

## Chapter 3 – Radio

### The Birth of Radio Broadcasting and Radio Set Manufacturing

#### 3. World War I

This is a short section that pulls together telephone and wireless technologies to set the stage for the Radio and subsequent chapters. Key topics are: communications and national security; government takeover of wireless and telephone (telegraph?); government as promoter of expansion and standards; the patent suspension; the situation of the major companies following WW I; the patent agreements on the vacuum tube.

*This section is about the explosion of radio broadcasting on the American scene in the early 1920s and its rapid development from a competitive chaos/ferment/novelty to an industry dominated by three national broadcast networks.*

*Radio as we know it – as broadcasting – didn't happen until 1920. There was a lot of innovation in wireless and a lot of excitement about it – first wireless telegraphy and then wireless voice. But wireless voice was thought of as wireless telephony. For unexplained reasons no one really thought of wireless voice – radio – as a broadcast medium. Everybody saw it as a way to provide telephone service without wires. The thought of radio as a conduit for information and entertainment really just came out of the blue in 1920 and took off in a big, big way across the country starting in 1921.*

*There are three characters in the radio broadcasting story: H.P. Davis, Herbert Hoover, and William Paley. By the latter part of 1920s or early 1930s, radio had pretty much consolidated into a national system of radio stations and three radio networks. This was the predominant structure of radio and played an important role in creating a new thread in American mass culture. It also brought in a new dimension in advertising, which then carried over to the regulatory structure of T.V. broadcasting and became the primary industry structure for radio and television broadcasting news and entertainment pretty much as a monopoly through 1970s and then as a predominant factor into the 80s and 90s. Davis, Hoover, and Paley formed the basic structure of the broadcasting industry that carried over into television and was a fixture of American media and life for decades. Collectively, the stories of these three individuals explain the creation and consolidation of the radio broadcasting business.*

#### 1. H.P. Davis

H.P. Davis at Westinghouse simultaneously originated two major new and interdependent industries - the radio broadcasting business and the consumer electronics business.

Davis's contribution began in 1920 with Frank Conrad's experiments with voice

transmission by wireless. Conrad worked at Westinghouse in Pittsburgh as an engineer originally on transmitters,<sup>1</sup> but later on other assignments as demand for transmitters declined. Captivated by wireless, however, he created an amateur radio station – 8XK – at home, where he experimented with different ways of voice transmission.<sup>2</sup> He solicited reports from people as to when they heard his station, how clear it was and how strong it was. Since he didn't want to talk all the time, he started playing phonograph records, he had his sons play piano, and had various people come by to talk.<sup>3</sup> People sent him postcards, not only about the signal quality, but also asking for certain records to be replayed.<sup>4</sup> At that time, there was no business of building radio receivers so the people who heard Conrad's transmissions were largely amateur tinkerers like Conrad who built their own receiver.<sup>5</sup> Many were American boys who for some reason had an interest in radio.<sup>6</sup> Increasingly, Conrad received cards solely about the content of his programs and unrelated to the technical aspects.<sup>7</sup>

Sometime in 1920, H.P. Davis sees an ad in one of the Pittsburgh newspapers that the Horne department store is selling radio receivers<sup>8</sup> for people who want to listen to Conrad's radio transmissions.<sup>9</sup> At that moment, H.P. realizes that, since Westinghouse builds radio equipment, it could sell radio receivers and it could sell more of them if it had a regular broadcast of entertainment and news material.<sup>10</sup> So, he decided that Westinghouse should set up a station that has more power than what Frank Conrad has, which would create an audience of people to buy its receivers.<sup>11</sup> So H.P. gets Conrad and other people at Westinghouse to build a

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<sup>1</sup> [Susan J. Douglas, *Inventing American Broadcasting, 1899-1922* (Baltimore: Johns Hopkins University Press, 1987) at 299; Lawrence W. Lichty and Malachi C. Topping, eds., *American Broadcasting: A Source Book on the History of Radio and Television* (New York: Hastings House Publishers, 1976) at 105.]

