

# A Chronology of Communication History

**Kirk Hallahan**

Colorado State University

In Revision | March 2024

---

## **Early Oral, Visual Communication**

- 100,000 BCE (Speculated) beginning of oral communication
- 45,000 Earliest artifacts of visual communication (Neanderthal plaque, mammoth tooth, Hungary)
- 30,000 Mammoth ivory house--earliest animal carving
- 35,000- Cave paintings by Cro-Magnon Man (southern France and Spain),
- 14,000 Drawings later simplified and evolved into pictographs
- 8,000 Earliest token system coincides with beginnings of agricultural economy in Fertile Crescent (Mesopotamia)

## **Emergence of Written Communication**

- 3,000 BCE Bronze Age begins (hard metal tools using alloys)
- 2,800 Advent of pictographs, phonogram systems; decline of token systems
  - Sumerians use clay tablets, later introduce cuneiform
  - Egyptians introduce papyrus, later use parchment,
- 1,000 Phoenicians developed simplified alphabet
- 800 Greeks created 23-symbol alphabet, basis for Roman alphabet
- 400 Golden Age of Greece: introduction of modern ideas of visual design; public debate flourishes with democratic rule; Plato, Aristotle theorizes about logic, argumentation, rhetoric, ethics.
- 200 Romans adapt Greek alphabet.
- 59
- 400- Fall of Rome, beginning of Dark Ages. Use of text limited
- 1200 CE mostly to monks working as copyists in monasteries .

## **Advent of Printing**

- 1000 Movable clay type invented in China
- 1234 Movable metal type invented in Korea
- 1200s Scribe guilds, commercial copyist shops sprout up around newly formed European universities
- 1300s Use of paper in Europe expands (Invented by Chinese in 105 AD, brought by Moors to Spain, spread to Italy, later to Germany)
- 1446 Gutenberg invents printing with movable type; Gutenberg Bibles
- 1470s First press in England; William Caxton prints earliest ad flyer.

## **Political Responses**

- 1529 King Henry VIII outlawed imported publications in England, one of many authoritarian rulers to control press.
  - Stationers Company later established to issue printing licenses.
- 1598 King James I extolled idea of divine right of kings
- 1644 John Milton launched libertarian thinking, called for free expression of ideas as means to discover truth in *Aeropagitica*.
- 1770s Thomas Paine and others published pamphlets calling for American

- 1789 Independence, value of free expression and free press  
U.S. and French constitutions adopted, including provisions guaranteeing freedom of expression.

### **Early Newspapers**

- 1480 French create first general mail system (1624 Denmark, 1625 England)  
1485 First newspaper (claimed by Hungary); various other efforts.  
1500s House of Fuggers circulated letters among correspondents  
1600-20 First sustained production of newspapers in Europe  
1620 First English-language newspaper: The Courant.... (Amsterdam)  
1640s Newspapers flourish in England, after century of strict control

### **Early Books and Book Publishing**

- 1900BC Earliest known "book," Book of the Living Dead (Egyptian papyrus)  
540BC Earliest library established in Athens  
868AD Chinese perfect a block printing system for books (DiamondSutra)  
Block books precedes printing with movable type (until 1480)  
1446 Gutenberg prints 42-line Bible in Mainz, Germany  
1457 First book with title page printed in Mainz (Psalmorum codex).  
Idea attributed to Peter Schoffer  
1460 Woodcuts used for book illustration beginning with Albrecht Pfister  
1461 First popular books printed in German vernacular in Bamberg by Albrecht Pfister (Ulrich Boner's Edelstein and Johann von Tepl's Ackermann aus Bohmen)  
1466 First German language Bible (first Italian in 1471)  
1470 Translation begins of Greek, Arab science classics  
1500 End of early period in printing history (aka incunabula)  
1747 Idea of numbering pages began by Foulis Press in Scotland  
1935 Modern paperback began (Allan Lane of Penguin Books)

