

Logos 8: 28 June 2006
New Arts of the 20th Century
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New Arts of the 20th Century

**Comics
Cinema
Popular Music**

**Skyscrapers
TV Shows
Videogames**



**“The medium is the message”
(Marshall McLuhan, 1964)**

**“Art is making something out of nothing and selling it”
(Frank Zappa)**

Bibliography

- **Eric Rhode: A History of the Cinema (1976)**
- **Eileen Southern: The Music of Black Americans (1971)**
- **Ted Gioia: A History of Jazz (1997)**
- **Piero Scaruffi: A History of Rock Music (2003)**

Comics

- Cave paintings from Lascaux in France
- Namer Palette from Egypt
- The Admonitions Scroll from China



Comics

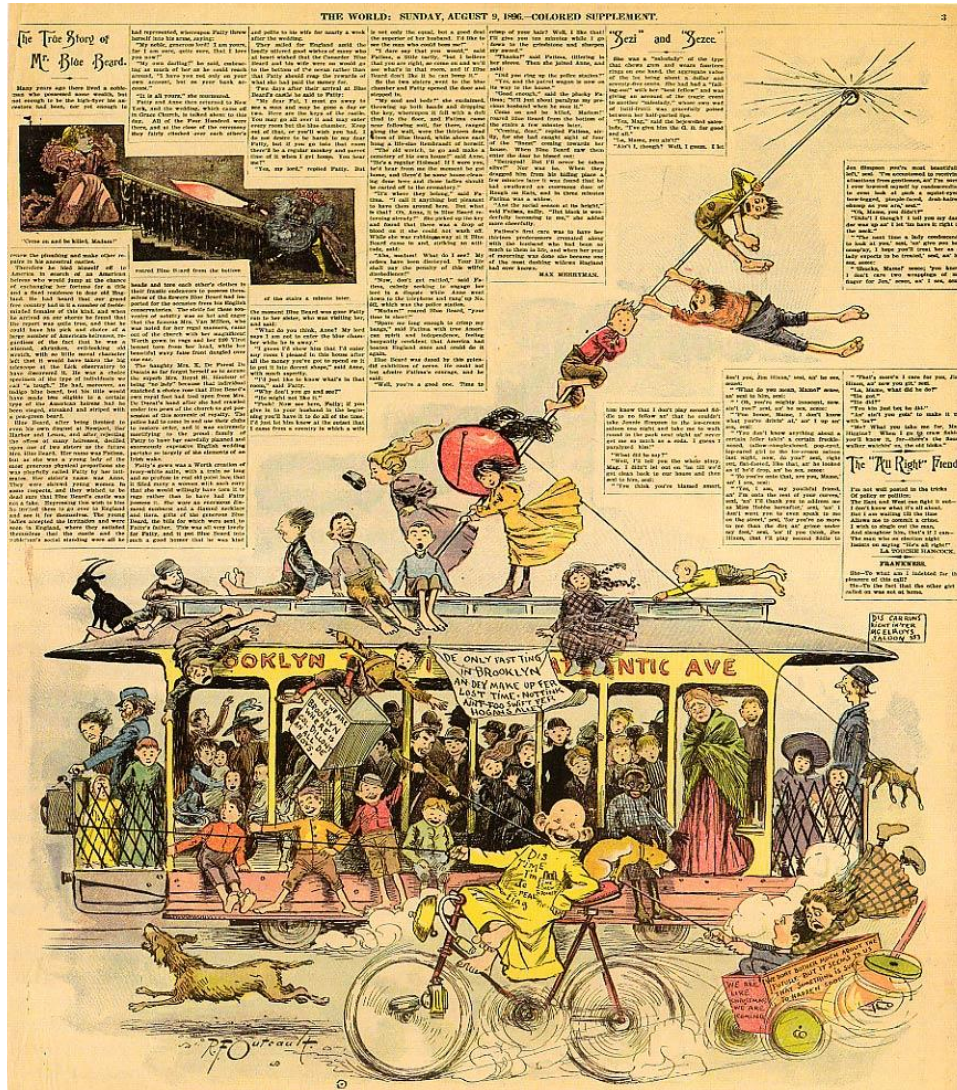
- Rudolphe Töpffer's "Histoire de M. Vieux Bois/ The Adventures of Obadiah Oldbuck" (Switzerland, 1837)
- Wilhelm Bush: "Max und Moritz" (Germany, 1865)



Durch den Schornstein mit Vergnügen
Sehen sie die Hühner liegen,
Die schon ohne Kopf und Gurgeln
Lieblich in der Pfanne schmurgeln. -