<sup>2</sup> [Douglas, *Inventing American Broadcasting*, 299; Marvin Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century* (Jefferson, North Carolina: McFarland & Company, Inc., 2000) at 15.]

<sup>3</sup> [Gleason L. Archer, *History of Radio to 1926* (New York: The American Historical Society, Inc., 1938) at 199-201; Tom Lewis, *Empire of the Air: The Men Who Made Radio* (New York: Harper Perennial, 1991) at 152; Erik Barnouw, *A Tower in Babel: A History of Broadcasting in the United States to 1933* (New York: Oxford University Press, 1966) at 67-68.]

<sup>4</sup> [Lichty and Topping, *American Broadcasting*, 105.]

<sup>5</sup> [Archer, *History of Radio to 1926*, 199.]

<sup>6</sup> [Our sources don't explicitly support this. But see Barnouw, *A Tower in Babel*, 68 ("The few hundred amateurs thought to be listening to Conrad's concerts in the Pittsburgh area were all technical-minded individuals who had themselves assembled their receivers.")]

<sup>7</sup> [Lichty and Topping, *American Broadcasting*, 105.]

<sup>8</sup> [CTW:] Who built those radios?

<sup>9</sup> [Douglas, *Inventing American Broadcasting*, 299-300; Lichty and Topping, *American Broadcasting*, 106; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 15.]

<sup>10</sup> [Douglas, *Inventing American Broadcasting*, 300; Lichty and Topping, *American Broadcasting*, 106.]

<sup>11</sup> [Ibid; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 15.]

more powerful transmitter on top of the Westinghouse plant in Pittsburgh<sup>12</sup> and applies to the government for a license, which it grants.<sup>13</sup> Until Westinghouse's application, no one had applied for a license for this purpose so the government came up with a way to give this license, and Westinghouse's station became KDKA.<sup>14</sup>

This moment sparked the creation of the radio broadcasting industry which later became the television broadcast industry and the consumer electronic industry. The radio broadcast industry needed interesting radio broadcasts to encourage people to buy their technology.

H.P. gets Westinghouse to build this radio station and start a program of news and entertainment and starts selling radio receivers.<sup>15</sup> So H.P. starts the station, he presumably starts building radios, and he builds a number of other stations around the country, from the midwest to northeast.<sup>16</sup> Those were the first radio broadcast stations and most of those stations still exist today as [WBZ] in Boston and WABC in NY.<sup>17</sup> In any event he starts a number of radio stations and starts making radio receivers. At this point, RCA comes into play because Westinghouse is part owner of RCA and has patents which came to be called the radio trust.<sup>18</sup> [Westinghouse] fairly quickly agreed to make RCA the sales arm for selling radios to the public.<sup>19</sup> An agreement emerges that GE would manufacture 60% of radios sold and Westinghouse would manufacture 40%.<sup>20</sup>

KDKA made its first transmission on election night November 2, 1920.<sup>21</sup> Immediately after, it began its regular radio broadcast, and radio as we know it emerges.<sup>22</sup> Amazingly, no one had thought of this before. Though Fessenden transmitted a Christmas program,<sup>23</sup> and

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<sup>12</sup> [Douglas, *Inventing American Broadcasting*, 300; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 15.]

<sup>13</sup> [Lichty and Topping, *American Broadcasting*, 106.]

<sup>14</sup> [Barnouw, *A Tower in Babel*, 69 (“On October 27 the Department assigned the letters KDKA – commercial shore-station call letters – and authorized use of 360 meters, a channel away from amateurs and comparatively free of interference.”).]

<sup>15</sup> [Douglas, *Inventing American Broadcasting*, 300.]

<sup>16</sup> [Archer, *History of Radio to 1926*, 215, says that Westinghouse quickly built other stations throughout the country, including WJZ in Newark, New Jersey, and WBZ in Springfield, Massachusetts, but doesn't specifically credit H.P. Davis with starting these stations.]