### **Early American Print Media**

- 1539 First printing press brought to New World (Mexico City)  
1640 First U.S. printing press set up at Cambridge (Harvard); first Book printed in U.S.: Bay Psalm Book.  
1690 Colonial press period begins. First U.S. newspaper: Publick Occurrences, Boston. Followed by Boston News Letter in 1704.  
1731 Benjamin Franklin started the first subscription library in U.S.  
1741 Benjamin Franklin becomes one of first two American magazine publishers  
1765 American publishers oppose British Stamp Tax  
1791 Bill of Rights (First Amendment) added to U.S. Constitution of 1789; partisan press period begins  
1820 Most major cities had newspaper: 22 dailies, 66 semi-weeklies, 422 weeklies in U.S.  
1831 Emergence of penny press; Benjamin Day begins New York Sun  
1846 Rotary (cylinder) press invented in the U.S.  
1886 Ottmar Mergenthaler perfects linotype automatic typesetting machine  
1890s Advent of yellow press (Joseph Pulitzer at New York World, William Randolph Hearst at New York Journal)  
1896 Adolph Ochs purchased New York Times, focused on serious news.

**Telegraphy** ("writing over distance")

- 1838 Samuel F. B. Morse invented technology, petitioned Congress for appropriation to build experimental line
- 1844 Morse linked Baltimore and Washington: "What hath God brought?"
- 1846 Associated Press wire service organized
- 1848 Trading began on Chicago Commodity Exchange as wire reached city
- 1855 Telegraph reached California, seven years before railroad.
- 1883 Four time zones established in U.S., facilitating communications.

**Photography** ("writing with light")

- 400 B.C. Early light principles observed by Aristotle
- 1727 Scientists discovered silver nitrate turns dark if exposed to light
- 1839 Early tintype photos invented by Louis Daguerre (daguerreotype)  
Negative system allowing multiple prints invented by William Talbot
- 1851 Glass plate negatives using wet collodion process method invented
- 1854 Roger Fenton became first notable news photographer (Crimean War)
- 1862-65 Matthew Brady chronicled U.S. Civil War, sold prints in galleries
- 1873 Professor Frederick Ives (Cornell U.) perfects halftone process to print photos in publications, after years of experiments
- 1880 New York Daily Graphic published first regular newspaper photos
- 1888 George Eastman invented roll film, popularized snapshot camera
- 1898 Photos pivotal in Spanish-American War coverage by yellow press
- 1928 New York Daily News front cover depicted execution of Ruth Snyder
- 1936 Life began publication, representing zenith of photojournalism
- 1937 Crash of Hindenberg dramatized value of news photographs

**Advertising**

- 1200 Routine use of modern signs, names on artisans' shops
- 1476 William Caxton, early English printer, used printed flier to promote book--earliest example of English-language printed ad
- 1660s Term "advertisement" generally adopted to describe commercial information in newspapers
- 1704 First U.S. newspaper carried advertising (Boston News-Letter)
- 1842 Volney Palmer established early media buying service
- 1869 First U.S. ad agency: N.W. Ayer & Son (Wayland Ayer)
- 1900 Consumer culture well established, evidenced by exhibits at Paris World's Fair
- 1905 John E. Kennedy terms "Advertising is salemanship in print,"  
Albert Lasker of Lord & Thomas agency promotes "reason-why" copy
- 1922 First radio advertising; WEAF in New York (toll broadcasting)
- 1946 First commercial TV advertising
- 1952 First use of TV commercials in presidential elections
- 1957 Jim Vicary coins term subliminal advertising
- 1990s Trend toward agency consolidation, integrated marketing communication (IMC)

**Publicity/PR**

- 1800 BC Sumerian bulletins told farmers how to improve crop yields

1622 AD	Pope Gregory XV established College of Propaganda
1748	First news release (Kings College, later Columbia)
1788-89	The Federalist Papers advocated creation of U.S. government.
1820s	Amos Kendall served as first presidential press secretary, a member of Andrew Jackson's Kitchen cabinet.
1840s	P.T. Barnum pioneered press agency for the circus
1882	William Vanderbilt responded with his famous quote about public reaction to changes by railroad: "The public be damned."
1902	First publicity agency created in U.S.
1906	Ivy Lee set up second publicity agency, issued Declaration of Principles based on helping media and telling the truth
1917-18	U.S. Committee on Public Information pioneered use of PR by government to support war effort, bond sales
1927	'Torches of Freedom' Easter Parade altered public opinion about women smoking in public.
1941-45	U.S. Office of War Information provided PR support for WWII.