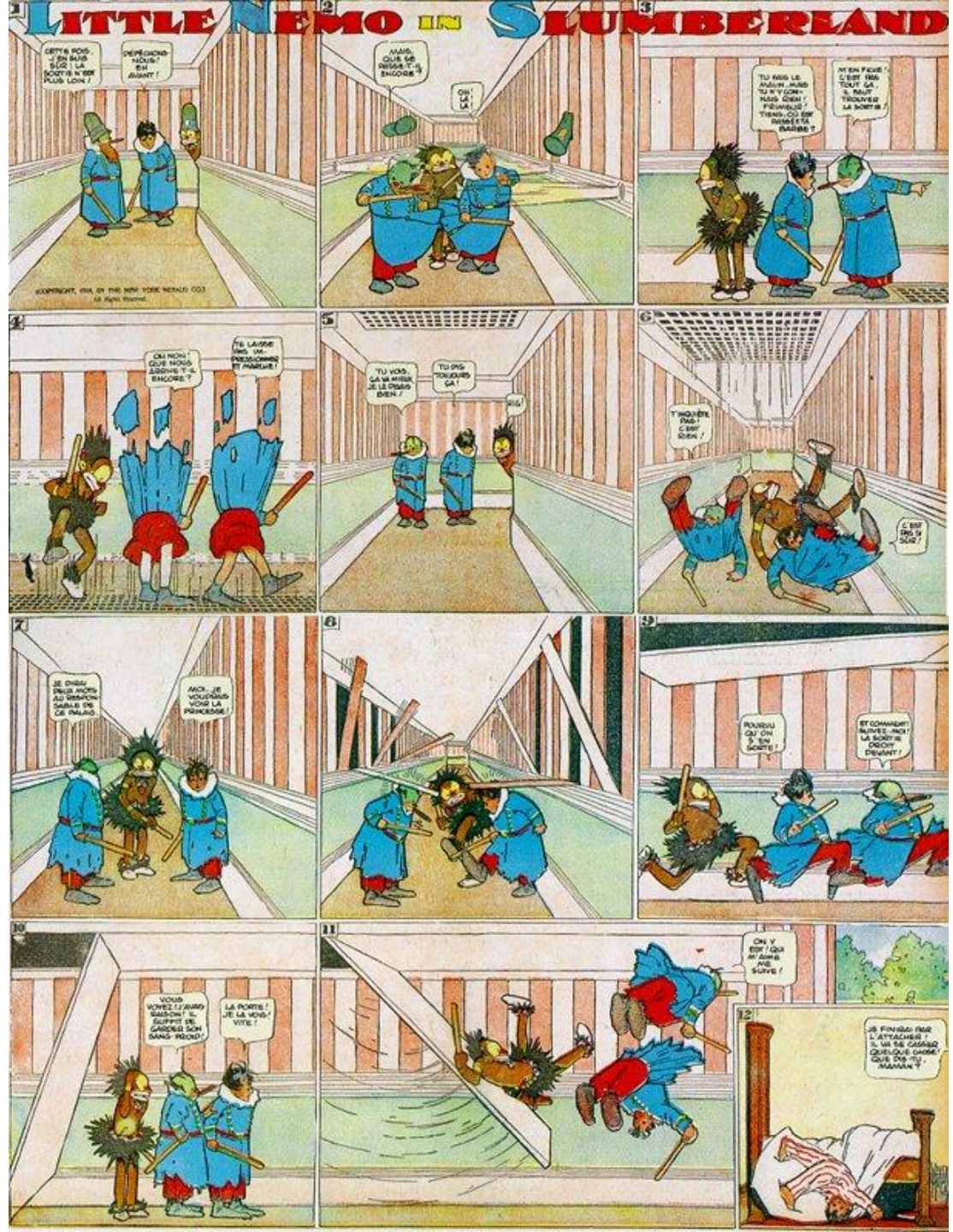
Comics

- Richard Outcault's "Yellow Kid" (1895)
- Entertainment for the family, targeting the audience that reads the newspaper
- The comics parasite on the newspaper (strips)



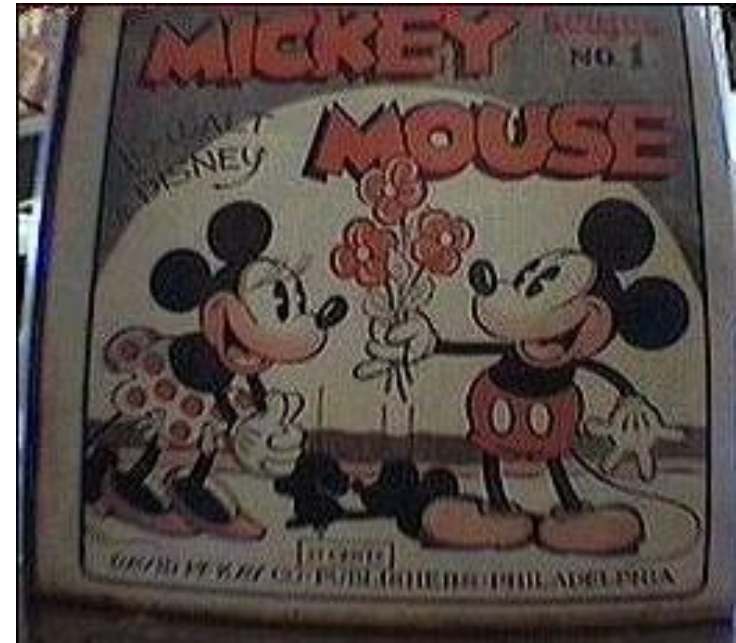
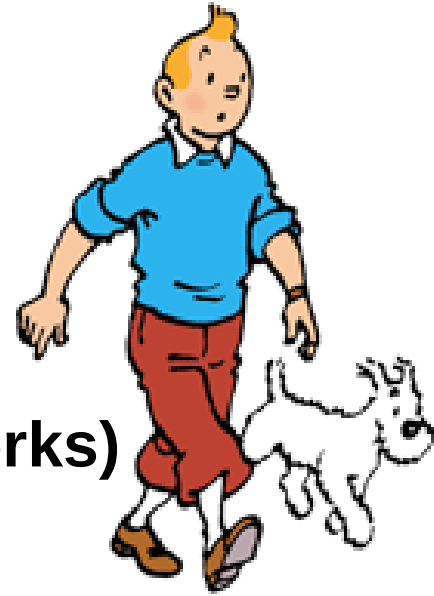
HOGAN'S ALLEY FOLK HAVE A TROLLEY PARTY IN BROOKLYN.

- Winsor McCay's "Little Nemo in Slumberland" (1905)



Comics

- Adventure
 - Popeye (1929, Elzie Crisler Segar)
 - Tintin (1929, Herge)
 - Mickey Mouse (1930, Walt Disney & Ub Iwerks)



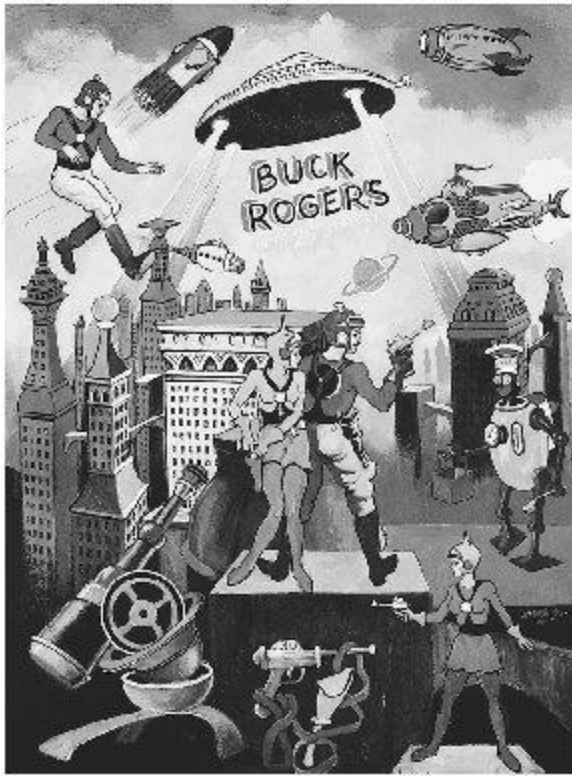
Comics

- Soap opera
 - George McManus' "Bringing Up Father" (1913)
 - Blondie (1930, Chic Young)



