and incentive to gather news on its own
  - Rising international tensions made news programs popular
    - What Saddam Hussein did for CNN during the Gulf War, Adolf Hitler did for NBC and CBS News
  - By 1940, network news & commentary shows comprised about 14% of all network evening programs

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Network News - Not until the mid-1930s did networks begin to broadcast regular and substantial news programs. Earlier, newspapers, fearing competition, had refused access to their news wire services. Radio lacked the incentive and resources to gather news on its own until the CBS and NBC networks decided to do so. News programs quickly became popular with the listening audience. Rising international tensions caused by the Spanish Civil War, the Japanese invasion of China, and Germany's assaults on numerous European countries under the leadership of Adolf Hitler gave news reports and analysis a growing presence and importance.

Radio becomes the main source for news - According to a *Fortune* survey made in 1939, 70 percent of Americans relied on the radio as their prime source of news and 58 percent thought it more accurate than that supplied by the press.

News commentators - The complex political and economic issues raised by the depres-sion, the New Deal, and the impending European crisis created a news hunger among Americans. One response to this came in the form of the radio news commentator, someone who specialized in analyzing the background of general news situations. These com-mentators successfully attracted sponsors and, like the variety show hosts, provided easy identification with a product

Notes About the Radio Medium - 1

- 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 any theater or symphony hall

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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

Notes About the Radio Medium - 2

- 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 individuals were a part – E.g. sports fans, Fred Allen fans, Amos 'n' Andy fans

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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 18th 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 print media as the generator of the nationalist "imagined community," it was radio that brought the imagined community to full fruition. Radio, through its various discourses -- linguistic slapstick, news reporting and commentary, the play-by-play, and DJ talk -- helped construct imagined communities of which we were a part, some national, some of them regional, racial, or generational

The Impact of the Great Depression

- Accelerated the expansion and influence of radio
  - Increased the audience for radio vis-à-vis other forms of entertainment
  - Caused vaudeville, the recording industry, nightclubs, and the performing theater to suffer, driving many of their performers into radio broadcasting.

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Audience – If you owned a radio, it was much cheaper to sit at home and listen to it than to go to a movie, an amusement park, a play, a vaudeville performance, or other forms of entertainment. **From vaudeville to radio -** Variety shows, especially when hosted by comedians, became the first important style of network radio. Relying heavily on the vaudeville format, these shows remained very popular throughout the decade; many of the stars continued the form on television. The master of ceremonies, who was either a comedian (Eddie Cantor, Ed Wynn, Fred Allen, George Jessel) or a singer (Al Jolson, Rudy Vallee, Kate Smith), served as a focal point for activity and as a means of easy identification with a sponsor's product. Nearly all the variety stars had long experience in vaudeville or the legitimate stage; the use of a studio audience recreated the human interaction so necessary in vaudeville. Ethnic and regional stereotypes and dialect stories, long a part of vaudeville and burlesque, easily made the transition to radio.

Effects of Radio - 1

- By broadcasting the same content to a vast audience at the same time, 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 know 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

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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.

Effects of Radio - 2

- 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.
  - Fostered an interest in classical music – especially live performance due to the poor sound quality of early radio
  - Fostered an interest in country/western music and jazz

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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 ghettoes 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. From the outset, music filled much of radio's available broadcast time. Live performances of the parlor piano and vocal music of recent decades were most common at first, but classical music, especially opera and orchestral performances, enjoyed frequent broadcast. While many Americans had joined in or at least heard the more popular music at home, in saloons and vaudeville theaters, or elsewhere, few had attended an opera or symphony concert. ***The audience that heard classical music with the low sound quality of early radio was soon eager for live performance. Between 1928 and 1939 the number of major professional symphony orchestras increased from 10 to 17; the total number of orchestras, including part-time less professional ones in smaller cities, grew from 60 to 286***. Perhaps !! more significant, whereas musical instruction in public schools was almost unheard of in 1920, two decades later it was widespread. Thirty thousand school orchestras and 20,000 bands had sprung up. Radio was much more effective than the earlier technological in-novation, the phonograph, in building an audience for classical music. Until the long-playing record was developed in 1948, phonograph records could hold only about five minutes of music per side, creating difficulties in the presentation of all but the shortest classical works. Furthermore, by 1924 superheterodyne radios were producing better-quality sound than phonographs. Radio therefore took the lead in presenting classical music, aided by the creation of the NBC Symphony Orchestra in 1936 under Arturo Toscanini and the weekly broadcasts of the New York Metropolitan Opera, starting in 1932. The phonograph industry went into a radio-induced slump that lasted through the 1930s.