#### **Telephony** ("sound over distance")

1876	Alexander Graham Bell beat out Elisha Gray for first patent
1877	Bell System launched; decided to lease, not sell, equipment
1880	First exchange (switchboard) in New Haven, Connecticut
1893	Telefon Hironodo (Budapest) experimented with telephone programming
1934	Federal Communications Act brought telephony under federal regulation to serve "public interest, convenience and necessity"
1949	Rural Electrification Act subsidized loans to extend service
1962	First communication satellite (Telstar)
1984	Breakup of Bell System into seven operating "Baby Bells"

#### **Phonography** ("writing with sound")

1877	Thomas Edison credited with first voice recording (phonograph)
1887	Emile Berliner's system allowed duplication (gramophone)
1890s	American music popularized by John Phillip Sousa (marches), Scott Joplin (ragtime) via recordings
1906	Lee DeForest's vacuum tube allowed amplifying voices
1920s	Joseph Maxwell invented microphone
1940s	Battle of the speeds: 78s, 33-1/3 LPs (Columbia), 45 EPs (RCA)
1951	DJ Alan Freed launched rock 'n' roll craze.
1978	Digital recording began
1983	Compact discs introduced

#### **Motion Pictures**

1824	Peter Roget recognized importance of persistence of images
1889	Thomas Edison and William Dickson invented first motion picture camera (kinetograph) and viewer (kinetoscope)
1894	Auguste and Louis Lumiere adapted camera built by Robert Paul (from Edison's design) to create cinemagraphe (basis for term cinema)
1895	Lumieres exhibited first motion pictures in Paris, adapted from Emile Reynaud's earlier Theatre Optique; opened first movie theater
1896	Edison acquired projection system from inventors, promotes it as the vitascope; first American theater opened in New York.
1902-3	Early motion picture classics produced by George Melies ("A Trip

to the Moon") and by Edwin S. Porter ("The Great Train Robbery")

1915 D.W. Griffith directed "The Birth of a Nation," followed next year by "Intolerance," -- acknowledged as the father of modern movies.

1922 Fox Movietone News experimented with sound (phonofilm: sound on film; perfected later by Lee DeForest)

1927 First sound motion picture ("The Jazz Singer" used vitaphone technology with separate phonograph recording)

1930 Sound pictures became accepted standard;

1935 Kodachrome process popularized color films

1941 Orson Welles' "Citizen Kane" considered best artistic film

1946 Peak of movie attendance -- 90 million Americans attend weekly

1950s Movies responded to advent of television

1954 Movies began second runs on television

1977 Video cassette sales, rentals began

### **Radio**

1864 Sir James Clerk Maxwell hypothesized about electromagnetic waves

1887 Henrich Hertz demonstrated, calibrated waves in laboratory

1888 Guglielmo Marconi created wireless telegraphy

1901 Marconi sent first wireless signal across Atlantic

1906 Reginald Fessenden conducted first experimental voice broadcast

1912 Sinking of Titanic heightened public awareness of "radio"

1919 Following use by military in World War I, consumer radio launched in U.S. with creation of Radio Corporation of America

1920 First station began operation, KDKA in Pittsburgh

1922 First radio advertising, WEAf in New York

1926 Radio consortium dissolved; National Broadcasting Company formed; AT&T focused on distribution of network broadcasts.

1927 CBS formed; William S. Paley took over control in 1928. Radio Act of 1927 created commission to oversee U.S. broadcasting

1934 Federal Communications Commission Act passed

1938 Orson Welles' famous "War of the Worlds" broadcast

1943 ABC formed after divestiture of the NBC Blue network

1950s Gordon McClendon spearheaded station conversions to formats

1981 Deregulation removed many restrictions on broadcasters

### **Television**

1923 Vladmir Zworykin invents iconoscope

1927 Philo T. Farnsworth obtained first television patent

1930 RCA, Westinghouse and GE pooled research efforts to develop commercial TV system under Westinghouse physicist Vladmir Zworykin

1939 Commercial television unveiled to public at New York World's Fair

1941 FCC established commercial TV standards; about 10 experimental stations operated during World War II

1946 Commercial broadcasting began; first network linked New York, Philadelphia and Washington, D.C. by coaxial cable.

1948 Four-year freeze in license began (lifted in 1952 when FCC Opened up UHF to provide extra capacity)

1949 Community Antenna Television (CATV) began--predecessor to cable

1953 FCC picked RCA system as the standard for color transmission

1962 All TV sets required to have VHF (2-13) and UHF (14-82) channels

1966	Major networks begin all-color programming; FCC adopted standards for cable operations.
1967	Public Broadcasting System established by U.S. Congress
1975	Satellite broadcasts to cable systems began; 1/2-inch betamax and VHS recording systems introduced by Sony, JVC
1981	First home camcorders invented as successors to 8mm home movies
1985	Fox Network began limited operations
1994	Direct broadcast satellite service began to homes in U.S.