Comics

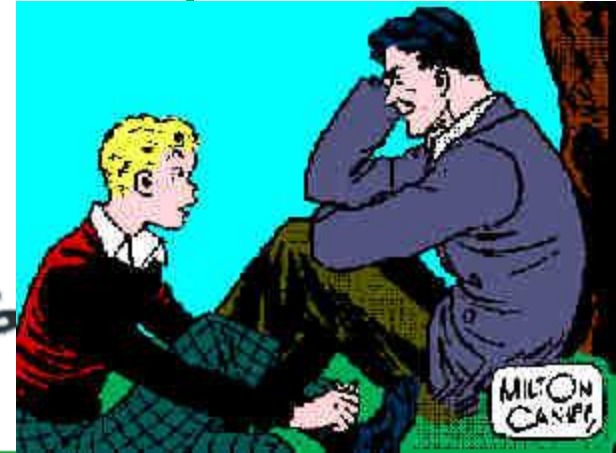
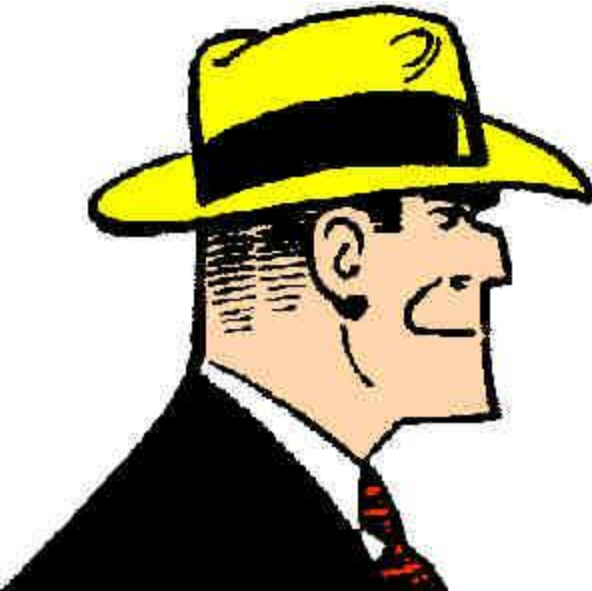
- **Science Fiction**
 - **Buck Rogers (1929, Phil Nowlan & Dick Calkins)**
 - **Alley Oop (1933, Vincent Hamlin)**
 - **Brick Bradford (1933, Clarence Gray & William Ritt)**
 - **Flash Gordon (1934, Alex Raymond)**





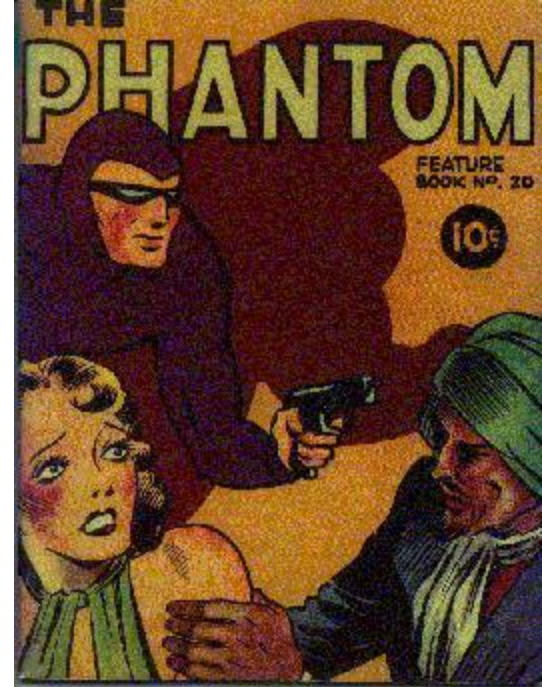
Comics

- Adventure (detective, picaresque, exotic, spy)
 - Dick Tracy (1931, Chester Gould)
 - Li'l Abner (1934, Al Capp)
 - Terry Lee (1934, Milton Caniff)
 - Secret Agent X-9 (1934, Dashiell Hammett & Alex Raymond)



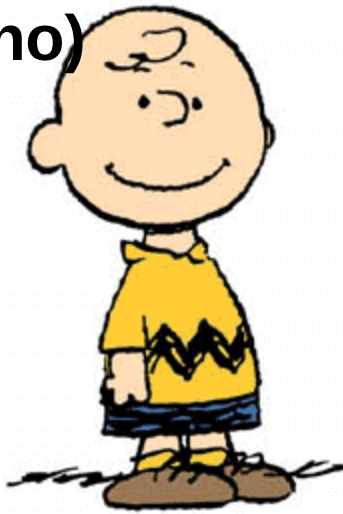
Comics

- Superhero (secret identity)
 - Phantom (1936, Lee Falk & Ray Moore)
 - Superman (1938, Jerome Siegel/Joe Shuster)
 - Batman (1939, Bill Finger/Bob Kane)
 - Spirit (1940, Will Eisner)



Comics

- **Comedy**
 - Pogo (1943, Walt Kelly)
 - Lucky Luke (1946, Morris)
 - Charlie Brown (1950, Charles Schulz)
 - B.C. (1958, Johnny Hart)
 - Les Schtroumpfs (1958, Peyo)
 - Asterix (1959, Rene' Goscinny/Albert Uderzo)
 - Mafalda (1964, Quino)



Comics

- **Comic books**
 - **Transition from strips to books: there is a market just for the comics**
 - **The comic strips of newspapers were free of charge, the comic books are not free**
 - **Transition from comics for the family to comics for children and comics for teenagers**
 - **Humor becomes a separate business**
 - **Mad Magazine (1952)**

Comics

- **Futuristic**
 - **Fantastic Four (1961, Stan Lee/Jack Kirby)**
 - **Barbarella (1962, Jean-Claude Forest)**
 - **Spiderman (1962, Stan Lee/Steve Ditko)**



