

Mark Schubin's *Fandom of the Opera* Notes, NYU-Poly, 2012 April 27  
(lectures may be downloaded at SchubinCafe.com)

**Origin of modern opera, modern science, and modern communications satellites:**

- 1520-1591 - Vincenzo Galilei: father of modern acoustics, sung drama, and Galileo (whom he taught experimentation); after reading Galilei's music-theory book, Johannes Kepler formulates his 3<sup>rd</sup> law of planetary motion, leading to modern satellites

**Telephony:**

- 1821 - After a demonstration of Charles Wheatstone's "enchanted lyre," *Repository of Arts* predicts wired opera broadcasts
- 1848 - "Telakouphanon" (acoustic telephone) service delivering opera to homes for a fee predicted in *Punch*
- 1849 - Antonio Meucci, technical director of Havana Opera's Teatro Tacón (and former stagehand and effects technician at Florence's Teatro della Pergola) begins experiments on sound transmission by electricity via wire
- 1876 - *The New York Times* predicts box-office drop at Academy of Music as a result of availability of opera via telephone
- 1877 - George du Maurier cartoon in *Punch's Almanack for 1878*, predicts delivery of opera to homes via telephone
- 1878 - *Don Pasquale* carried by telephone lines in Bellinzona, Switzerland from opera-house auditorium to nearby room
- 1880 - Microphone developed specifically for opera at David Moseley & Sons, Manchester, England; Edward P. Fry probably 1st person to listen to opera at home via telephone (applauds what he likes); opera carried 80 km from Zürich to Bâle
- 1882 - Scotland's National Telephone Company allows home/office access to operas at Dundee's Theatre Royal
- 1885 - Opera-at-home subscription service begins in Lisbon, 180,000 *reis* for a 90-opera season; *The Electrical Engineer* reports in 1888 subscriber headphone listening (probable earliest reference to consumer headphones)
- 1887 - *Faust* carried live from Paris to Brussels (Massenet's *Le Mage* carried live from Paris to London listeners in 1891)
- 1889 - Théâtrophone pay-for-time opera-by-cable begins in Paris, spreads across Europe and North America
- 1893 - Hungarian Telefon-Hirmondó opera-by-wire service offers 1st newscasts (ended by World War II destruction)
- 1908 - Dictograph carries live sound from Metropolitan Opera stage to general-manager Heinrich Conreid's office

**Recording:**

- 1889 - Oldest known surviving aria recording, bass Peter Schram singing from *Don Giovanni*
- 1900 - Metropolitan Opera librarian Lionel Mapleson starts making 1st non-interfering location performance recordings
- 1903 - *Ermani* 1st "full-length" (abridged) opera recording (40 disks); nearly complete *Pagliacci* recorded in 1907
- 1907 - Caruso records *Vesti la giubba* 3<sup>rd</sup> time; oldest million seller; digital deconvolution later (1976) restores sound
- 1976 - First commercial digital 16-bit audio recorder (Soundstream) & recording: *The Mother of Us All* at Santa Fe Opera

**Sound broadcasting:**

- 1673 - Acoustic opera transmission to outside the house suggested by Athanasius Kircher in *Phonurgia Nova*
- 1900 - Acoustic broadcasts from the Eiffel Tower via Auxeto-Gramophone compressed-air amplified phonograph
- 1907 - Recorded opera music transmitted by radio (possibly 1906); Eugenia Farrar live singing leads to U.S. Navy radio
- 1910 - Radio broadcasts of live operas transmitted directly from the Met; 2<sup>nd</sup> marred by radio-telegraph beer message
- 1919 - Opera radio broadcasts in Chicago and New Brunswick, NJ via military transmitters, latter heard live 2000 miles at sea
- 1920 - Melba sings in UK (pre-BBC) with enough power to be outlawed; Teatro Coliseo whole season aired in Buenos Aires
- 1921 - Opera radio broadcasts common in Berlin and Chicago; following year common in Salt Lake City
- 1926 - Teatro Colón, Buenos Aires, orders its own broadcast transmitter for opera
- 1928 - African-American composer Harry Freeman's *Voodoo* (trimmed) broadcast on WGBS in 1928 before stage premiere
- 1929 - Cesare Sodero's *Ombre Russe* broadcast in totality on NBC radio before opening on stage
- 1931 - Regularly scheduled Saturday-afternoon Metropolitan Opera radio broadcasts begin (haven't stopped yet)
- 1937 - CBS commissions Gruenberg's *Green Mansions* as a "non-visual opera" with sound effects; 1<sup>st</sup> radio commission 1932
- 1938 - *Carmen* broadcast from edited film recording on WQXR (Salzburg Festival operas recorded on sound film in 1937)
- 1939 - First scheduled FM broadcast includes opera *Francesca da Rimini*
- 1949 - Edited Lily Pons note in a delayed Metropolitan Opera broadcast of *Lucia* causes a scandal
- 2006 - Sirius Satellite Radio begins offering a 24-hour Metropolitan Opera channel