Country music - Radio also promoted the popularity of other forms of music. Both jazz and country music reached beyond the audiences they had known and evolved significantly as a result. Music that could be and often had been performed at home in the parlor included sentimental songs, ballads, vaudeville and musical comedy tunes, and less-challenging operatic pieces. Such parlor music was familiar, traditional, and remained widely enjoyed by early radio audiences. Country music in the 1920s consisted of a range of non-professionalized, traditional folk music often referred to as "hill-billy." Early Southern radio stations experimented successfully with fiddle tunes, gospel songs, and other localized forms of folk music. In April 1924 the Sears, Roebuck station in Chicago (named WLS for World's Largest Store) began a fiddle and square dance music program called "The National Barn Dance." It was an instant hit. Nineteen months later, station WSM in Nashville, Tennessee, fol-lowed with a variety show named "The Grand Old Opry." Before long, the "Opry" had proved so popular that it was being broadcast four hours a night every Friday and Saturday. These programs, which could be heard throughout the South and Midwest, and a number of imitators called attention to country music and made celebrities of its best performers. Innovations in style, such as the combining of fiddle, guitar, mandolin, and banjo to make "bluegrass music," soon followed. Radio lifted country music from its highly localized roots and encouraged its evolution as widely popular and distinctive American music

Jazz - Radio did not at first embrace jazz, a musical genre ripening rap-idly in the 1920s. Jazz had its origins in Dixieland, ragtime, blues, and other musical forms that had evolved in the pre-World War I urban South, particularly in the black community of New Orleans. | Jazz migrated along with its practitioners to Chicago and elsewhere during the war and enjoyed growing popularity throughout the ur-ban North in the 1920s. Since jazz was not considered altogether re-spectable, whether because of its black roots, its spontaneous,!! improvisational nature, its pulsating and often passionate style, or its frequent association with prohibition-era speakeasies, most radio stations were at first reluctant to broadcast it. Band leader Paul Whitman did a lot to change attitudes toward jazz, less because he was a classical-trained musician and actually wrote down parts for his musicians than because he favored a soft, sweet, and smooth style of jazz. When he commissioned composer George Gershwin to write a jazz composition for piano and orches-tra and first presented *Rhapsody in Blue* in February 1924, jazz ac-quired instant respectability. Whitman's orchestra and his style of jazz became a regular feature of radio music for the next quarter-century. Other bands led by Guy Lombardo, Ozzie Nelson, Rudy Vallee, Duke Ellington, Glenn Miller, and Tommy and Jimmy Dorsey followed in Whitman's path, helping to make jazz an important part of radio broadcasting, especially in the 1930s and 1940s.

Effects of Radio - 3

- 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

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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.

Effects of Radio - 4

- 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
  - Favored jazz despite its frequent association with prohibition-era speakeasies and its black roots

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Crooning - *The limitations of radio, however, reshaped music.* ***Intense voices, especially high sopranos, had a tendency to blow out the tubes on radio transmitters. As a result, a number of singers developed a new soft, gentle style that came across well and soon became known as "crooning“ --*** singing in a gentle murmuring, soft, intimate manner that was adapted to the limitations of early amplifying systems.

Crooning was pioneered by Vaughn de Leith, "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.[14] This style was emulated with great success by other singers, most notably Rudy Vallee, Kate Smith, and Bing Crosby, who built large and loyal audiences as they perfected the 'crooning' style.

Effects of Radio - 5

- Radio and WWI led to code encryption and code breaking
- Radio paved the way for TV and radar
- Radio made music an acceptable endeavor for men
- Radio led people to match their personal schedules to the schedules of the broadcast day

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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 peace.

Set the stage for TV - Radio is arguably the most important electronic invention of the century. Technically, culturally, and economically, it set the stage for television. Technically, television was, in the words of David Sarnoff, "radio with pictures." Once radio came on the scene, there emerged a strong desire on the part of engineers and networks to add moving picture to voice transmission. Finally, the networks, genres, many of the programs, and even the actors/actresses that emerged with radio carried over to TV.

Men and Music –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. Susan Douglas in *Listening . Radio and the American Imagination* noted that radio - by identifying music with technology and by producing a fraternal subculture of hams eager to feel a sense of connectedness to each other – made musical pleasure acceptable to men.