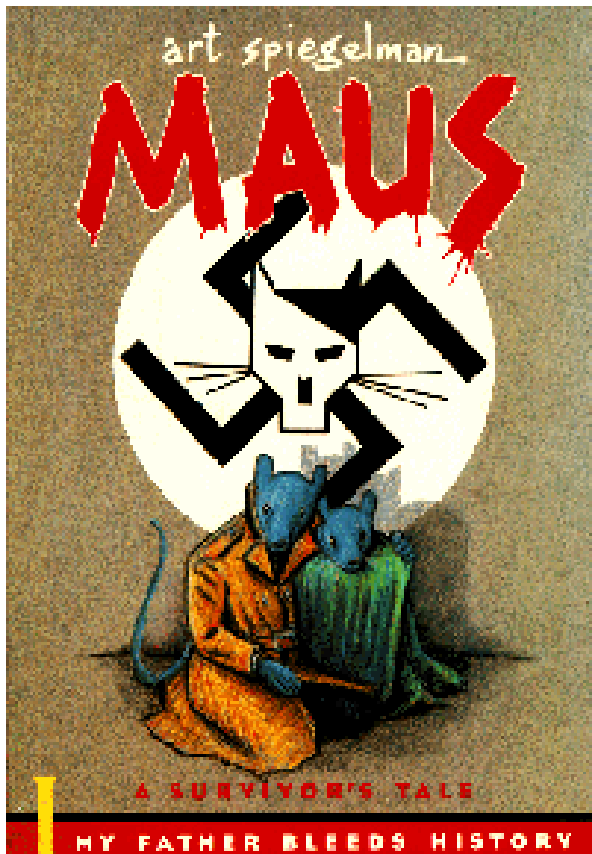
Comics

- Stylish
 - Valentina (1965, Guido Crepax)
 - Arzach (1974, Jean Giraud Moebius)



Comics

- Graphic Novel
 - Maus (1980, Art Spiegelman)
 - No Nausicaa (1982, Hayao Miyazaki)



Cinema

- 1895: the Lumiere brothers invent cinema
- Georges Melies: “Le Voyage dans la lune” (1902)
- Louis Feuillade: “Fantômas” (1913)



Cinema

- Birth of the language
 - Griffith: The Birth of a Nation (1915)
 - Sjöström: Phantom Chariot (1920)
 - Murnau: Nosferatu (1922)
 - Stroheim: Greed (1924)
 - Eisenstein: Battleship Potemkin (1925)
 - Lang: Metropolis (1926)
 - Buster Keaton: The General (1927)



Cinema

- Talkies



Cinema

- Birth of the genres
 - King Vidor: Hallelujah (1929)
 - Sternberg: Der Blaue Engel (1930)
 - Mervyn LeRoy: Little Caesar (1930)
 - Marx: Duck Soup (1933)
 - Charlie Chaplin: Modern Times (1936)
 - Hawks: Bringing Up Baby (1938)
 - John Ford: Stagecoach (1939)
 - Frank Capra: Meet John Doe (1941)



Cinema

- Individual language
 - Welles: Citizen Kane (1941)
 - Kurosawa: Rashomon (1950)
 - Wilder: Sunset Boulevard (1950)
 - DeSica: Miracolo a Milano (1951)
 - Kazan: On The Waterfront (1954)
 - Bergman: Seventh Seal (1956)
 - Hitchcock: North By Northwest (1959)



Cinema

- **Nouvelle Vague**
 - Godard: A Bout de Souffle (1959)
 - Fellini: La Dolce Vita (1960)
 - Antonioni: Blow-Up (1966)
 - Bunuel: Belle de Jour (1967)
 - Polansky: Rosemary's Baby (1968)



Cinema

- The genres revised
 - Aldrich: Hush Hush Sweet Charlotte (1965)
 - Kubrick: 2001: A Space Odyssey (1968)
 - Peckinpah: The Wild Bunch (1969)
 - Martin Scorsese: Mean Streets (1973)
 - Coppola: The Godfather (1974)
 - Robert Altman: Nashville (1975)



Cinema

- **World cinema**
 - **Theodoros Anghelopulos: Traveling Players (1975)**
 - **Bernardo Bertolucci: 1900 (1976)**
 - **Andrej Tarkovskij: Stalker (1979)**
 - **Istvan Szabo: Mephisto (1981)**
 - **Peter Greenaway: The Draughtsman's Contract (1982)**
 - **Wim Wenders: Wings of Desire (1988)**
 - **Lars Von Trier: The Kingdom (1995)**
 - **Emir Kusturica: Underground (1995)**

Pop Music

- **Napoli: the Aria**
- **Vienna: the Waltz**
- **Paris, Vienna, London: the Operetta**
- **Paris: the Cabaret**
- **Berlin: the Cabaret**
- **Britain: the Music Hall**
- **Roma: the Canzonetta**

Pop Music

- **From publishing to recording**
 - **1877: Thomas Edison invents the phonograph that plays cylinders**
 - **1887, Emile Berliner builds a gramophone that plays sound recorded at 78 RPM on a flat record**
 - **1890: 100,000 pianos are sold in the USA**
 - **1892: Music publishing becomes big business on Tin Pan Alley**
 - **1894: the weekly Billboard magazine is founded, reporting "charts" of music sales**
 - **Music has a voice and a name (of the singer), not just a song title and a song composer**

Pop Music

- Thomas Edison and his phonograph (1877)



Thomas Edison holding
a record (cylinder)



Pop Music

- **New distribution channels**
 - **1899: Edward Easton founds the first record label, Columbia**
 - **1901: Guglielmo Marconi conducts the first transatlantic radio transmission**
 - **1901: Melville Clark builds the first full 88-key player piano (music on demand, that does not depend on a performer)**
 - **1902: Enrico Caruso's Vesti la Giubba becomes the first record to sell a million copies**
 - **1910: 350,000 pianos are manufactured, many of them equipped to play "player-piano rolls"**
 - **1920: Westinghouse Electric sets up a commercial radio station, "KDKA"**

Pop Music

- New distribution channels
 - Player pianos and radios



Philco 70 (1931)

Pop Music

- **Tin Pan Alley in the 1920s**
 - **1921: 106 million records are sold yearly in the USA**
 - **1929: there are more than 10 million radios in the USA alone**
 - **The songwriter**
 - **Hoagy Carmichael**
 - **Walter Donaldson**
 - **Fred Ahlert**
 - **The singer**
 - **Al Jolson (1910s)**
 - **Bing Crosby (1930s)**



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REG. U.S. PAT. OFF.

This trademark and the trademarked word
"Victrola" identify all our products. Look under
the lid! Look on the label!

VICTOR TALKING MACHINE CO., Camden, N. J.