<sup>17</sup> [“WBZ (AM),” *Wikipedia*. [http://en.wikipedia.org/wiki/WBZ\\_\(AM\)](http://en.wikipedia.org/wiki/WBZ_(AM)); WJZ is now known as WABC. “WABC (AM),” *Wikipedia*. [http://en.wikipedia.org/wiki/WABC\\_\(AM\)](http://en.wikipedia.org/wiki/WABC_(AM)).]

<sup>18</sup> [Gleason L. Archer, *Big Business and Radio*, (New York: The American Historical Company, Inc., 1939) at 4ff.]

<sup>19</sup> [Lewis, *Empire of the Air*, 154-55; Paul Starr, *The Creation of the Media: Political Origins of Modern Communications* (New York: Basic Books, 2004) 226-27.]

<sup>16</sup> [Starr, *The Creation of the Media*, 226-27; Archer, *Big Business and Radio*, 4ff.] Did Westinghouse sell radio receivers under its own brand for a while? Did it think it was its right to build them, exempt from the patent pool agreement?

<sup>21</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 15, 19.]

<sup>22</sup> [Archer, *History of Radio to 1926*, 208; Lewis, *Empire of the Air*, 153.]

<sup>23</sup> [Archer, *History of Radio to 1926*, 86-87; Douglas, *Inventing American Broadcasting*, 156-

someone on the West Coast was producing regular transmissions, they weren't thinking about making this a commercial proposition. It was either a publicity stunt (Fessenden) or personal hobby (West coast guy), not an attempt to stimulate radio sales to the general public.

H.P. largely disappears until 1926 when NBC is formed as a national broadcasting company, a network owned by RCA, and H.P. becomes NBC's chairman of the board.<sup>24</sup> NBC crystallized the formation of a national network – a network provided for by AT&T.<sup>25</sup>

## 2. Herbert Hoover

Herbert Hoover is one of the most important guys in the history of early broadcasting because he provided the regulatory mechanism, which is in large part why there are three television networks.

The radio act of 1912 said that the Secretary of Commerce must grant a license to whoever wants one.<sup>26</sup> In the 1920s, both the transmission and reception technology was such that it was hard to distinguish between particular frequencies and, as the number of stations grew, there was more and more interference.<sup>27</sup> Hoover at the Commerce Department believed in the cooperation of government and industry.<sup>28</sup> He developed a procedure for granting licenses to broadcast stations subject to certain restrictions, i.e., a station might be able to broadcast with only certain watts of power or only on particular days or times.<sup>29</sup> There was interference, particularly at night.<sup>30</sup> [And by amateur radio operators, particularly when amateurs' transmitters were located near listener's receivers, in which case the amateur transmission may have blocked out other transmissions.<sup>31</sup>] So Commerce [restricted amateurs

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<sup>24</sup> [Archer, *Big Business and Radio*, 285.] How much of a role did he have in the creation of NBC? Was creation of the network his idea?

<sup>25</sup> [Starr, *The Creation of the Media*, 344.]

<sup>26</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 10 (citing U.S. Attorney General opinion letter to the Secretary of Commerce, Nov. 22, 1921 (“The language of the act, the nature of the subject matter regulated, as well as the general scope of the statute, negate the idea that Congress intended to repose any such discretion in you in the matter of licenses.”)) and at 46-47 (citing *Hoover v. Intercity Radio Co.*, 286 Fed. 1003 (Ct. App. D.C. 1923) (Act of 1912 failed to give the Secretary of Commerce power to refuse a license)).]

<sup>27</sup> [Douglas, *Inventing American Broadcasting*, 315; Lichty and Topping, *American Broadcasting*, 534-36, 547-52.]

<sup>28</sup> [Douglas, *Inventing American Broadcasting*, 316; Lichty and Topping, *American Broadcasting*, 534; Starr, *The Creation of the Media*, 333-34.]

<sup>29</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 68ff; Douglas, *Inventing American Broadcasting*, 316; Starr, *The Creation of the Media*, 334-35.]