Leisure by the clock – What the workplace (with its getting to work on time), the railroad (with its time schedules), and World War I (with its need for synchronized action) began, the broadcast schedule completed. Now everyone, not just workers or train travelers, had to match their daily routines to the clock. Not only men but also women and children now began to wear wristwatches.

Effects of Radio - 6

- Revolutionized advertising
  - Radio enabled the advertiser to reach into the home
  - Radio helped create the celebrity product endorser
    - This promoted an ethic of consumption, by encouraging people to buy the product or service that a psychologically-significant person endorsed
  - Radio enabled sponsors to identify their products with certain lifestyles and demographic groups
    - E.g. the Lucky Strike campaign which popularized smoking by women
    - Sponsors often became identified with the programs they sponsored

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Reach into the home - "Frank A. Arnold, director of development for the National Broadcasting Company, called broadcasting the "Fourth Dimension of Advertising," an addition to the three traditional advertising media of newspapers, magazines, and outdoor displays. Arnold elaborated the image of radio advertising as a sort of psychological burglar in the home. The fourth dimension allowed business men to invade psychic space previously unreachable.

"For years the national advertiser and his agency had been dreaming of the time to come when there would

be evolved some great family medium which should reach the home and the adult members of the family in

their moments of relaxa-tion, bringing to them the editorial and advertising message. . . . Then came radio

broadcasting, utilizing the very air we breathe, and with electricity as its vehicle entering the homes of the

nation through doors and windows, no matter how tightly barred, and delivering its message audibly through

the loud-speaker wherever placed. ... In the midst of the family circle, in moments of relaxation, the voice of

radio brings to the audience its program of entertainment or its message of advertising.

By reaching into the home, radio made commercials difficult to avoid. While one could easily skip over newspaper and magazine advertisements, avoiding radio commercials was much more difficult – you had to turn off the set or move the dial and often this could not be done before you heard the commercial.

Effects of Radio - 7

- Revolutionized politics
  - Enabled politicians to go over the heads of both the press and the political party, thus weakening their relative power
  - Helped set the national agenda on significant issues and events
  - Created an 'imagined community' of like-minded listeners who could be politically mobilized

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Disintermediation of local newspaper and political elites - Before radio, politicians on the national and large-state level wishing to get their messages across to the voting public had to rely either on the press, the political party, and/or the local party machine. States and nations were just too big for a politician to be able to speak to each voter individually. One reason FDR resorted to the radio was that 3/4th of the newspapers supported his Republican opponents.

Agenda setting – What was talked about on the radio was what the politicians, pundits, and newspapers talked about. What was not talked about was ignored.

Radio & imagined communities – Radio, even more than newspapers, created an 'imagined community' among listeners who could be constituted as such by the speaker's verbalization of the values, ideals, or grievances of his listeners. Aimee Semple McPherson, Billy Sunday, Adolf Hitler, FDR, Huey Long, and Fr. Charles Coughlin were all expert at using radio to create an 'imagined community' of listeners.

The DC-3

The DC-3

- The DC-3, which first flew on July 4, 1936, was the first modern airliner
  - It could carry 24 passengers and had a top speed of 230 mph
  - By 1939, it was carrying 90% of all airline passengers in the U.S.
  - Had all-metal construction, retractable landing gear, and stressed skin fuselages
  - Had such passenger amenities as stewardesses, reading lamps, call buttons, and upholstered seats

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In 1932, 475,000 passengers flew by air; by 1941, thanks to the DC-3 and the creation of an airport infrastructure, 4 million did so.

Impact of the DC-3

- Made transcontinental air travel possible
- Began the process by which the airplane replaced the train and bus as the favored means of long-distance travel across the United States
- Began trans-atlantic and trans-pacific passenger flight service
- Gave rise to sun glasses

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Rapid transcontinental air travel - With only three refueling stops, eastbound transcontinental flights across the U.S. taking approximately 15 hours became possible. Westbound trips took 17 hours 30 minutes because of typical prevailing headwinds—still a significant improvement over both earlier aircraft and train travel. Early U.S. airlines like United, American, TWA and Eastern ordered over 400 DC-3s. These fleets paved the way for the modern American air travel industry, quickly replacing trains as the favored means of long-distance travel across the United States.

Sun glasses - In the 1920s, Bausch & Lomb produced green goggle lenses for U.S. Army aviators troubled by glare from clouds. In the 1930s, they put the new glass into plastic frames and began selling them to the public under the trademark Ray-Ban.