Pop Music

- **The Minstrel Show**
 - **Christy Minstrels**
 - **Virginia Minstrels (1830s)**
 - **Georgia Minstrels, the first black minstrel troupe (1865)**
 - **Banjo**
 - **Cakewalk (syncopated) dance**
 - **Tap dancing**
 - **Coon (syncopated) song**

Pop Music

- **The Revue**
 - The Burlesque (1860s)
 - The Vaudeville (1880s): the USA's version of the British music hall
 - "Ziegfeld Follies" (1907)
 - Lee and Jacob Shubert's extravaganzas (1910s)



Pop Music

- **The Musical**
 - **1890s in Europe: Gilbert and Sullivan's operettas**
 - **1890s in the USA: musical farce**
 - **Black musical comedy**
 - **Bob Cole's A Trip to Coontown (1898)**
 - **Will-Marion Cook's ragtime-tinged Clorindy the Origin of the Cakewalk (1898)**
 - **Will-Marion Cook's In Dahomey (1902)**

Pop Music

- **The Musical**
 - **George Cohan's musical melodramas (1900s)**
 - **Irving Berlin (1910s)**
 - **Eubie Blake's "Shuffle Along" (1921), entirely composed and sung by blacks**
 - **Jerome Kern's "Showboat" (1927)**
 - **Richard Rodgers (1930s)**
 - **Golden age of the musical during the Great Depression**
 - **Decline caused by the competition of television variety shows, that catered to the same audience, and by rock music**

Pop Music

- **The Night Club**
 - **"Sans-Souci" (1915), first cabaret in New York**
 - **"Cotton Club" (1923), only black entertainers**
 - **Speakeasies**

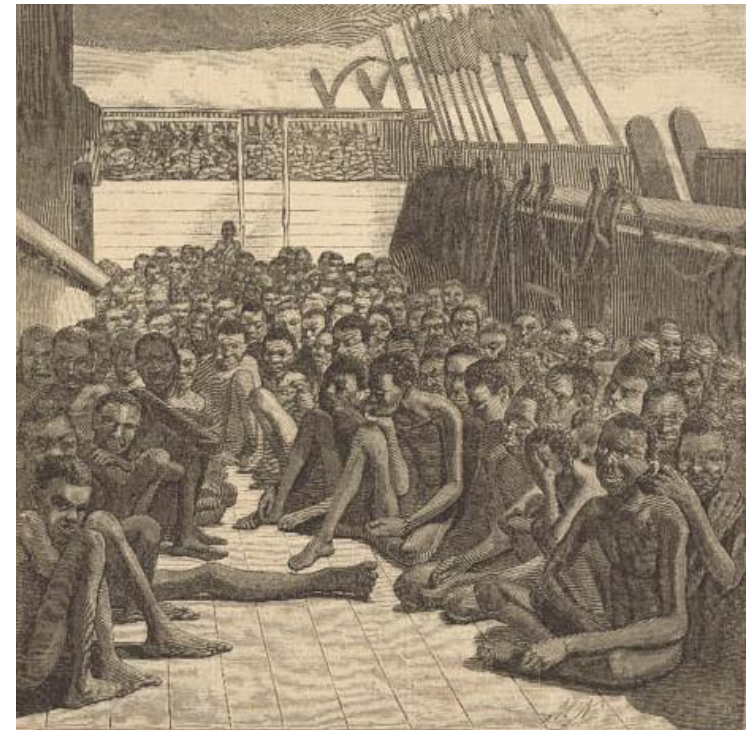
Pop Music

- **Ballroom dancing**
 - **Cakewalk (1900s)**, the first negro dance to be adopted by the white masses
 - **Foxtrot (1913)**, generational rebellion
 - **Charleston (1923)**
 - **The middle class does not want to sing: they want to dance**
 - **Shift from buying music sheets to spending money in a dance club**
 - **Black syncopated orchestras**
 - **Ernest Hogan's Memphis Students (1905)**
 - **James Europe's Hellfighters (1918)**
 - **Will-Marion Cook**



Pop Music

- **African-American music**
 - **The fusion of European folk music with African folk music is the most important source of innovation for music in the western world after the Ars Nova**



Pop Music

- **African-American music**
 - **1890s: Ragtime**
 - **1910s: Blues**
 - **1917: Jazz**
 - **1932: Gospel music**
 - **1942: Rhythm'n'blues**
 - **1951: Rock'n'roll**
 - **1955: Soul music**
 - **1960: Reggae (Jamaica)**
 - **1965: Funk music**
 - **1976: Hip-hop**
 - **1981: Techno**
 - **1984: House**

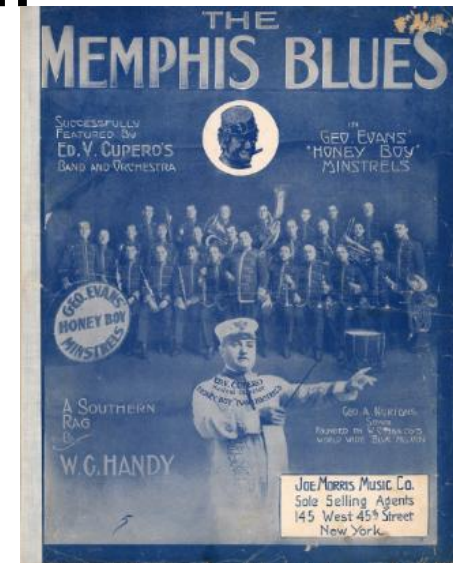
Pop Music

- **African-American music**
 - **Ragtime (1890s)**
 - **Rag: originally the piano arrangement of a coon song and, later, any kind of syncopated piano instrumental**
 - **Ragtime transfers the syncopation of minstrel shows from a naive rural environment to a sophisticated urban environment**
 - **Missouri**
 - **Scott Joplin**
 - **Eubie Blake**
 - **Ragtime mainly sold as tapes for player pianos**
 - **First recording only in 1917**

Pop Music

- **Blues**

- African polyrhythm vs European linear rhythm
- West-African pentatonic scale vs European chromatic scale
- Call and response
- Spontaneous improvisation
- Spirituals
- Work songs
- The blues: a state of mind
- The blues: a dialogue between a human being and his guitar
- The blues: black music for blacks only
- Spread by medicine shows (eg, TOBA circuit)