<sup>30</sup> [For the same reason, interference also worsened during cold weather because “the static would clear and signal ranges would increase.” Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 179.]

<sup>31</sup> [Ibid at 40-41.]

from broadcasting material, including weather reports, news and entertainment.<sup>32</sup> It also] added more frequencies which required at least new stations to adopt more precise frequency control transmitters.<sup>33</sup> Adding stations with more frequencies required people to buy radios capable of tuning to particular frequencies without much interference, but the people with older radios still encountered interference.<sup>34</sup> Radio grew v rapidly and the public interest grew –radio was an increasingly noticed phenomenon on national landscape.<sup>35</sup>

Then in [December] 192[5] and [January 1926], [Eugene F.] McDonald, the president of Zenith, moved his transmitter to a frequency that had been reserved for Canadian broadcast, saying that the government didn't have the authority to restrict it.<sup>36</sup> Commerce sued Zenith,<sup>37</sup> and ultimately [the U.S. District Court for the Northern District of Illinois] ruled that Commerce didn't have authority to refuse the company a license.<sup>38</sup>

Long before the suit, Hoover had been asking for Congressional authority for the regulatory apparatus and procedures that he had created, but Congress was never able to get its act together,<sup>39</sup> either because it didn't think it was urgent or didn't know what to do.

After the *Zenith* decision, people felt entitled to do whatever they wanted and began

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<sup>32</sup> [Ibid at 41, 67.]

<sup>33</sup> [Lichty and Topping, *American Broadcasting*, 550; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 84.]

<sup>34</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 43-44.]

<sup>35</sup> [See, e.g., Lichty and Topping, *American Broadcasting*, 536 (“The number of broadcast stations in the United States had grown from 60 [in 1922] to 581 by March, 1923, while radio receivers had increased from an estimated 600,000 to somewhere between 1.5 million to 2.5 million sets during the same period.”); Starr, *The Creation of the Media*, 335 (“From 1922 to 1925, the number of receivers in use climbed to an estimated 2.75 million, the proportion of homes in the United States with radios grew from 0.2 to 10.1 percent, and the quality of reception improved as cheap crystal sets with limited capacities gave way to better models with vacuum tubes.”); Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 49 citing Herbert Hoover’s opening address at the First Radio Telephony Conference, Feb. 27, 1922 (“The Department estimates that today over 600,000 . . . persons possess wireless telephone receiving sets, whereas there were less than fifty thousand such sets a year ago.”).]

<sup>36</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 163; Lichty and Topping, *American Broadcasting*, 553-54.]

<sup>37</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 164-67.]

<sup>38</sup> [*U.S. v. Zenith Radio Corp.*, Docket No. 14257 (Dist. Ct. N.D. Ill. April 16, 1926), located at [www.fcc.gov/mb/audio/decodoc/misc/US\\_v\\_Zenith\\_Radio\\_Corporation.html](http://www.fcc.gov/mb/audio/decodoc/misc/US_v_Zenith_Radio_Corporation.html). Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 169-70. Hugh G. J. Aitken, “Allocating the Spectrum: The Origins of Radio Regulation,” 35 *Tech. & Culture* 686, 702 (1994); Lichty and Topping, *American Broadcasting*, 529, 546, 554.]

<sup>39</sup> [Lichty and Topping, *American Broadcasting*, 535-38, 544-45. There is some speculation that, frustrated with Congress, Hoover encouraged Zenith to bring suit because he wanted a test case to show that he didn't have the authority to stimulate congress to enact a statute that explicitly governed government regulation of broadcasters.]

shifting into other frequencies.<sup>40</sup> Hoover's system quickly devolved into a big mess and a previously annoying problem quickly became unmanageable.<sup>41</sup>

