## **Chapter 2 Notes**

## Following from Susan Douglas, Inventing American Broadcasting

Frontispiece: CTW excerpts:

Telegraph without wires – how attractive it sounds.

A little instrument that one can almost carry in the pocket, certainly in a microscopic grip, and if your correspondent be likewise equipped, you may arrest his attention and talk to him almost any time or place, with no intervening medium but the ... ether... Possible? Certainly. But will it pay?

xxv re the popularization of inventors: they had harnessed electricity, what could be mre heroic or romantic? Electricity aheld a special place in the public's imagination.

xxvii vaudeville was the most popular form of entertainment in the public sphere, but with movies, phonograph, (and then later radio) a new alliance between technology and entertainment was of profound economic and cultural significance.

xxviii transition from "wireless" to "radio occurred between 1906 & 1912

9 1899 America's cup, Bennett, Herald, Stanley/Livingstone

10 scientific community dismissive of Marconi as nothing new

17 Marconi & mother go to England. Family forms company. Publicity by linking Queen's yacht to Prince of Wales health.

18 sends across English Channel 1899

19ff Yacht races in detail. Public notices, Herald front page, public display, NY Times,

25 Western Union "reviled monopoly".

25ff Newspapers self-interest in getting competition, lower prices than transatlantic cables charged. *New York Times* 

26ff Press construction of meaning of wireless beginning 1899

31 American academic belittling of Marconi's work as nothing new, but he had a working total system.

35 Marconi worked by trial and error to achieve a commercial goal.

36 Marconi personality aloof humorless, self-centered

38 Marconi invents practical tuning to different frequencies. Crucial patent.

39-40 Marconi search for better detector. Patent of magnetic detector in 1902. earphones, operator discrimination of different transmitter tuning, faster, more robust, good on ships.

42ff Fessenden

45 Fessenden early work 1900 on continuous wave as preferable alternative to Marconi's spark.

46 Fessenden idea of using dynamo for transmitter instead of spark; places order with GE 1900.

48ff De Forest

52 Stone, tuning, American patent application 1900

53 De Forest again, need for personal celebrity

53ff Marconi goal of transatlantic service. Curvature of earth? Went for bigger and more powerful instead of more refined as were De Forest, Stone and Fessenden.

55 Marconi drive for succeeding first rather than technical perfection

56 spark a foot long, 200 miles

56 1901 yacht races, competition between De Forest and Marconi

57 Marconi success transmitting across Atlantic - letter "S".

57-58 Very positive press. "in the public mind, Marconi and wireless telegraphy are one; he is its creator." See footnote 69 for ref.

59 doubts from scientific community about his success. See article on whether he really did it (should be on desk).

\*\* 62 rise of market for corporate securities, 1887-1902, see footnote book to check out, probably of more use to the Vail story.

64-65 Establishment of American Marconi, short on who took initiative. John Bottomley, E.H.Moeran

66 organization of Marconi company, businesslike, role of board, Marconi.

66 Finance & ownership of company???

67 Marconi goal to establish monopoly in wireless, to connect the British empire.

67 Douglas: company had two strategies:

- new ship-to-shore service short term
- alternative to cable companies long term

69-70 1899, company adopted two key financial policies:

- shipping companies needed shore stations to make ship-borne equipment worthwhile, i.e., system infrastructure (cf Bell decision to provide wires and telephones). So company built the shore stations and <u>leased</u> ship equipment along with Marconi operator to provide an end-to-end service

- Nonintercommunication rule: ship and shore stations would communicate only with other Marconi stations.

70 Mutually exclusive contract with Lloyd's - major step toward monopoly goal, self-fulfilling standard, cf Aitken 239, cf Windows, Galaxy, other?

73 American Marconi financially on its own

77 American Marconi slow to build shore stations, slow to build US market, little support from England.

78 Preeminence of British Navy, shipping helped Marconi as British company.

78-79 Importance of Marconi's personal skills and ease of dealing with corporate heads and heads of state.

79 American Marconi in preeminent position by 1912 ??? how???