Pop Music

- **Blues**

- **The Delta**
- **New Orleans: Storyville (1897-1917)**
- **Kansas City: Tom Pendergast's reign (1925-39)**
- **Memphis: William Handy (1910s), twelve-bar structure**
- **Mass migration to the North: 1916**
- **Prohibition (1920-33)**
- **New York: blues singers, classic blues**
 - **Mamie Smith's Crazy Blues (1920), the first blues to become a nation-wide hit**
 - **Bessie Smith**
 - **Ma Rainey**



Pop Music

- **Blues**
 - **Country blues**
 - **Blind Lemon Jefferson (1926)**
 - **Robert Johnson (1936)**
 - **Chicago blues (1920s-1950s)**
 - **Boogie woogie (1927)**
 - **Rhythm'n'blues (1946)**



Pop Music

- **African-American music**
 - **Gospel music**
 - **1871: the Jubilee Singers tour the USA**
 - **Thomas Dorsey (1920s)**
 - **Gospel quartets (1930s)**
 - **Mills Brothers, Ink Spots, Soul Stirrers**
 - **Doo wop (1950s)**
 - **Soul music (1955)**

Pop Music

- **Jazz**
 - **1917: Dixieland**
 - **1932: Swing**
 - **1945: Bebop**
 - **1950: Cool jazz**
 - **1960: Free jazz**
 - **1969: Fusion jazz**

Pop Music

- **Jazz**
 - **Minstrel shows: syncopation, banjo**
 - **Ragtime: syncopation, piano, instrumental, joy, 16-beat**
 - **Blues: improvisation, guitar, lyrics, sorrow, 12-beat**
 - **Jazz = ragtime's syncopation + blues' improvisation + marching band's instruments**

Pop Music

- **Jazz vs European music**
 - **European music "trained" the voice to sound as perfect as the instruments, jazz music trained the instruments to sound as emotional as the human voice of the blues**
 - **Jazz as a stage in the ongoing process of black assimilation of white technology (most of the instruments were as "un-African" as possible)**

Pop Music

- **Jazz vs Ragtime**
 - Ragtime was written composition, distributed as sheets. Jazz was improvised music, distributed as records.
- **Jazz vs Blues**
 - Blues was mainly vocal, jazz was mainly instrumental
 - Jazz was born as music to dance to, blues music was born as music to mourn to

Pop Music

- **Jazz**
 - The first musical genre to propagate thanks to the record and the radio

Pop Music



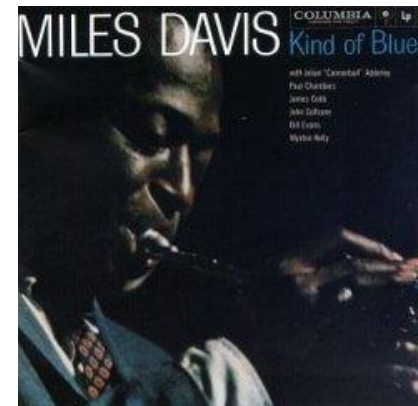
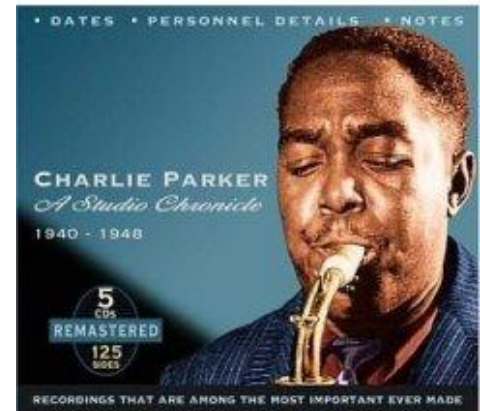
- **Jazz**
 - **Dixieland jazz: syncopation, collective improvisation, instrumental**
 - **Jazz as a new form of entertainment for whites**
 - **Jelly Roll Morton: tonal variety, creative dynamics, solos**
 - **Louis Armstrong: the art of the solo, paraphrasing the melody, the instrumental counterpart to blues singing**



Pop Music

- **Jazz**

- Big bands and swing: composed jazz (Duke Ellington)
- Chamber jazz (intimate, not for dancing) vs Swing orchestras (party music)
- Bebop (Charlie Parker) and cool (Miles Davis): alienating the audience (the demise of jazz as entertainment)
- The schism: free jazz for intellectuals and jazz-rock for the masses (no rhythm for free jazz and rock rhythm for jazz-rock)



Pop Music

- **Country**
 - **1910: John Lomax's "Cowboy Songs and Other Frontier Ballads"**
 - **1916: Cecil Sharp's collection of folk songs from the Appalachian mountains**
 - **1922: Texan fiddler Eck Robertson cuts the first record of "old-time music"**
 - **1920s: String bands**
 - **1925: Carl Sprague becomes the first "singing cowboy"**
 - **"Hillbilly" (urban, led by the guitar) style vs "mountain" style (led by fiddle and banjo)**
 - **Comedians as much as artists**

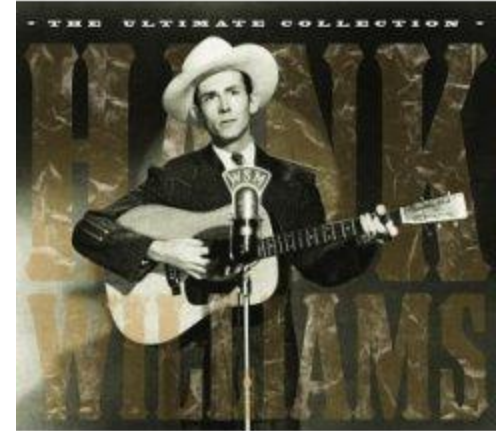
Pop Music

- **Country**
 - 1927: Carter Family, Jimmie Rodgers
 - 1931: honky-tonk style (Gene Autry)
 - 1932: western swing (Bob Wills)
 - 1934: bluegrass (Bill Monroe)
 - 1936: Nashville (Roy Acuff)



Pop Music

- **Country**
 - 1940s: The Nashville sound (Chet Atkins)
 - 1950s: Hank Williams
 - 1950s: female country singers
- **Protest folk song**
 - 1935: Woody Guthrie's "Dust Bowl Ballads"
 - 1940: Pete Seeger's Almanac Singers
 - 1950s: Politicized folk revival (Greenwich Movement)



Pop Music

- **The recording revolution**
 - **Until the 1940s: recordings limited to the capacity of the 78 RPM record, about three minutes**
 - **A set of several 78 RPM records (an “album”) required to contain longer recordings**