**Stereo:**

- 1881 - Clément Ader demonstrates stereo transmission from the Paris Opera; a critic writes, "The telephone is a harsh judge"
- 1895 - UK Electrophone opera-by-wire service offers stereo headphones (headphones used for opera at least since 1888)
- 1925 - Berlin Opera broadcasts stereo radio via two radio stations (possibly earlier)
- 1952 - *The Los Angeles Times* reports Orpheum Theater equipped with stereo sound for Met's 1st cinema transmission
- 1973 - Texaco/Metropolitan Opera Radio Network becomes world's 1st live in stereo (to 12 U.S. cities)
- 1976 - New York City Opera's live telecast *The Ballad of Baby Doe* carried to more than half of all U.S. households in stereo

**Community television:**

- 1877 - Letter to *The Sun* [NY] describes future live transmission of opera pictures and sounds to theatres
- 1886 - Atlanta & Detroit opera houses offer baseball away games portrayed live on stage
- 1919 - Hugo Gernsback suggests in *Radio Amateur News* live radio sound to accompany filmed pictures in cinemas
- 1952 - Met *Carmen* is transmitted to 31 cinemas in 27 cities; TV stations must relinquish network feeds for the event
- 1986 - Basel Opera *Lucia* plazacast, followed by Houston Grand Opera in 1995 and then others
- 2006 - Metropolitan Opera live HD plaza, Times Square, and international and HD cinema transmission
- 2007 - SF "Opera at the Ballpark" begins at AT&T Park (32,000 at 2010 *Aida*); 2008 "Opera in the Outfield" in D.C.

### Home television:

- 1882 - Albert Robida's *Le Vingtième Siècle* predicts (& illustrates) opera delivered to homes via "téléphonoscope"
- 1891 - Edison predicts opera television (in color) to be shown at 1893 World Columbian Exposition in Chicago
- 1928 - Opera singers on TV (dancers in 1935); Fritz Reiner proposes conductor camera for remote cueing
- 1936 - BBC carries Coates's opera *Pickwick* on TV before it opens on stage; Lockhart-Mummery predicts live 3D TV opera
- 1937 - *La serva padrona* becomes 1st full-length opera broadcast on TV; child actors lip-sync singers in *Hansel & Gretel*
- 1938 - Paul Nipkow Sender in Berlin broadcasts *Der Schauspieldirektor* opera from film (repeatedly); BBC-commissioned Hughes radio opera *Cinderella* televised; 1951 NBC *Amahl and the Night Visitors* is 1st commissioned originally for TV
- 1938 - Dancers, choreographed by Anthony Tudor, "step-sync" a live BBC *Tristan* with off-screen singers
- 1947 - New London Opera Company (UK) *Don Giovanni* 1st opera telecast from stage (Cambridge Theatre); Met 1948
- 1949 - NBC Opera Theater starts 16-year run; U.S. commercial TV broadcasters commission 20 operas in Golden Age
- 1954 - DuMont Television moves to New York's Central Opera House; began *Opera Cameos* in 1953
- 1957 - Prokofiev trims his *War & Peace* for TV production
- 1958 - Swedish Television shoots *Orfeo ed Euridice* at Drottningholm as a test for Pelé's 1st football/soccer World Cup
- 1963 - Menotti's *Labyrinth* uses video effects that cannot be achieved on the stage
- 1966 - New Met is wired for TV (with camera position in cloak room to show furs being checked); never used
- 1971 - New York City Opera's *Le Coq d'Or* 1st opera on only cable television; uses USAF-developed low-light technology
- 1989 - Bavarian State Opera's *Ring* shot in HDTV, followed next year by Seattle (*War & Peace*) and Met (*Semiramide*); UK Channel Four grant program requests only "unstageable operas" for TV
- 1997 - Televised-opera productions must be licensed in China