Finally Congress got it together and created the Radio Act of 1926 which was passed in 1927.<sup>42</sup> The Act provided that there would be a commission for one year to regulate and issue licenses, after which the authority would revert to commerce dept.<sup>43</sup> The commission, however, was extended for several years and in 1929 was made permanent so that licensing was done by the Radio commission.<sup>44</sup> The policies and procedures that the Fed[eral] Radio Commission had adopted, however, were essentially those that Commerce had evolved under Hoover.<sup>45</sup>

The litigation and legislation of this period illustrates that Hoover<sup>46</sup> and most people believed that radio spectrum should not be owned by corporations but by government.<sup>47</sup> There's a lot of reference to the public interest and regulating radio on behalf of public interest.<sup>48</sup>

The Hoover story is a story of government regulation of air waves, cooperation with industry and emergence of a sound regulatory scheme under which industry grew and prospered.

One of the key elements of the Hoover policy was that to accommodate all these would-

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<sup>40</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 176-81. But see Lichty and Topping, *American Broadcasting*, 554 ("There is disagreement as to how much interference and actual 'chaos' followed the Department of Commerce's relaxation of control. However, from July 1, 1926, to December 18, 1926, the Department was required to grant 126 new licenses (to total 642 stations). More than 91 stations changed wavelengths and about 132 stations increased power. By February of 1927 more than 210 new stations had been licensed from July 1, 1926, bringing the total number to 716.")]

<sup>41</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 176-81.]

<sup>42</sup> [Ibid at 183; Aitken, *Allocating the Spectrum*, 689.]

<sup>43</sup> [Radio Act of 1927.]

<sup>44</sup> [Lichty and Topping, *American Broadcasting*, 530.]

<sup>45</sup> [Thomas W. Hazlett, "The Rationality of U.S. Regulation of the Broadcast System," 33 *J.L. & Econ.* 133, 173 (1990).]

<sup>46</sup> [Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 52ff.]

<sup>47</sup> [David Sarnoff, who became RCA President, was among the majority who viewed radio "as a philanthropically supported public service." Roland Marchand, *Advertising the American Dream: Making Way for Modernity, 1920-1940* (Berkeley: University of California Press, 1985 at 89. See also Michele Hilmes, *Hollywood and Broadcasting: From Radio to Cable* (Urbana, IL: University of Illinois Press, 1990) at 10 citing a 1924 Senate resolution stating that "The ether and the use thereof for the transmission of signals, words, energy and other purposes . . . is hereby reaffirmed to be the inalienable possession of the people of the United States and their Government."]

<sup>48</sup> [Radio Act of 1927; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 50ff, 85-87; Douglas, *Inventing American Broadcasting*, 317; Lichty and Topping, *American Broadcasting*, 529-30, 541-45] [CTW:] Where did "public interest convenience necessity" come from and when was it first applied to radio?



be broadcasters, they adopted a pattern of having high-powered transmitters located in certain areas and medium power located in other areas, low in other areas.<sup>49</sup>

The table of allocation sets forth where stations may be located and at what power, which pretty much evolved from the stations that were already operating in the early days.<sup>50</sup> The table also reflected Congress's desire that radio frequencies be equitably assigned throughout country.<sup>51</sup>

Under the table, only a fraction of towns could receive four or more stations and that's important because when the networks were set up they naturally ran their lines where they could get the most audience. Because the LD rates that AT&T charged were expensive, the networks went to where they could get the most people.<sup>52</sup>

The first network would go to the most powerful set of stations.<sup>53</sup> The second one would go to the second most powerful, using less powerful stations to fill in their audience. The third network had a different problem – it could go to the biggest cities, but finding other markets where people could hear three stations gets more important. The fifth network had a big problem because it has to run long distance cable to lots of different towns which is expensive and impracticable.<sup>54</sup>

The result is that the first two stations evolve quickly, owned by NBC, followed by a third network, CBS, [headed] by Bill Paley.<sup>55</sup> The assignment of stations and their power around the country was done in a way that was a balance of political pressures and commercial interests to reach the most people.<sup>56</sup> What that produced was a scheme so that everybody could get at least one station. But from a commercial network economics point of view it was economically viable really only to have three radio networks. That policy / philosophy of balancing political interests and making sure everyone has radio access and the commercial theory to have more stations for more people was carried into TV with the result that there were

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<sup>49</sup> [Starr, *The Creation of the Media*, 334-35; Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 68ff.]