Pop Music

- **The recording revolution**
 - **The ASCAP ban of 1942-44 (no instrumental music recorded)**
 - **Pop music becomes mainly vocal (not instrumental) music**
 - **V-discs create a demand for longer songs**
 - **1948: the 12-inch 33-1/3 RPM long-playing vinyl record (the LP), that allows recordings of more than twenty minutes per side**
 - **Adolf Hitler: the portable electromagnetic recorder**
 - **1947: Ampex tape recorder copied from German technology**
 - **Enables recordings of lengthy performances of music**

Pop Music

- **The recording revolution**
 - **The LP and the tape make the old cumbersome "album" (the set of several 78 RPM records) obsolete**
 - **The live performance less and less essential (after the sheet music, the piano roll, the radio and the 78 RPM record)**
 - **Yet another commercial revolution caused by distancing the listening experience from the actual performance**

Pop Music

- **The recording revolution**
 - **Record labels rely on radio and tv stations (or musicals or films) to publicize their products**
 - **European television, controlled by government bureaucrats, has little motivation to change formats or contents**
 - **USA television, controlled by businessmen, has strong motivation to continuously try new formats and contents**
 - **In the USA, competition led to innovation.**
 - **Beginning of the American domination of popular music**

Pop Music

- **African-American music**
 - **Rock'n'roll**
 - **Independent radio stations and record labels**
 - **Fusion of rhythm'n'blues and country'n'western**
 - **Definition of rock'n'roll: white kids listening to black music**
 - **Social issues of young white people**
 - **The frustration of the white young person mirrors the frustration of the segregated black person**
 - **Soundtrack of the emancipation of a new social class: the youth**
 - **Rock becomes “the” popular music of the white Anglosaxon youth**

Pop Music

- **African-American music**
 - **Rock'n'roll**
 - **The masses (not the aristocracy or the scholars) determine who becomes famous and who survives**
 - **The masses are influenced by clubs, record labels, broadcasting and rock journalism**

Pop Music

- **African-American music**
 - **Rock'n'roll**
 - **The beat of rhythm'n'blues**
 - **The rhythm section of jazz (bass and drums)**
 - **The electric guitar as the lead instrument**
 - **The singer as the main soloist**

Pop Music

- **African-American music**
 - **Rock music**
 - **Britain: merge with blues and folk revivals**
 - **USA: merge with singer-songwriters and hippies**
 - **Psychedelic rock (1965)**
 - **Progressive rock (1968)**
 - **Hard rock (1969)**
 - **Fusion with all existing genres (folk, blues, jazz, classical, electronic...) and adoption of all new technologies**



Pop Music

- **African-American music**
 - **1960: Reggae and dub (Jamaica)**
 - **1970: Funk music: first dance mania since the early 1960s**
 - **1972: Disco music: electronic rhythm, first major gay genre**
 - **1976: Hip-hop: beatbox**

Pop Music

- **Hip hop**
 - **Jamaica: toasting (talking in rhyme over the instrumental parts of a record)**
 - **Bronx, 1973: Toasting becomes rapping, itinerant sound systems for parties**
 - **Bronx, 1975: Jamaican dj Clive "Hercules" Campbell makes music out of breakbeats**
 - **Bronx, 1975: Theodore "Grand Wizard" Livingstone discovers the "skratching" sound of a turntable**
 - **Bronx, 1976: Joseph "Grandmaster Flash" Sadler introduces "cutting" (cutting a song on the beat), "phasing" (altering the speed of the turntable) and "back-spinning" (spinning a record counterclockwise)**
 - **1979: first hip-hop record (Sugarhill Gang)**

Pop Music



- **Hip hop**
 - **"Deejays" engage in duels based on turntable skills**
 - **No instruments**
 - **The turntable is "the" instrument**
 - **"Messages" (sociopolitical commentary)**
 - **Afrika Bambaataa Asim (Kevin Donovan): collages of breakbeats, beatbox, sound effects and song fragments (electro-funk)**

Sugarhill Gang



Pop Music

- Hip hop
 - Facets of the hip-hop culture:
 - Music
 - Dancing: b-boys (break dancers)
 - Spray-painted graffiti: tagging



Pop Music

- **African-American music**
 - **1981: Techno: sequencer, high-tech funk music, fast electronic beat**
 - **1984: House: electronic dance music built around drum-machines and soul vocals**
 - **Raves**

Pop Music

- **Popular music of the white western youth**
 - **1971: Cosmic music (Germany)**
 - **1974: Punk-rock (UK)**
 - **1976: Disco-music (Germany)**
 - **1976: Industrial music (UK)**
 - **1978: Ambient music (UK)**
 - **1987: Grindcore (UK) and Death-metal**
 - **1989: Post-rock**
 - **1990: Doom-metal (UK)**
 - **1990: Drum'n'bass (UK)**
 - **1994: Glitch music (Germany)**

Pop Music

- **Storytelling: Blues, Rock'n'Roll, Singer-songwriters, Soul, Rap, Punk**
 - Musical expression of the philosophical, political and social issues of the century
- **Rhythm: Rhythm'n'Blues, Rock'n'Roll, Funk, Disco, Techno, Drum'n'Bass, World-music**
 - Musical expression of acquired urban rhythms and of the lost rural rhythms

Pop Music

- **Pop music as a metaphor for the continuing sexual revolution (dance craze of the 1920s, blues, jazz, rock, disco, etc)**

Pop Music

- **“No change in musical style will survive unless it is accompanied by a change in clothing style” (Frank Zappa)**



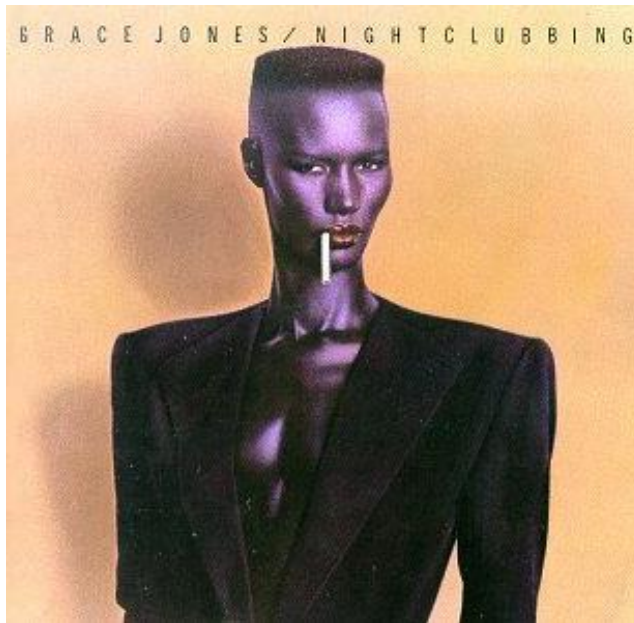
Dizzy Gillespie, 1950s



Summer of Love, San Francisco 1967



Sex Pistols, 1976



Grace Jones, 1978



Grandmaster Flash

Pop Music

- **World music**
- **iTunes**

Pop Music

- **The essence of popular music: transience (continuous innovation: yesterday's style is not classic but boring)**
- **Rapid adoption of new technologies**
- **The industry decides when a new genre is born and then artists have to fit into an existing genre to thrive**