### "Silent" movie era:

- 1852 - Paris Opera special-effects master Jules Duboscq patents 1<sup>st</sup> photographic motion-picture projection system (in 3D)
- 1894 - Edison releases *Carmencita* Spanish dancer film (name used in *Carmen* just before the Habanera)
- 1896 - Operetta films; Rosabel Morrison touring *Carmen* with filmed bullfight introduces many Americans to movies
- 1897 - Georges Hatot's *Faust*, released by the Lumiere brothers, based on Gounod's opera
- 1898 - *The Daughter of the Regiment* is the 1st filmed opera (two minutes) to be shown; *Martha* is shot on film and, then, in
- 1899 - *Martha* is shown at the Eden Musée with live performers singing behind the screen; technique popular though 1922 cinema opera *Jenseits des Stromes* (with projected score at bottom of screen; other systems for cueing musicians in opera movies used small conductor image or signal lights built into the set)
- 1899 - Georges Méliès's *Cendrillon* movie based on the same year's Massenet opera of the same name
- 1902 - *Faust et Méphisto* by Alice Guy, 1st female film director, for Gaumont (not her 1st movie)
- 1915 - Geraldine Farrar becomes silent-movie star based on success onstage as *Carmen*
- 1919 - Hugo Gernsback proposes live sound, distributed by radio, to cinemas projecting silent opera movies

### "Sound" movie era:

- 1894 - First synchronized-sound movie uses music from Planquette's opera *Les cloches de Corneville* (restored in 2000)
- 1900 - At Phono-Cinéma-Théâtre at Paris Exhibition, synchronized-sound arias are screened, including Victor Maurel singing arias from *Don Giovanni* and *Falstaff* and Émile Cossira singing aria from *Roméo et Juliette*; 1905 Cinéματο-Gramo-Théâtre
- 1902 - Aria from *Carmen* in an Alber's Electro Talking Bioscope movie in Netherlands
- 1906 - Cinemafono Pagliej sound-movie system introduced in Rome specifically for opera
- 1907 - "Complete" *Faust* (22 arias), using Chronophone system
- 1908 - Cinophon short *Ach wie so trügerisch* synchronizes an actor to Caruso's recording of *La donna è mobile*
- 1913 - First complete opera shot in U.S. with synchronized sound, *Pagliacci*
- 1933 - Laurel & Hardy version of Auber's *Fra Diavolo* (with music)
- 2009 - Opéra de Rennes *Don Giovanni* live 3D to cinemas (before *Avatar*); 2010 Folkoperan *Faust*; 2011 ENO *Lucrezia*
- 2011 - Non-live stereoscopic 3D *Carmen* from London's Royal Opera opens in cinemas worldwide

### Crossed fields & miscellany:

- 1841 - Antoine Claudet shoots 1<sup>st</sup> snapshot (short-exposure photograph) of ballet dancers from "the Italian Opera" in London
- 1915 - Mascagni's *Rapsodia Satanica* called 1st "film opera" (opera written specifically for screen), has libretto
- 1926 - Vitaphone moves to the Manhattan Opera House, where *Don Juan* sound feature is recorded
- 1927 - Term "horse opera" used to describe western movie (based on the word *melodrama*, with roots of music and acting); Weill opera *Royal Palace* incorporates film sequence (Berg's *Lulu* has one in 1937)
- 1928 - Weill's *Der Zar läßt sich photographieren* has recorded music in the score
- 1949 - Term "space opera" used to describe science-fiction movie
- 1951 - Academy-award winning film-score composer Bernard Herrmann writes opera *Wuthering Heights*; Menotti directs film of his *The Medium* (previously directed for TV in 1948 and stage in 1946)
- 1952 - First live opera transmission to cinemas (Met's *Carmen*, 31 theaters in 27 cities)
- 1954 - DuMont Television Network moves to New York's Central Opera House (now the Fox Television Center)
- 1958 - Moore's *Gallantry* opera based on soap opera, complete with commercials
- 1987 - Adams's *Nixon in China* is 1<sup>st</sup> "newsreel opera" or "CNN opera;" Yavelow's *Countdown* called 1<sup>st</sup> "computer" opera
- 1994 - *Countdown* (above) called 1<sup>st</sup> opera in cyberspace; *Honorio in Cibespazio* called 1<sup>st</sup> Internet opera (1<sup>st</sup> webcast 1995)
- 2000 - *Virtopera* performed in multiple countries and on the Internet
- 2006 - The World Opera project for geographically distributed performance begins; research labs tackle sync issues