<sup>50</sup> [1928 Fed. Radio Comm'n 2d Ann. Rep. 11 at 216, available at [http://www.fcc.gov/mb/audio/decdoc/annual\\_reports.html](http://www.fcc.gov/mb/audio/decdoc/annual_reports.html); Bensman, *The Beginning of Broadcast Regulation in the Twentieth Century*, 204ff; Hazlett, "Rationality," 167-68.]

<sup>51</sup> [Robert W. McChesney, *Telecommunications, Mass Media, and Democracy: The Battle for the Control of U.S. Broadcasting, 1928-1935* (New York: Oxford University Press, 1993) at 21 (1993); Hazlett, "Rationality," 161, 168.]

<sup>52</sup> [Our sources don't discuss the points made in this paragraph.]

<sup>53</sup> [McChesney, *Telecommunications, Mass Media, and Democracy*, 29 ("Within two years the average independent station had a power of 566 watts, while one of NBC's seventy-four stations averaged over 10,000 watts. By 1935 only four of the sixty-two stations that broadcast at 5,000 or more watts did not have a network affiliation.")]

<sup>54</sup> [Our sources don't discuss most of the points made in this paragraph.]

<sup>55</sup> [McChesney, *Telecommunications, Mass Media, and Democracy*, 20-21, 29.]

<sup>56</sup> [Id.]

three network T.V. stations.<sup>57</sup>

Hoover created the scheme adopted by the FCC and perpetuated by FRC that allows commercial broadcasting to grow but constrains it to three networks. This gave the three networks a lot of economic, political and cultural power that they used in an oligopolistic way which we choose to call a monopoly.

### 3 Bill Paley

In the development of the networks, the characters are Owen Young at GE, Robert Sarnoff at RCA, and Bill Paley at CBS. The primary actor is Bill Paley. The three stories here – radio, the development of the networks (not sure who the actors are there), and the development of advertising on the networks as we know it (Bill Paley) – carries us up to the early '30s, when the '34 Telecom Act which consolidates the structure of the radio broadcast business.

After NBC is created, [Arthur Judson and George A. Coats form a rival company, United Independent Broadcasters in 1927, which becomes CBS in 1927.]<sup>58</sup> Paley became President of CBS.<sup>59</sup> Unlike NBC, which was owned by RCA, a company that manufactured radios, Paley's CBS did not create radios.<sup>60</sup> NBC was justified partially on the grounds that it helped sell RCA radios and partially on the AT&T model of selling sponsorships.<sup>61</sup> Paley had to make radio broadcasting a revenue producing business apart from the promotional value of selling radios and jumped into selling sponsorships and advertising.<sup>62</sup> Because he was differently motivated

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<sup>57</sup> [From conversations with Susan Burgess and Margaret Whitehead, it is understood that CTW is making an academic argument that the formation of the three network oligopoly coalesced around various economic forces that he has investigated up to this point. It is clear that in this draft he did couch his assertions regarding this formation in the usual language that one would use to indicate the uniqueness of this argument, even though, implicitly, he had made it.]

<sup>58</sup> [Barnouw, *A Tower in Babel*, 194, 222-23.]

<sup>59</sup> [Ibid. at 194, 223-24.]

<sup>60</sup> [Laurence Bergreen, *Look Now, Pay Later: The Rise of Network Broadcasting*, (Garden City, NY: Doubleday & Company, Inc., 1980) at 59.]