TV Shows

- **Variety show**
 - **Global (not local) vaudeville**
 - **"Kraft Television Theatre" (1947)**
 - **Ed Sullivan's "Toast of the Town" (1948)**
 - **"Perry Como Show" (1948)**
 - **"Texaco Star Theater" (1948)**
 - **Downplay the choreography and emphasize the star**

TV Shows

- **Sitcom**
 - **1926: the success of comic strips prompts radio stations to create "situation comedies" (or "sitcoms"), the equivalent of a recurring comic strip without the pictures**
 - **"Mary Kay and Johnny" (1947), first sitcom on tv**
 - **"I Love Lucy" (1951)**

TV Shows

- **Soap opera**
 - **Radio**
 - **The radio targets a new class of consumers: housewives**
 - **Daytime serial dramas aimed at an audience of housewives**
 - **Endless intricate adventures, usually of a romantic nature**
 - **Soundtrack performed by an organist, drawing from a wealth of melodramatic melodies**
 - **Marketing household products such as soap, thus “soap opera”**
 - **"The Guiding Light" (1937), the archetype of all future soap operas**

TV Shows

- **Soap opera**
 - **Television**
 - **"Faraway Hill" (1946), first one specifically designed for television**
 - **"Peyton Place" (1964), first prime-time soap opera (thus targeting a broader audience than just housewives)**
 - **The collective subconscious of the American youth**

Skyscrapers

- Chicago



The Carson Pirie Scott Store,
by Louis Sullivan (1899)

Skyscrapers

- **Manhattan**
 - **Chrysler Building, New York (1928)**
 - **Empire State Building, New York (1933)**
 - **Rockefeller Center, New York (1931-37)**

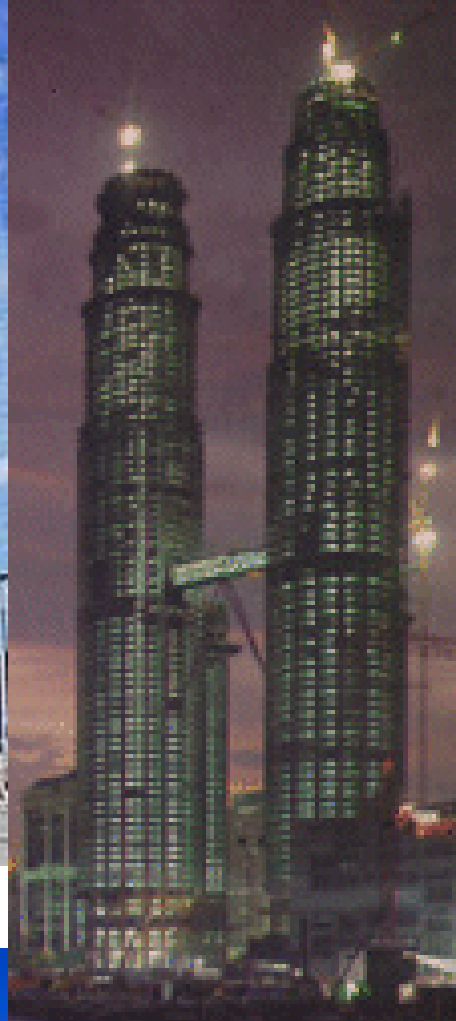




Skyscrapers

- **Internationalization**

- **Taipei 101 Taipei 509m 2003**
- **World Financial Center Shanghai 460m 2005**
- **Petronas Towers Kuala Lumpur 452m 1998**
- **Asia Plaza Kaoshiung Taipei 431m 2008**
- **Jin Mao Tower Shanghai 421m 1998**
- **CITIC Plaza Guangzhou 391m 1997**
- **Shun Hing Square Shenzhen 384m 1996**
- **Central Plaza Hong Kong 374m 1992**
- **Bank of China Tower Hong Kong 369m 1989**
- **Emirates Office Tower Dubai 355m 2000**
- **The Centre Hong Kong 350m 1998**
- **Tuntex & Chien-Tai Tower Kaohsiung 348m 1997**





Malmo



Chicago



Taipei
Kuala Lumpur



Dubai



Hong Kong
Riyadh



Beijing



London
Shanghai



Yokohama



Skyscrapers



Taipei 101
Petronas Towers
Jongno Tower, Seoul



Videogames

- **1975: Atari Pong (Nolan Bushnell and Alan Alcorn)**
- **1977: Atari 2600**
- **1978: Space Invaders (Toshihiro Nishikado), first blockbuster videogame**
- **1980: Pac-Man (Toru Iwatani)**
- **1981: Nintendo's Donkey Kong Ditty (Shigeru Miyamoto)**
- **1981: Atari Centipede (Ed Logg and Dona Bailey), first videogame to appeal to women**
- **1982: Pole Position, first major photorealistic videogame**
- **1983: Dragon's Lair (Rick Dyer and Don Bluth), an interactive animated film and first game on laserdisc**
- **1985: Nintendo Entertainment System (Masayuki Uemura)**

Videogames

- **1986: Atari Lynx, first portable game system**
- **1989: Sega Mega-Drive/Genesis**
- **1993: Myst (Rand Miller), first “artistic” videogame**
- **1995: Sony Playstation**
- **1996: Nintendo Ultra 64**
- **1999: the Cyberathlete Professional League, the world's first videogame sports league**
- **1998: Half Life (Gabe Newell & Marc Laidlaw), novel-level plot and characters**
- **2000: The Sims (Will Wright), imitation of ordinary family life**
- **2003: Katamari Damacy (Keita Takahashi), adventures in a surreal world**