#### **Broadcast News**

1912	Sinking of Titanic heightened public awareness of "radio"
1916	Lee DeForest pioneered news reports of early presidential elections
1920	KDKA reported results of Harding-Cox election; WWJ in Detroit later began regular news broadcasts
1933	Associated Press began separate radio news service
1932-44	FDR capitalized on power of radio in famous "Fireside Chats"
1938	First network radio broadcasts on CBS, NBC
1947	First newscast: "Camel News Caravan" with John Cameron Swayze
1963	Network news broadcasts expanded to half-hour; JFK's Assassination brought drama direct to home TV sets.
1968-72	Vietnam War and protests dramatized power televised news coverage, aided by advent of videotape and satellite transmission
1974	Televised Watergate hearings led to resignation of Richard Nixon
1980	Cable News Network began 24-hour TV operations

#### **Computing/Computer-Mediated Communications**

1642	Blaise Pascal invented first mechanical calculator
1833	Charles Babbage credited with inventing computer
1868	Christopher Sholes invented first typewriter; patented by Eliphant Remington in 1874
1880s	Herman Hollerith invented punch card system used in 1890 census. His firm, founded in 1911, became predecessor to IBM.
1939	John V. Atanasoff and Clifford Berry invented first digital, binary machine demonstrating principles later used in computers
1946	John von Neumann wrote influential paper outlining components of basic computers known today
1951	UNIVAC became first commercial computer (invention of John Mauchley and J. Presper Eckert at Remington-Rand); IBM Model 650 introduced two years later
1948	Transistors invented at Bell Labs, later used in amplifiers in 1953, radios in 1954)
1958	Computer circuit boards created by Jack Kirby (Texas Instruments)
1960s	Minicomputers introduced
1962	First computerized game (William Higginbotham, Brookhaven Lab)
1975	First microcomputer kit, Altair 8000, introduced by Edward Roberts, with software written by Bill Gates and Paul Allen.
1976	Steve Jobs and Steve Wozniak co-found Apple Computer (introduce Apple I)
1975	Bill Gates and Paul Allen co-found Microsoft
1976	Steve Jobs and Steve Wozniak co-found Apple Computer
1981	IBM PC is introduced with DOS software from Microsoft
1984	Apple Macintosh combined earlier mouse and windows technologies with graphic capability, simplified operations for consumers.

1990s      Multimedia capabilities provided sound, video in PCs.

#### **Mobile Communications**

1973      Motorola introduces first mobile phone  
1994      First smartphone - the Simon  
2000      Rise of cell phone use and cellular technology  
2001      iPod and MP3 format-compressed digital file format debut  
2007      Apple iPhone uses IOS (adapted in part from iPod music player, 2001)  
2008      First Android smartphone using software by Google (HTC Dream)

#### **Internet, Networking and World Wide Web**

1965      Computer time-sharing becomes popular  
1969      U.S. Defense Department computer network created--model for Internet (ARAPANET: Advanced Research Project Agency Network)  
1973      TCP/IP and email protocols established on ARPANET  
1977      Dial-up multi-user domains/dungeons (MUDs) provide platform for games, chat over phone lines  
1978      Bulletin board system via telephone modem debuts in Chicago  
1979      CompuServe starts closed-system Internet service over phone lines  
1980      Usenet; Hypertext links introduced; first online newspaper (Columbus Dispatch on CompuServ)  
1983      MCI Mail, first commercial email service  
1988      Internet Relay Chats available from multiple services  
1990      Tim Berners-Lee at CERN outlines basic elements of the hypertext mark-up language (<http://>), the protocol that made the World Wide Web possible  
1992      National Research and Education Network (NREN) approved by U.S. Congress to upgrade Internet.  
1993      Marc Andreessen creates predecessor to Netscape (now Firefox) browser;  
Commercialization of World Wide Web begins  
1995      *Microsoft Internet Explorer* is launched  
1995      Amazon.com launches online shopping  
1995      First mobile web browser (PowerWeb in Apple Newton)  
1998      Google search engine launched  
2004      Broadband penetrates half of American homes