<sup>61</sup> [Archer, *Big Business and Radio*, 305, (NBC's early broadcasting led to a deficit, but this "was an expected development. The directors, particularly Owen D. Young, were inclined to view the matter as a semi-philanthropic activity which the leading corporations of the radio industry were joining hands in supporting."); 321; 336 ("NBC was spending huge sums in the development of radio broadcasting, whereas Columbia, at this time, was concerned chiefly with the commercial phase of the industry."); Bergreen, *Look Now, Pay Later*, 67.] [CTW:] Did CBS own any stations? [Yes – by the end of 1928, CBS owned 17 stations. Archer at 320.]

[Burgess:] As for NBC, Tom thinks it was Westinghouse and GE that owned stations, not RCA.

<sup>62</sup> [Lewis, *Empire of the Air*, 183. In 1931, CBS fought for business and didn't censor its sponsors as severely as NBC. Barnouw, *A Tower in Babel*, 238. But Lichty and Topping, *American Broadcasting*, 284 describe Paley's competitive strategy differently, saying that Paley "made two major decisions. The first was to concentrate on 'creative programming' . . . Instead of being merely a pipeline for the programs of others, CBS would become a programming organization, originating and putting on its own shows. . . Decision No. 2 was to seize leadership



from folks at NBC, he moved more aggressively to sell more direct advertising along the lines of what we know it today rather than the more stately sponsorships that NBC had been using.<sup>63</sup> The different motivations are that NBC was expected to do more high class information and entertainment that would reflect well on parent companies and was heavily subsidized by parent companies so it wasn't under same pressure to create a stand alone business unit.<sup>64</sup> So [competitive pressure brought on by] Paley led the way for the development of direct advertising.<sup>65</sup> Maybe even created the model of sustaining programs.<sup>66</sup> Paley sought out performers and program ideas that were more appealing to a large audience.<sup>67</sup>

He built CBS in cooperation with the advertising agencies and major advertisers.<sup>68</sup> He was more aggressive than Sarnoff at NBC about allowing increasingly overt commercialism in advertising.<sup>69</sup>

A big part of Paley's success was that he treated radio as a commercial undertaking.<sup>70</sup> Whereas Sarnoff at NBC held to the view that radio needed to be uplifting and bring culture to the masses, Paley succeeded in making radio broadcasting and in particular network radio broadcasting a viable stand alone profitable undertaking based on advertising.<sup>71</sup> He did that counter to the snobby elite view that this medium of the public airwaves should not be used for crass commercial purposes.<sup>72</sup> Paley and what he was doing at that time did not mesh with the anglo-protestant perception of what responsible business men did.<sup>73</sup>

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in radio by getting control of the talent.”)]

<sup>63</sup> [Barnouw, *A Tower in Babel*, 238; Bergreen, *Look Now, Pay Later*, 62-63.]

<sup>64</sup> [Hilmes, *Hollywood and Broadcasting*, 51, 52; Bergreen, *Look Now, Pay Later*, 61-67; Marchand, *Advertising the American Dream*, 90 (“Owen D. Young, the chairman of General Electric and the chairman, in 1926, of Radio Corporation of America, regarded RCA’s new subsidiary, the National Broadcasting Company, as a “semi-philanthropic” activity.”).]

<sup>65</sup> [Marchand, *Advertising the American Dream*, 108.]

<sup>66</sup> [Paley improved CBS revenue by devising a different relationship between itself and its affiliates than NBC’s. Unlike NBC, which paid its affiliates to carry sponsored programs and charged them for the network’s sustaining programs, CBS offered its sustaining programs free in return for an option to transmit the network’s sponsored programs any time in the affiliates’ schedule and free transmission of sponsored programs on the affiliate. See, e.g., Starr, *The Creation of the Media*, 354; Barnouw, *A Tower in Babel*, 251.]

<sup>67</sup> [Lewis, *Empire of the Air*, 183-84.]

<sup>68</sup> [Marchand, *Advertising the American Dream*, 108; Bergreen, *Look Now, Pay Later*, 62-63, 67.]

<sup>69</sup> [Barnouw and Bergreen claim that CBS broke the direct advertising ban first, but Lichty and Topping contradict this. See, e.g., Bergreen, *Look Now, Pay Later*, 63; Barnouw, *A Tower in Babel*, 238. Contra Lichty and Topping, *American Broadcasting*, 199.]

<sup>70</sup> Paley’s father ran a cigar company - he came from a commercial business background. [See, e.g., Starr, *The Creation of the Media*, 353-54; Barnouw, *A Tower in Babel*, 223-24; Archer, *Big Business and Radio*, 318-19; Hilmes, *Hollywood and Broadcasting*, 20.]

<sup>71</sup> [Hilmes, *Hollywood and Broadcasting*, 50-52; Bergreen, *Look Now, Pay Later*, 62-63.]

<sup>72</sup> [Marchand, *Advertising the American Dream*, 89ff; Bergreen, *Look Now, Pay Later*, 67.]

<sup>73</sup> [Our sources don’t address this proposition.]

Paley brought to the business the idea that you could build a commercially successful broadcast business as opposed to a broadcast business subsidized by the sale of radio receivers.<sup>74</sup> RCA could justify running radio stations at a loss because they'd sell more radios. Paley wasn't in the business of selling radios so he needed to build his network to be economically viable and to do that he was more willing to accept more overt kinds of advertising.<sup>75</sup> In the beginning it was sponsorships, then they started to do product placements<sup>76</sup> - like the Klondike ice cream singers.<sup>77</sup> Then advertising crept in.<sup>78</sup> The AT&T sponsorship model at WEAFF<sup>79</sup> may have played a role in this but the important thing about Paley was that he built a third network by developing ways that sponsors and later advertisers could promote their products and brand name. Because of his different motivations than Sarnoff, he was always more aggressive than Sarnoff in organizing his programs so that commercial sponsors could get more and more value out of them and therefore pay more money to him.<sup>80</sup> Over time this model grew into ad agencies developing programs directly in cooperation with the networks.<sup>81</sup> Paley and CBS were always at forefront.<sup>82</sup>

Paley built the economic model of the broadcast business as a stand alone successful industry with ads as the fundamental revenue source.<sup>83</sup> This broadcasting model was copied 100% by television and still today most of the networks are advertiser supported.<sup>84</sup>

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<sup>74</sup> [Starr, *The Creation of the Media*, 354; Hilmes, *Hollywood and Broadcasting*, 51-52; Bergreen, *Look Now, Pay Later*, 67.]

<sup>75</sup> [See also fn 43 above.]

<sup>76</sup> [Marchand, *Advertising the American Dream*, 90, 92 (“experiments with program sponsorship had led advertising to the threshold of new discoveries about the profitable fusion of advertising and entertainment. Very cautiously, advertisers tested the limits of mere sponsorship. When those limits were reached, they began exploring unobtrusive methods of integrating advertising and entertainment.”).]

<sup>77</sup> [Marchand, *Advertising the American Dream*, 94 lists the musical groups “the Ipana Troubadours, the A&P Gypsies, and the Cliquot Club Eskimos.”]

<sup>78</sup> [Marchand, *Advertising the American Dream*, 94 says that direct advertising began in 1926, though advertisers were still hesitant to use it as late as 1928.]

<sup>79</sup> [Starr, *The Creation of the Media*, 355 (when the networks were reluctant to allow direct advertising, WEAFF titled its first regular series the Eveready Hour, including its sponsor's name in the title.).]

<sup>80</sup> [Our sources don't discuss this.]

<sup>81</sup> [Starr, *The Creation of the Media*, 355 (“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.”); Hilmes, *Hollywood and Broadcasting*, 52, 83; Barnouw, *A Tower in Babel*, 239-40.]

<sup>82</sup> [Clarification needed.]

<sup>83</sup> [Sources don't credit Paley alone for creating the economic model of funding the broadcast business on ads, though CBS appears to be the first network set up as so.]

<sup>84</sup> [Starr, *The Creation of the Media*, 356-57; 384.]

WWI – patents, etc. – how did these come into play and why are they important to our story?

Movies – how did these come into play and why are they important to our story?